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# **Gender Assignment and Word-final Pronunciation in French: Two Classification Systems**

**Margaret à Beckett, M.A.**

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# TABLE OF CONTENTS

<b>Table of Contents</b>	iii
<b>Abstract</b>	xi
<b>Statement of Originality</b>	xiii
<b>Acknowledgments</b>	xv
<b>Abbreviations, Symbols &amp; Typological Conventions</b>	xvii
<b>Tables &amp; Figures</b>	xix
 <b>Chapter 1 Introduction - Gender assignment in French</b>	
1.1 Gender and languages	1
1.2 Gender and French nouns	2
1.3 Cross-linguistic research into nominal classification systems	5
 <b>Chapter 2 Literature review and methodology</b>	
2.0 Introduction	7
2.1 Cross-linguistic research into gender and noun classification	8
2.1.1 Potential universal factors	10
2.1.2 Three major studies of nominal classification systems	12
2.1.3 Nominal classification systems of various languages	18
2.1.4 Systems in European languages	20
2.1.5 Interaction between phonology and gender	22
2.2 The French language – relevant historical information	24
2.2.1 <i>Serments de Strasbourg</i> , 842 AD	26
2.2.2 <i>Cantilène de Sainte Eulalie</i> , ca. 878	26
2.2.3 Later changes in the French language	27
2.3 Current linguistic research into gender assignment in French	28
2.3.1 Gender assignment and word-final phonology	29
2.3.2 Gender assignment and morphology	42
2.3.3 Gender assignment and semantics	43
2.3.4 Gender assignment of homonyms and other French nouns	54
2.4 Summary – literature review	55
2.5 Methodology	56
 <b>Chapter 3 Review of phonological, morphological and semantic explanations</b>	
3.0 Introduction	59
3.1 Word-final phone in relation to gender assignment	60
3.1.1 Single syllable nouns - gender assignment and word-final syllable structure	63
3.1.2 Interaction between word-final pronunciation and orthographic representations	66
3.1.3 Changes in word-final pronunciation for loan words entering the French lexicon	67
3.2 Morphology and gender assignment	68
3.2.1 Compound nouns	69
3.2.2 Semantic extensions, grammatical conversions, and loan words	71
3.2.3 Detailed morphological analysis related to word-final phones /it/	73

3.3	Semantic explanations	76
3.4	Summary	78

## Chapter 4 Birds - Gender Assignment and Word-final Pronunciation

4.0	Introduction	80
4.1	Predictability – frequency based on word-final phonology and gender assignment	82
4.2	Initial exploration – word-final phonology and gender assignment	83
4.2.1	Word-final phonology and gender assignment of loan words	83
4.2.2	Word-final phonology and gender assignment of synonyms	85
4.2.3	Word-final phonology and gender assignment of derived nouns	86
4.2.4	Summary	88
4.3	Semantics and gender assignment – initial exploration	88
4.3.1	Semantics and superordinate terms	88
4.3.2	Semantics and collective nouns	93
4.3.3	Semantics related to 'male' and 'female' birds	95
4.3.4	Young terrestrial fowl - distinctions for 'male' and 'female'	96
4.3.5	Other historical terms for 'male' and 'female' of a kind	98
4.3.6	Attributes associated with 'male' and 'female' terrestrial fowl	100
4.3.7	Waterfowl	102
4.3.8	Kind – the 'unmarked' case amongst pairs of terms	105
4.3.9	Gender assignments – other terrestrial fowl	106
4.3.10	Word-final pronunciation	109
4.3.11	Summary	113
4.4	Analysis of count nouns in the corpus	117
4.4.1	Aerial birds	117
4.4.2	Aquatic birds	135
4.4.3	Plumage colour	154
4.4.4	Flightless birds	149
4.4.5	Differences in comparative age, size	161
4.4.6	Remaining nouns in the corpus	166
4.4.7	Summary	167
4.5	Birds in related sets	171
4.5.1	Nouns denoting 'pigeons' and 'doves'	171
4.5.2	Members of the 'finch' family	182
4.5.3	Heron-like wading birds	183
4.5.4	Crow family, incl. <i>corbeau</i> (M) 'raven and <i>corneille</i> (F) 'crow'	189
4.5.5	Summary – related sets	193
4.6	Other issues raised in the analysis	196
4.6.1	Generic term <i>oiseau</i> (M) 'bird'	196
4.6.2	Historical changes in other generic terms – <i>canard</i> (M) 'duck'	197
4.6.3	Woodpeckers – an adaptation too far	197
4.6.4	'Flightless' and the feminine noun <i>talève takahé</i> (F) 'takahe'	198
4.6.5	Compound and simple nouns – alternative gender assignments	202
4.7	Summary of findings	202
4.8	Conclusions	206

## **Chapter 5 Fish - Gender Assignment and Word-final Pronunciation**

5.0	Introduction	210
5.1	Predictability – frequency based on word-final phonology and gender assignment	210
5.2	General information relating to the lexical field 'fish'	211
5.2.1	General characteristics of fish	211
5.2.2	Difficulties in accurate identification of fish	213
5.3	Initial exploration of gender assignment	216
5.3.1	Superordinate noun	216
5.3.2	Collective nouns	217
5.3.3	Loan words	218
5.3.4	Nouns derived from other linguistic processes	219
5.3.5	Summary – superordinate nouns, collective nouns and loan words	221
5.4	Semantic analysis of count nouns in the corpus	222
5.4.1	Irregular nouns - feminine and vowel-final	223
5.4.2	Irregular nouns - masculine and consonant-final	227
5.4.3	Regular nouns - masculine and vowel-final	231
5.4.4	Regular nouns - feminine and consonant-final	235
5.4.5	Word-final pronunciation	240
5.4.6	Summary - count nouns in the corpus	244
5.5	Attributes - further discussion	247
5.5.1	Elongated shape	247
5.5.2	Upright orientation	251
5.5.3	Distinctions in age and size	255
5.5.4	'Nocturnal'	260
5.5.5	Schooling fish	263
5.5.6	Summary relating to attributes	264
5.6	Comparison of species in related sets	266
5.6.1	Eels	266
5.6.2	Flatfish	268
5.6.3	Billfish (swordfish, marlin, sailfish) and needlefish (garfish, etc.)	276
5.6.4	Wrasse	279
5.6.5	Further comparison - <i>saumon</i> (M) 'salmon' and <i>truite</i> (F) 'trout'	281
5.6.6	Summary – related sets	282
5.7	Word-final pronunciation	284
5.8	Summary and conclusion	285

## **Chapter 6 Other Living Creatures - Gender Assignment and Word-final Pronunciation**

6.0	Predictability – frequency based on word-final phonology and gender assignment	292
6.1	Initial exploration – association between linguistic processes and gender assignments	293
6.2	Initial exploration – semantics associated with family sets	296
6.2.1	Family sets – lexical distinctions for age and sex	298
6.2.2	Other sets of family pairs	300
6.2.3	Unmarked case amongst family sets	301
6.2.4	Word-final pronunciation patterns	302

6.3	Semantics – collective nouns, superordinate and general terms and loan words	306
6.3.1	Collective nouns	307
6.3.2	Superordinate nouns and general terms	313
6.3.3	Loan words	318
6.3.4	Summary – related sets, collective nouns, superordinate & general terms, loan words	322
6.4	Semantic analysis – count nouns	327
6.4.1	Masculine count nouns	327
6.4.2	Feminine count nouns	337
6.4.3	Similar creatures, different gender assignments (worms, amphibians, reptiles (tortoise/turtle))	348
6.4.4	Word-final pronunciations	351
6.4.5	Summary – count nouns	355
6.5	Attributes and counter-examples	360
6.5.1	Adapted for flight	360
6.5.2	Nocturnal habit	364
6.5.3	Moving in leaps and bounds	369
6.6	Comparative – differences in some degree	373
6.6.1	'Diminutive' in relation to 'young' of any kind	373
6.6.2	Affective - another form of 'diminutive'	374
6.6.3	Comparative difference in size – 'smaller than'	375
6.6.4	Comparative difference in size – 'larger than'	376
6.6.5	Vowel-final pronunciation - 'diminutive', 'augmentative', 'affective'	377
6.6.6	'Superlative' degree	378
6.7	Related sets	379
6.7.1	Members of the 'antelope' sub-family	379
6.7.2	Snakes	383
6.7.3	Whales	385
6.8	Summary and discussion – other living creatures	389
6.8.1	Summary relating to count nouns	391
6.8.2	Summary relating to word-final pronunciation	395
6.9	Concluding remarks	397

## **Chapter 7 Gender Assignment and Word-final Pronunciation – Plant Kingdom**

7.0	Introduction	399
7.1	Predictability – frequency based on word-final pronunciation and gender assignment	399
7.1.1	Woody plants – distributions in gender assignment and word-final pronunciation	399
7.1.2	Fruit – distributions in gender assignment and word-final pronunciation	400

### **PART I – WOODY PLANTS**

7.2	Background	401
7.2.1	Woody plants – defining characteristics	401
7.2.2	Confusion in botanical terms	401

7.2.3	Terminological issues in cross-linguistic identification of plants	402
7.2.4	Reclassification of gender assignments – historical data	403
7.3	Plant kingdom – superordinate terms, collective nouns and loan words	406
7.3.1	Collective nouns - masculine	406
7.3.2	Superordinate nouns	411
7.3.3	Botanical terms	417
7.3.4	Loan words	418
7.3.5	Nouns formed by extension and compounding	419
7.3.6	Nouns derived from other grammatical classes	423
7.3.7	Summary – initial analysis	424
7.4	Woody plants – count nouns in the corpus	428
7.4.1	Masculine consonant-final nouns	428
7.4.2	Masculine vowel-final nouns	434
7.4.3	Feminine vowel-final nouns	439
7.4.4	Feminine consonant-final nouns	442
7.5	Closely-related plants with different gender assignments	452
7.5.1	Genus <i>Rhododendron</i>	452
7.5.2	Genus <i>Hibiscus</i>	454
7.5.3	Genus <i>Rhamnus</i> ('buckthorns')	455
7.6	Summary – count nouns denoting 'woody plants'	459
7.7	Woody plants – further issues	462
7.7.1	Counter-examples <i>épinette</i> (F) 'white spruce', <i>pruche</i> (F) Canadian spruce/hemlock	462
7.7.2	Historically feminine noun <i>mélèze</i> (M) 'larch'	466
7.7.3	Further counter-example - <i>badiane</i> (F) 'star-anise tree'	467
7.7.4	Counter-examples relating to word-final pronunciation	467
7.7.5	Vines and bines	470
7.7.6	Summary	476
7.8	Conclusion - 'woody plants'	478
7.8.1	Trees, shrubs and vines	

### PART III – FRUITS

7.9	Fruits – initial exploration	483
7.9.1	Analysis of superordinate terms	484
7.9.2	Loan words denoting 'fruit'	486
7.9.3	Alternative word-final pronunciations of loan words	493
7.9.4	Summary	494
7.10	Count nouns denoting 'fruit'	496
7.10.1	Nuts	496
7.10.2	Berries	499
7.10.3	Drapes, pomes and other fruits	508
7.11	Sets of related fruits	515
7.11.1	Cherries	515
7.11.2	Apples	518
7.11.3	Citrus fruits	520
7.12	Summary	526
7.12.1	Ranking of attributes	531
7.12.2	Implications of this research for other languages	532
7.13	Conclusion – fruits	535

## Chapter 8 Gender Assignment & Word-final Pronunciation – Human Beings

8.0	Introduction	537
8.1	Gender assignment and biological sex	537
8.2	Preliminary analysis	543
8.2.1	Superordinate terms - gender assignment	543
8.2.2	Nouns formed from various grammatical classes	549
8.2.3	Loan words	552
8.2.4	Summary	554
8.3	Collective nouns denoting human beings	557
8.3.1	General or non-specific collective terms	557
8.3.2	Predictability according to frequency	558
8.4	Semantic analysis of collective nouns	559
8.4.1	Feminine consonant-final nouns	559
8.4.2	Feminine vowel-final nouns	565
8.4.3	Masculine nouns - vowel-final and consonant-final	570
8.4.4	Collective nouns – word-final pronunciation	574
8.5	Collective nouns in related sets	575
8.5.1	Kinship groups - related by blood, marriage	575
8.5.2	Common activity, task, interest	578
8.5.3	Origins, homeland	582
8.5.4	Leader and retinue	584
8.5.5	Gatherings related to quantity	584
8.5.6	Groups based on social conditions	587
8.5.7	Groups on the move	589
8.5.8	Collectives of human beings in general	590
8.5.9	Summary - collective nouns	594
8.6	Count nouns denoting 'human' – predictability according to distributions	597
8.7	Nouns without any gender assignment	599
8.7.1	No gender assignment, uninflected word-final pronunciation	599
8.7.2	No gender assignment, inflected word-final pronunciation	602
8.7.3	Inflected word-final pronunciation – further discussion	607
8.7.4	Changes in gender assignment as indicators of social norms in French and other languages	609
8.7.5	Summary	610
8.8	Fixed gender assignment - masculine	612
8.8.1	Masculine nouns entailing 'male' in the lexeme	612
8.8.2	Masculine nouns – no semantic entailment for 'male' or 'female'	615
8.8.3	Masculine nouns, semantic referents 'female'	627
8.9	Fixed gender assignment – feminine	629
8.9.1	Feminine nouns entailing 'female'	629
8.9.2	Feminine nouns – no semantic entailment for 'male' or 'female'	630
8.9.3	Feminine nouns, semantic referents 'male'	635
8.10	Summary – count nouns	637
8.11	Issues still outstanding	644
8.11.1	Alternative gender assignments for <i>gens</i>	644
8.11.2	Singular, plural and collective meanings of <i>homme</i>	648
8.11.3	Rank and gender assignment	655

8.11.4	Historical and current acceptance of alternative gender assignments	658
8.12	Summary and conclusions – human beings	657
<b>Chapter 9 Discussion, Conclusions, &amp; Theoretical Implications</b>		
9.0	Discussion of findings	666
9.1	Phonology and gender assignment	666
9.2	Morphology and gender assignment	666
9.3	Semantics of gender assignment and word-final phonology	668
9.3.1	Features and attributes – their different roles in the classification process	675
9.3.2	Gender assignments unrelated to the semantic system	677
9.3.3	Attributes and predictability of gender assignment and word-final pronunciation	681
9.3.4	Features, gender assignments, and nouns denoting human referents	682
9.4	Word-final pronunciation – discussion	685
9.4.1	Features in binary opposition – dimensions in time and space	686
9.4.2	Regularisation of word-final pronunciation for loan words	688
9.4.3	Different word-final pronunciations for synonyms and members of the same family	689
9.4.4	Suffixation	690
9.4.5	'Agreement'? Reconsidering alternative pronunciations of suffixes	694
9.4.6	Word-final pronunciation elsewhere in the French lexicon	698
9.4.7	Male:female oppositions – invariable word-final pronunciation	701
9.4.8	Male:female oppositions and alternative word-final pronunciations – interaction with the phonological template	703
9.5	Concluding remarks	705
9.5.1	A semantic explanation – dual classification systems	705
9.5.2	Third system - a phonological template	707
9.5.3	Ranking among attributes	709
9.5.4	Predictability of classifications	711
9.6	Theoretical implications	711
9.6.1	Implications for lexical fields beyond 'living things'	712
9.6.2	Prototypes and abstractions in French	713
9.6.3	Organising principles for French – contrariety	713
9.6.4	Considerations of French vis-à-vis Noun Class and Classifier languages	714
9.6.5	Dual classification systems in other languages	716
9.6.6	Women, fire and dangerous things	717
9.6.7	Features in French - relationship with other semantic systems	719
<b>Appendices</b>		
Appendix I	<i>Déclaration faite par l'Académie française en séance du 14 juin 1984</i>	723
Appendix II	<i>Déclaration sur la féminisation des noms de métiers, fonctions, grades et titres: 21 mars 2002, Académie française (Translation by M. à Beckett)</i>	725
Appendix III	Single syllable nouns	729

Appendix IV	Nouns with word-final phones /it/	755
Appendix V	Birds	757
Appendix VI	Buffon, George Louis Leclerc, Comte de (1707-88) Extracts from <i>Histoire naturelle</i> , Tomes 1-7 ( <a href="http://www.oiseau.net">www.oiseau.net</a> , 2005)	762
	• <i>L'Autruche</i> 'The Ostrich'	763
	• <i>La caille</i> 'The Quail'	764
	• <i>La cigogne</i> 'The Stork'	766
	• <i>Le/Du corbeau</i> 'The Raven'	769
	• <i>La grue</i> 'The Crane'	772
	• <i>Les Hirondelles</i> 'The Swallows'	776
	• <i>Le/Du merle</i> 'The Blackbird'	777
	• <i>L'Oie</i> 'The Goose'	779
	• <i>Oiseaux qui ne peuvent voler</i> 'Birds unable to fly'	782
Appendix VII	Geese – additional terms	783
Appendix XIII	Fish	784
Appendix IX	Fish having an 'elongated' form	788
Appendix X	Other living things	789
Appendix XI	Woody plants	796
Appendix XII	Fruits	799
Appendix XIII	Fruits – German nouns	801
Appendix XIV	Collective nouns - human beings	802
<b>Bibliography</b>		805



## ABSTRACT

Previous phonological, morphological and semantic analyses of gender in French cannot fully account for gender assignment and changes in word-final pronunciation for French nouns or for loan words entering the French lexicon. The writer's own experiences, and the extensive research of Tucker et al. (1977) into the ability of native French speakers to predict gender assignment accurately, suggested the potential for underlying rule-based phenomena. Until now, the intuitive recognition of the significance of word-final phonology that suggested some formal link with gender assignment has provided only limited predictability.

This thesis argues that French gender assignment and word-final pronunciation can be explained more adequately with reference to semantic principles similar to those of the morpho-syntactically complex classifier systems found in languages of Africa, Asia, Australia and South America. Like some of those languages, French involves not one but two separate, independent nominal classification systems. The primary classification system relates to gender through agreement and is semantically determined in terms of a limited range of oppositional features linked to masculine or feminine. An equally important secondary nominal classification system, also semantically determined, reflects a different set of oppositional features encoded on the noun through word-final surface phonetic constraints. Features pertaining to gender concern binary oppositions in form, mode of existence, and quantity. Features pertaining to word-final pronunciation concern binary oppositions in dimension, time and space. Many of the features in the French system occur as organising principles in other languages (eg. animate:inanimate, etc.). For living entities, attributes concern nature and the various ways that organic matter is perceived.

In some cases, alternative gender assignments may reflect multiple salient features, eg. *aigle* (M/F) 'eagle' associated with contrasting classifications (diurnal/masculine, free/feminine). For male:female pairs of a kind (humans, animals), multiple features may also be expressed in alternative word-final pronunciations, through retention or reduction of the final consonant, or through different suffixes. These surface phonetic constraints constitute a third system – a

phonological template – whereby the reduced/shorter forms co-occur with masculine gender, and non-reduced more complex forms with feminine gender. These principles are found in the early development of Old French and are maintained in agreements in Modern French. This phonological template can account for strongly-held views regarding associations between gender assignment and word-final pronunciation.

This account is motivated by the different treatments concerning historical changes, loan words, synonyms, and alternative classifications found for some nouns – except those few whose masculine gender has become 'fossilised', reflecting older sociocultural norms, or whose reclassification to masculine appears to have been imposed. It provides an explanation for gender assignment and word-final pronunciation that challenges earlier accounts, and has implications for the many languages where nominal classifications heretofore remain unexplained. This explanation calls into question the dichotomy generally drawn between Noun Class languages on the one hand and Classifier languages on the other since the French systems reflect characteristics of both.



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Ada Mary Lambert à Beckett (dec'd.), CBE, MSc. (1897), my grandmother  
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Who championed the rights of all children to an education

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## **Abbreviations, symbols and typological conventions used in this thesis**

C	Consonant, in association with Vowel relating to syllable structure, CV
F	feminine gender assignment, also (F)
M	masculine gender assignment, also (M)
N	neuter gender assignment, also (N)
O	Object, in any combination with S and V
S	Subject, in any combination with V and O
V	Verb, in any combination with S and O
V	vowel, in association with C relating to syllable structure, CV
CF	consonant-final pronunciation
VF	vowel-final pronunciation
~	nasalised vowel
CS	Compound suffixation
SS	Single suffixation
Red.	Reduced phonological/phonetic form (contrasting with non-reduced forms)
VC	voiced consonant
CD	consonant devoicing
Adv.	adverb
Prep.	preposition
PP	prepositional phrase
Vowels with IPA values	
i, e, ɛ, ə, ɔ, a, ɔ, o, u, ẽ, œ, ă, ɔ̃, y, ø, œ	
Consonants with IPA values	
j, ʒ, ʧ, dʒ	
*	unacceptable, ungrammatical
#	syllable boundary
/ ... /	phonemic representation
[ ... ]	phonetic transcription

- : indicates semantic oppositions such as rough:smooth
- <.> indicates orthographic consonant or vowel, particularly the silent or mute <e>
- < indicates 'from' in respect of derivation

#### § 4.5.4 indicates Chapter 4, Section 5.4

'Single quotes' identifies quotations from other texts translated into English, and is also used to identify attributes, eg. 'rough'

Upper case italics, eg. *Populus* ('poplar'), indicates a scientific genus

*P. tremuloïdes* indicates a species within the genus

Lower case italics, eg. *rhododendron*, identifies a lexical term in general usage

*Italic script* is used for non-English language examples

(anc.) indicates ancient or former usage

(arch.) indicates an archaic meaning

(arg.) indicates a slang term (*argot*)

(dimin.) indicates 'diminutive'

(fam.) indicates informal use

(inj.) indicates 'demeaning'

(Lit., liter.) indicates literary usage

(mod.) indicates modern usage

(pej.) indicates pejorative use

(vulg.) indicates a vulgarity

## TABLES & FIGURES

### TABLES

- 2.1 Old French gender assignment observed in articles and agreement principles
- 2.2 Distribution of gender assignment for consonantal phones
- 2.3 Appendix I, Table IX and X Last phone [ g ] (Tucker et al., 1977:77-78)
- 2.4 Appendix I, Tables XXVII and XXVIII Last phone [ t ] (Tucker et al., 1977:94-96)
- 2.5 Distribution of gender assignment for vowel phones
- 2.6 Summary of Tucker et al (1977) results for terminal phone / -õ / plus penultimate phone
- 2.7 Correlation between gender assignment and 'male' or 'female' human beings
- 2.8 Nouns whose gender is revealed through the article
- 2.9 Nouns showing resistance to alternative feminine gender assignment
  
- 3.1 Phonological analysis of vowel- & consonant-final nouns in current database
- 3.2 Gender assignment and word-final pronunciation patterns for single-syllable nouns
- 3.3 Syllable structure amongst single-syllable nouns
- 3.4 Nouns derived from infinitive verb forms
  
- 4.1 Distributions relating to gender assignment and word-final pronunciation
- 4.2 Loanwords denoting 'bird'
- 4.3 French synonyms – gender assignment and word-final pronunciation
- 4.4 Collective nouns denoting birds
- 4.5 Male and female birds
- 4.6 Additional examples - male and female of a kind
- 4.7 Young birds identified as 'male' or 'female'
- 4.8 Fowl - distinguishing features of 'male' and 'female'
- 4.9 Waterfowl - distinguishing features of 'male' and 'female'
- 4.10 Unmarked case amongst 'fowl'
- 4.11 Variation in word-final pronunciation for nouns denoting 'fowl'
- 4.12 Aerial birds
- 4.13 Nocturnal birds of prey
- 4.14 Aquatic birds
- 4.15 Birds with brightly coloured plumage
- 4.16 Birds with black plumage
- 4.17 Flightless birds
- 4.18 Young of various species
- 4.19 Birds 'diminutive' in stature
- 4.20 Nouns denoting pigeons and doves
- 4.21 Nouns denoting members of the 'finch' family
- 4.22 Birds identified as *aigrette* (F) 'egret'



- 4.23 Heron-like birds according to techniques for obtaining food
  - 4.24 Three black birds - *corbeau* (M) 'raven', *corneille* (F) 'crow', *freux* (M) 'rook'
- 
- 5.1 Distribution of nouns according to gender assignment and word-final pronunciation
  - 5.2 Loanwords denoting fish
  - 5.3 Gender assignments of pre-existing nouns and figurative use in extension
  - 5.4 Feminine nouns with vowel-final pronunciation
  - 5.5 Masculine nouns with consonant-final pronunciation
  - 5.6 Masculine nouns with vowel-final pronunciation
  - 5.7 Feminine nouns with consonant-final pronunciation
  - 5.8 Elongated shape – feminine counter-examples
  - 5.9 Nouns denoting 'young' of various species
  - 5.10 Fish 'diminutive' in size
  - 5.11 Fish noted for their comparatively larger size
  - 5.12 Nouns denoting 'nocturnal' fish
  - 5.13 Fish that form schools
  - 5.14 Nouns denoting 'eel'
  - 5.15 Nouns denoting 'flatfish'
  - 5.16 'Flat' in relation to objects in other lexical fields
  - 5.17 Billfish - masculine and feminine nouns
  - 5.18 Nouns denoting 'wrasse'
- 
- 6.1 Nouns denoting other living creatures
  - 6.2 Pre-existing nouns used extension to denote a living creature
  - 6.3 Nouns formed with suffix *-ard*
  - 6.4 Family sets – distinctions between 'male' and 'female' of the same kind
  - 6.5 Other pairs of 'male' and 'female' related in derivation
  - 6.6 Family distinctions according to age and sex
  - 6.7 Other species with different terms for 'male' and 'female'
  - 6.8 Word-final pronunciation – elision of final phone
  - 6.9 Masculine collective nouns denoting living creatures
  - 6.10 Feminine collective nouns denoting living creatures
  - 6.11 Superordinate terms denoting a living creature
  - 6.12 Masculine loanwords
  - 6.13 Feminine loanwords
  - 6.14 Masculine count nouns denoting living creatures (excluding birds, fish)
  - 6.15 Feminine vowel-final nouns denoting a 'living creature'
  - 6.16 Feminine consonant-final nouns denoting a 'living creature'
  - 6.17 Nouns in the corpus denoting 'worm'

- 6.18 Nouns in the corpus denoting 'amphibian'
  - 6.19 Nouns in the corpus denoting 'turtle'/'tortoise'
  - 6.20 Creatures adapted for flight – feminine nouns
  - 6.21 Creatures adapted for flight – masculine counter-examples
  - 6.22 Nouns denoting 'butterfly' and 'moth'
  - 6.23 Animals moving in leaps and bounds - feminine nouns
  - 6.24 Creatures moving in leaps and bounds - masculine counter-examples
  - 6.25 Nouns denoting the young of a kind
  - 6.26 'Diminutive' – terms of affection for animal
  - 6.27 Comparatively smaller living creatures other than fish
  - 6.28 Comparatively larger size - living creatures other than fish
  - 6.29 Superlative degree – creatures larger than any other of their kind
  - 6.30 Nouns denoting 'antelope'
  - 6.31 Nouns denoting 'snake'
  - 6.32 Aquatic mammals - 'whale' family
- 
- 7.1 Woody plants - distribution according to gender and word-final pronunciation
  - 7.2 Fruits - ditribution according to gender assignment and word-final pronunciation
  - 7.3 Collective nouns relating to plants - masculine
  - 7.4 Collective nouns relating to plants - feminine
  - 7.5 General terms for plant life
  - 7.6 Botanical or scientific superordinate terms
  - 7.7 Loanwords denoting 'tree'
  - 7.8 Trees, shrubs and vines – nouns formed by extension, compounding
  - 7.9 Nouns formed with the suffix *-ia*
  - 7.10 Nouns formed with the suffix *-ier*
  - 7.11 Masculine consonant-final nouns denoting 'woody plant'
  - 7.12 Masculine vowel-final nouns denoting 'woody plant'
  - 7.13 Feminine vowel-final nouns denoting 'woody plant'
  - 7.14 Feminine consonant-final nouns denoting 'woody plant'
  - 7.15 Nouns denoting genus *Rhamnus*
  - 7.16 Differences in height amongst 'deciduous' trees
  - 7.17 Coinings reflecting the older word-final paradigm
  - 7.18 Modern coinings reflecting the olde word-final paradigm
  - 7.19 Old World 'woody' vines and bines
  - 7.20 Two further 'bines'
  - 7.21 General terms denoting 'fruit' (botanical, vernacular)
  - 7.22 Loanwords denoting fruit
  - 7.24 Distributions of loan words and certain physical characteristics
  - 7.24 Nouns denoting 'nur'

- 7.25 Nouns denoting 'berry'
  - 7.26 'Mountainberry' – masculine and feminine synonyms
  - 7.27 Nouns denoting 'drupes, pomes and other fruits'
  - 7.28 Nouns denoting cherries
  - 7.29 Nouns denoting 'apples'
  - 7.30 Original three yellow, sour, oblong citrus fruits
  - 7.31 Fruits – gender assignments and word-final pronunciations in four European languages
- 
- 8.1 Invariable masculine and feminine nouns denoting male or female human
  - 8.2 Superordinate nouns denoting a single human referent
  - 8.3 Nouns used in figurative extension to denote a human referent
  - 8.4 Nouns derived from adjectives
  - 8.5 Loanwords - collectives of human beings
  - 8.6 Distribution patterns for collective nouns denoting human referents
  - 8.7 Feminine consonant-final nouns denoting human referents
  - 8.8 Feminine consonant-final collective nouns denoting male referents
  - 8.9 Feminine collective nouns denoting humans - vowel-final
  - 8.10 Masculine collective nouns denoting human referents
  - 8.11 Collectives relating to kinship
  - 8.12 Collectives relating to shared activity, task, interest, belief, opinion
  - 8.13 Collectives relating to origins, homeland
  - 8.14 Collectives relating to leader and retinue
  - 8.15 Collectives relating to quantity
  - 8.16 Collectives relating to social conditions
  - 8.17 Collectives on the move
  - 8.18 Collectives of human beings in general
  - 8.19 Count nouns - distribution according to gender assignment and word-final pronunciation
  - 8.20 Nouns with no fixed gender assignment – uninflected word-final pronunciation
  - 8.21 Nouns with no fixed gender assignment – inflected word-final pronunciation
  - 8.22 Word-final masculine and feminine variants
  - 8.23 Further examples of masculine and feminine word-final variants
  - 8.24 Comparison of word-final variants according to syllable structure
  - 8.25 Masculine nouns with male lexical referent
  - 8.26 Masculine nouns – no lexical designation of sex
  - 8.27 Masculine nouns derived from pre-existing nouns
  - 8.28 Masculine nouns with female lexical referent
  - 8.29 Feminine nouns with female lexical referent
  - 8.30 Feminine nouns – no lexical designation of sex
  - 8.31 Feminine nouns with male lexical referent

- 8.32 Male and female – pairs of terms, inc. family memberships
  - 8.33 Military ranks and their gender assignment
  - 8.34 Other terms identifying rank – royalty and nobility
  - 8.35 Rank and gender assignment in academia
- 
- 9.1 Nouns used in extension providing pejorative nuances in their application to 'human'
  - 9.2 Nouns formed with *habit* (M) 'habit' via suffixation
  - 9.3 Patterns of agreement among suffixes that offer alternative pronunciations
  - 9.4 Oppositions in time and space among other grammatical categories

## FIGURES

Figure 1      Classification Systems

Figure 2      Phonological template



## Chapter 1 Gender assignment in French - Introduction

It is astonishing how little we know about the grammatical meaning of the category gender even today. We know only that it has nothing or at least very little to do with biological gender, and that calling the gender classes masculine, feminine, and neuter is misleading. Thus, we know what gender is not, but not what constitutes the function of the category.

(Leiss, 2000:237)

### 1.1 Gender and languages

The term gender first appeared in the fifth century BC when the Greek philosopher Protagoras divided Greek nouns into three separate groups – 'masculine', 'feminine' and 'inanimate' (identified today as neuter) (Aikhenvald, 2000:19). Gender remains a convenient term for describing a system for grouping related nouns into particular classes, but it provides one of language's most puzzling mechanisms. It has been deemed to be a '... result of highly sexual imaginations of "our primitive ancestors" ...', a view advanced by Grimm in his early nineteenth century examination of German grammar (in Leiss, 2000:240). It was a system which provided a 'one-to-one mechanism of correlating a noun and its respective gender' (Unterbeck, 2000:xv) and, indeed, gender for many languages involves this precise correlation. However, the effect of this descriptive term was to separate out and treat differently any variation. A noun which varied from such grouping was considered to deviate from the general rule, even in the face of abundant exceptions to the rule.

Gender assignment also causes confusion because of a connection often made, by academics as well as the wider community, between 'linguistic' gender, a grammatical categorisation, and sex, a biological categorisation (Aikhenvald, 2000:19) often identified as 'natural gender'. Such a connection is unhelpful, especially in relation to inanimate nouns.

The definition of gender most commonly referred to is Hockett's definition (1958, in Corbett, 1991:1, Unterbeck et al., 1999:1) as 'classes of nouns reflected in the behaviour of associated words'. Crystal (1985:133) defines gender as '... a grammatical category used for the analysis of word classes displaying such contrasts as masculine/feminine/neuter, animate/inanimate, etc.'

More recently, gender systems have been described as those systems 'showing sex differentiation within nominal classification' (Unterbeck, 2000:xxvi). However, Senft (2000:15) makes a similar claim in relation to noun class systems, which are '... characterised by agreement with constituents outside the NP' (noun phrase). Aikhenvald (2000:19) suggests that 'gender' and 'noun class' ... are often used interchangeably', but she uses 'noun class' as a cover term and reserves 'gender' for systems with only two or three classes (necessarily including masculine and feminine). Corbett (2005b:3) suggests that these two different terms may be considered as products of different linguistic traditions but treats both as gender. As 'gender' has been associated with French nouns for so long, this tradition continues for this research.

Most accounts of gender include accompanying observations alluding to its puzzling nature with regard to both gender agreement and gender assignment as a system (Corbett, 1991:1; Unterbeck, 2000:xxvi). Corbett (1991:4) suggests that determining the number of genders is simple and uncomplicated in some languages but more complicated for others. However, he argues that in determining whether a language is or is not a gender language, the unifying and determining feature of gender across languages is agreement:

While nouns may be classified in various ways, only one type of classification counts as a gender system: it is one which is reflected beyond the nouns themselves in modifications required of "associated words".

(Corbett, 1991:4)

## 1.2 Gender and French nouns

The two-gender French system is derived from Latin which language had a three-gender system. The current system of gender for French nouns has evolved through a number of cycles. Of the three-gender forms, French preserves only two.

According to Corbett, the French language is often regarded as having 'one of the most opaque' systems of gender assignment (1991:57). However, during the twentieth century various rules have emerged that help predict gender. Corbett (1991:57) notes Bidot's (1925)

analysis of French nouns that resulted in the publication of a series of rules, a review of which material reveals a lay-out based on orthography and semantics. Corbett (1991:57) also draws attention to Mel'čuk's (1958) account of the system of gender in French in relation to phonological forms of noun endings and their frequency, and research by Tucker, Lambert and Rigault (1977) where certain tendencies also emerge. He suggests that these findings challenge the arbitrariness of the French system.

Gervais (1993:122-3) notes that the gender of French nouns has been derived to a high degree, some ninety percent, from its Latin parent, and that the formerly Latin neuter has disappeared and for the most part been converted to French masculine. She, too, suggests that the grammatical assignment of French gender is not a straightforward system and is most visible in written forms; she points out that the gender of some nouns denoting humans is 'conventional rather than correlational' and that neuter or a 'genderless' category still exists, eg. *cela* 'that (thing)', and *rien* 'nothing', as well as the otherwise feminine nouns *personne* 'person', which she suggests is rendered genderless in its function as an indefinite negative pronoun, and the feminine *chose* 'thing', which assumes a neuter-like form in expressions such as *quelque/autre chose s'est passé* 'nothing/something else happened' since agreement with the feminine noun does not appear on the past participle of the verb (Gervais, 1993:123).

Gervais (1993:122) also notes the change of gender for a number of nouns in the transition from Latin to Old French, or from Old French to Modern French. For instance, the formerly feminine *minuit* 'midnight' gave way, she suggests, under the influence of the masculine *midi* 'midday' and became masculine too, while other nouns began as masculine and became feminine, eg. *écritoire* 'writing case', *armoire* 'wardrobe', 'because most words ending in *-oire* are feminine' (Gervais, 1993:122).

Interest in French gender has emerged in two fields. The first field is that of social politics and efforts to provide feminine alternatives for nouns applying to areas of employment previously occupied only by males.



The second field is the research generated almost entirely by second language learners and teachers of French. This has probably resulted from the great difficulties gender poses for second language learners who are unable to construct exceptionless rules by which the gender of further words might be predicted. For native French speakers, gender appears to have been of little interest, probably because they are unaware of this aspect of their competence. It is surprising, however, that mainstream linguists appear to have ignored this area, a situation revealed by the limited amount of primary research available either in English or in French on this topic.

As a speaker of French as a second language, and an expatriate working in France for a number of years, my observations are that gender poses only the most occasional problem for native speakers, yet no definitive pedagogical account of the system is available. Most pedagogical accounts describe some semantic influence as well as morphological or spelling regularities that are most commonly expressed in terms of numerical tendencies.

The genesis of this thesis occurred some years after my return to Australia, when an international oil company sending its employees to French-speaking North Africa requested assistance in language preparation, a project in which I became involved. Their requirements included the making an audio tape of French engineering terms alongside English translations. This material was to be provided by a French oil engineer on a short-term posting to Australia, but his sudden recall to North Africa meant that the long list of terms he had just finished preparing was never able to be discussed. When we received it, to our horror none of the French terms included any gender assignment, which suggested to me that not only he did not consider gender assignments necessary, but that he was unaware that non-native speakers would not know and would consequently need that information. Lacking any other means of finding out, our replacement French speaker, North African-born, was simply asked to include the indefinite article before each French noun as we made the recording, without any discussion as to how this might turn out. At its conclusion, he commented that he had never seen any of the terms before yet he knew their gender assignments without knowing how he knew. These incidents suggested to me that organising principles existed and from that time a quest began, to

discover what those principles might be.

### 1.3 Cross-linguistic research into nominal classification systems

While the semantic element is crucial for all languages with gender systems, in some languages gender is strictly semantic. In such languages, 'the meaning of a noun is sufficient to determine its gender' while the gender of a noun infers something about its meaning (Corbett, 1991:8). For other languages, Corbett suggests, gender is only 'primarily semantic' and is determined by additional criteria, morphological or phonological, which supplement the meaning; in such languages gender assignment depends on 'formal' assignment rules, that is, 'the form of the nouns involved rather than on their meaning' (1991:33).

In addition to languages that have gender systems, linguists in the latter half of the twentieth century have described other languages as having 'classifier systems'. Walsh (1993) observes that every language makes some attempt to classify the world in a way that reflects distinctions between 'same' and 'other' (1993:107). Some languages may typically reflect the distinction that can be made between natural gender according to male and female, while others may not reflect that distinction at all as, for instance, the Australian Aboriginal language Pitjantjara (Bowe, 1987), and Picardy, a French regional language (Hawkins, 1993).

Where languages make use of a wider number of distinctions, one or two classes may characterise humans as, for instance, in Dyirbal, another Australian language of northern Queensland, a language with four classes – two of which make use of the distinction between male and female (Dixon, 1972:308). Murrinh-Patha, the Australian language spoken in the western coastal region of the Northern Territory, has ten classes, two of which relate to humans; however, for this language the distinguishing features are not that of 'male' and 'female', but of oppositions between 'Aboriginal' (*kardu*) and 'non-Aboriginal' (*ku*) humans (Walsh, 1993:118, 109).

As well as the notion 'class' or 'kind' shared by classifier and gender languages, many classifier languages also have the feature of agreement, that is, the reflection of one class in the

behaviour of another. Many Australian Aboriginal languages have noun classes referred to as classifiers, some of which require agreement, eg. Walmajarri, a Western Australian language (Yallop, 1993:24). Swahili, a widely recorded Bantu classifier language which has upwards of 15 noun classes, has extensive adjective, nominal and verbal agreement (Corbett, 1991:44). Since agreement is a key feature used by Corbett (1991) and others in defining gender languages, Corbett includes classifier languages in his cross-linguistic account of gender (1991:43).

Craig's (1986:3) introduction to a range of theoretical issues in typological studies covering noun classes and noun categorization suggests that classifier systems in other languages may help us 'break away from the traditional predictability/arbitrariness dichotomy and contribute to increasing understanding of the nature of such systems'. Aikhenvald's (2000) cross-linguistic review of classifier systems provides an empirical account of noun categorization in the world's languages. In her preface (vii-viii), Aikhenvald discusses the extensive range of noun classification devices and mechanisms. Of significance is her use of 'classifier system' as a term that can apply '... to any grammatical system of noun categorization device(s) in a particular language' (Aikhenvald, 2000:vii). This definition would suggest that empirical accounts of classifier languages are relevant to a language with 'gender systems'.

The following research draws together material from a number of areas of linguistics as well as previous research on gender assignment in French, seeking an explanation for a phenomenon that has been considered for many centuries to be arbitrary or inexplicable.

This thesis examines the issue of gender of nouns in French, providing a detailed phonological analysis to complement existing approaches to this question, and re-examines the role of morphology and semantics in the distribution of gender classification and the relative influence of these competing factors.

## **Chapter 2 Literature review and methodology**

### **2.0 Introduction**

As observed in Chapter 1, despite the considerable variation among the classification systems found in the world's languages, natural or biological gender plays some role in many languages – though not always the principle role. For other languages it plays little or no role at all, eg. some Aboriginal languages, Mandarin, Japanese. Those languages which use classification systems beyond 'natural gender' are based around other semantic features. In other languages, phonology and phonotactics may contribute more significantly to noun classification/gender systems.

The gender system of French nouns seems so far to have defied all efforts to describe it comprehensively. As in many languages, the connection between grammatical gender and semantic gender is not apparent. In fact, natural or biological gender can account for only a small percentage of the total number of French nouns referring to humans (Surridge, 1995:10). While this lack of direct fit seems to be unproblematic for native speakers of French and is rarely discussed by them, it is a particular problem for language learners and language teachers, and is of theoretical interest to linguists.

Most research in French has considered aspects of word-final phonology to be relevant to the assignment of gender in French, eg. Mel'čuk (1958, 1974), Tucker, Lambert & Rigault (1977), Desrochers & Paivo (1990), Monpiou, Metz-Lutz & Wioland (1995). However, such analyses provided tendencies only. There has long been an awareness of a possible relationship between word-final pronunciation and gender assignment, particularly for alternative suffixes among nouns denoting humans which seemed to be associated with masculine or feminine gender assignments. This association even gave rise to the (1965) publication of an inverse dictionary (Juilland, 1965, in Surridge, 1986:271).

The lack of fit offered between word-final phonology and gender assignment and further research by Surridge (1986, 1989a, 1989b, 1990) into gender of French nouns led her to suggest that a number of features interact within a chronological hierarchy, and that this

chronology of word acquisition by children ensures the development of an unconscious awareness of these patterns as they interact (1993). However, even here the precise nature of semantic, phonological and morphological interaction remains hidden, as Surridge suggests, by 'conflicting sets of rules' (1993:87, 88), exceptions (1993:88), and 'limited applicability' (1993:89).

The extent to which second language teachers have contributed to research concerning the principles governing assignment of gender on nouns contrasts with the lack of research by native French linguists in this field. The apparent lack of interest on the part of native speakers over the last 75 years (and previous centuries) may be because, for them, it is a system that is straightforward and systematic although inexplicable to others. The *Académie française*, the body charged with regulating the French language, suggested in a (1984) declaration that gender assignment relates to the presence or absence of some quality (1984, <[www.academie-francaise.fr/langue/francois.html](http://www.academie-francaise.fr/langue/francois.html)>, 2005 and included as Appendix I) and that masculine serves as the unmarked case, while feminine ... *ne sert qu'accessoirement à rendre la distinction entre mâle et femelle* 'is used only in an accessory way to render the distinction between male and female' (2002, Appendix II).

The review of relevant literature is presented here in two sections. The first is a broad cross-linguistic review of gender and noun classification systems. The second section relates to French. It commences with a brief historical overview of the French language, and is followed by an analysis of current linguistic research into French gender over the past fifty or so years, particularly phonological, morphological and semantic explanations offered to date. The final section of this chapter covers the methodological approach to the present study.

## 2.1 Cross-linguistic research into gender and noun classification

Characteristics by which other languages and cultures categorise nouns and determine noun classes may be of some use in the examination of the gender of French nouns. Among the various classification systems we find 'noun class', 'gender', and 'classifier' and each is identified as having a semantic basis. Each refers to a particular way that a grammatical

system categorises nouns.

For some languages, noun class or nominal classification is expressed by a 'marker' on the noun, eg. Tamil, a Dravidian language spoken in south-east India and Sri Lanka, etc. (Corbett, 1991:9). In other cases the classification of a noun is expressed outside the noun, eg. numeral classifiers in Vietnamese, Chinese, etc. and the two-gender system of Ojibwa, a Algonquian language spoken in northern states of USA (Corbett, 1991:20). Different again are languages with semantic distinctions that include not only masculine, feminine and neuter but a range of other attributes ('rational', 'animate', etc.). Gender is also expressed outside of the noun in languages such as French and other Romance languages, etc.

In some 'gender' languages semantic distinctions may be expressed on the noun as well as on related elements, eg. Russian where suffixes occur on nouns and on related elements (Corbett, 1991:34). The complex agreement systems of Bantu languages of southern Africa involve prefixes on the noun and related elements, as in the following example from Swahili, *kikapu kikubwa kimoja kilianguka* ('basket', 'large', 'one', 'fell') 'one large basket fell' (Corbett, 1991:43).

In addition to languages that have gender or noun class systems, linguists in the latter half of the twentieth century have described other languages as having 'classifier systems'. 'Noun classifiers' identify some characteristic of the noun and co-occur with the noun in a noun phrase (Aikhenvald, 2000:80), typically as a free morpheme, eg. as numeral classifiers in Vietnamese, Chinese, etc. A feature of classifier languages is that function may be the principle determinant of noun class, and when the function of a noun changes, so may the class, as occurs in Vietnamese (Löbel, 2000:239) and in Murrinh-Patha, an Australian language of the Northern Territory, where inanimate objects are in the *nanthi*- class but as offensive weapons they are in the *thu*-class (Walsh, 1993:111). This feature will be relevant to the present study.

These cross-linguistic studies are more relevant to the present study for the overview they provide of salient semantic features, although the distinctions between 'gender', 'noun class'

and 'classifier' languages are also of interest. As Craig (1986:2) points out, the various classifier systems 'may expose how the process of categorization works'. Regardless of differences in terminology and any similarities and differences in the ways that languages may express semantic classifications on nouns, even the small amount of evidence in French of semantically motivated gender assignments suggests that it is important to consider this material.

### 2.1.1 Three major studies of nominal classification systems

The three major cross-linguistic studies over the last twenty years are by Craig (1986), Corbett (1991), and Aikhenvald (2000) and they cover an extensive range of languages.

The various systems addressed in Craig's (1986) typological studies deal with noun classes and categorization. They include 'gender' languages such as German, 'noun class' languages such as Yagua (a language of north-eastern Peru) and Dyirbal, a 'noun class/gender' language such as Proto Bantu, and a range of 'classifier' languages such as Vietnamese, Japanese and Chinese, as well as Jacalteco, a Meso-American language that has both noun class and numeral classifier systems (Craig, 1986:263). It also covers written languages, eg. Egyptian hieroglyphics, and signed languages, eg. American Sign Language. Classifiers in today's Chinese identify 'flat', 'round', 'long and rigid' (Erbaugh, 1986:429) while salient features of Tai classifiers relate to oppositions such as flexible/rigid, animate/inanimate (Delancey, 1986:447). Such distinctions – in shape and in form – are equally crucial for classifiers in Japanese and Austroasiatic languages (Mon-Khmer, Nicobarese, Aslian) (Downing, 1986:347, Adams, 1986:247-252). In addition to these features, Yagua also attends to variables in size between small, medium and large (Payne, 1986:117-118).

Craig's typological studies include research by Adams (1986) into numeral classifiers in three sub-families of the Austroasiatic family – Mon-Khmer, Nicobarese, and Aslian. Adams found that they have many similarities despite being considered as having '... a diverse and sometimes unique set of systems in comparison to other languages in the area' (1986:241). She identifies several semantic features that are crucial, including the contrasting properties

'animate' and 'inanimate'; 'long and rigid'; 'long and flexible', as well as other properties such as 'round' and 'flat'. Adams also refers to earlier research by Huynh Sang Thong (1983, in Adams, 1986:244) revealing that gardeners discussing plants in Vietnamese '... employ a greater variety of classifiers than ordinary people might', which suggests that classification of an entity is not itself fixed but can vary according to the knowledge that speakers have of the referent.

Corbett's (1991) review of gender as a grammatical category includes Bantu languages of the southern Africa, Indo-European languages of Europe (including French, German and Russian), Dravidian languages of India and Sri Lanka, as well as Asian, American, African, and Pacific languages including those of Australia and New Guinea. For Corbett, gender assignment depends largely on two sources of information – the semantics of a noun, and its (morphological or phonological) form (1991:7-8). Diyari, an Australian Aboriginal language of the Lake Eyre region in South Australia, is suggested by Corbett to be an example of a language that is strictly semantic in that one gender includes every animate whose referent is female while the other gender includes all others, male, non-sexed animates, all inanimates (Austin, in Corbett, 1991:11) – although the reverse occurs in Kala Lagaw Ya, a Torres Strait island language where nouns denoting males are found in one class and the feminine class contains the remainder (Corbett, 1991:11).

Corbett (1991:29) notes that gender may be partially semantic. Some genders are clearly associated with semantic rules, while semantic rules for other genders are less clear.

Even more extensive is the examination undertaken by Aikhenvald (2000) in her cross-linguistic analysis of the various kinds of nominal classification systems in the world's languages. For Aikhenvald (2000:17), noun class and gender are expressed outside of the noun itself, '... within a head-modifier noun phrase', in language-specific ways; noun classifiers, however, are associated with the noun – often as an independent word or affix relating to animacy and physical properties in a way that is independent of other constituents inside or outside of the noun phrase (2000:81). For humanness, further properties may cover



kinship, and distances between generations, or they may include distinctions in age which in some languages can interact with social status, particularly in Mayan languages (Aikhenvald, 2000:284). Independent distinctions relating to size are rare for noun classifiers.

Other classifiers include numeral classifiers, the most widely recognised, which precede or follow the numeral in a numeral noun phrase or an expression of quantity (Aikhenvald, 2000:198). Aikhenvald suggests that numeral classifiers can be divided into 'sortal' classifiers, which are associated with some inherent property of the referent, and 'mensural' classifiers, which relate to ways of measuring. Inherent properties may cover animacy, humanness, sex, as well as physical properties, functional properties and quanta (pairs, collectives, etc.) (2000:286). Physical properties form a significant semantic area for numeral classifiers in relation to shape, dimension, direction and orientation (2000:288). While languages differ in the kinds of distinctions they make, examples provided by Aikhenvald (2000:288ff) show that 'long', 'flat' and 'round' are common distinctions.

The review of the range of noun categorisation devices by Aikhenvald suggests that languages do not fit neatly into divisions between the various systems, particularly languages that have more than one system, such as noun classes as well as numeral classifiers, or noun classes as well as noun classifiers (2000:432). However, regardless of the way classifications are expressed across languages, Aikhenvald suggests that semantics typically concern animacy, spatial properties in directionality and orientation, physical properties, social status and kinship, functional properties, quanta, arrangement, and nature (Table 11.13, 2000:306).

### 2.1.2 Nominal classification systems of various languages

Research on the semantics of Dyirbal, an Australian Aboriginal language of north-east Queensland, undertaken by Dixon (1972) includes other distinctions. He identifies four noun classes, listed in (1) as the schema of basic categories (1972:308):

- |     |                            |  |
|-----|----------------------------|--|
| (1) | Class I ( <i>bayi</i> )    | animateness; (human) masculinity               |
|     | Class II ( <i>balan</i> )  | (human) femininity; water, fire, sun, fighting |
|     | Class III ( <i>balam</i> ) | edible vegetables and fruit                    |
|     | Class IV ( <i>bala</i> )   | residue class (including most trees).          |

However, there is some 'bleeding' of nouns into other genders from the subset in which they would otherwise fit, since each set has a large number of exceptions. While animates are in Class I, birds are in Class II, as are scorpions, fireflies, crickets, other animate entities that might otherwise be in Class I. Fish are typically in Class I, the same class as 'males' (human and animal) – but not 'dangerous' fish such as 'stonefish' and 'garfish', which are in Class II – the same class as 'females'. While fishing spears and fishing lines are inanimate, they are in Class I alongside other animate entities. Most trees are in Class IV – but not 'stinging trees' and the 'stinging nettle vine', which are in Class II rather than Class IV alongside other trees (Dixon, 1972:309). 'Moon' is in Class I with 'males', while 'sun' is in Class II – as is 'fire', 'water' and anything to do with fighting (1972:308-309). Dixon is able to account for most of these exceptions through more general principles involving mythological, conceptual, or important property relationships that set exceptions apart from another or others in its set – the most common being 'harmfulness' (1972:308). As examples of these three relationships, 'fishing line' and 'fish spear' being conceptually related entities are both in the same Class I; most birds are believed to be the spirits of dead females and are in Class II, except willy wag-tails which are mythical men and are in Class I; 'harmful' creatures such as the hairy mairry grub, scorpion, echidna, etc. in Class II rather than Class I can be understood in relation to their 'harmful' nature – although he does not explain why they might not be equally harmful to females, also in Class II. Dixon states that these class-concept associations and additional rules can account for the vast majority of noun class memberships (1972:308). Even so, there remain nouns whose distributions are without explanation, and Dixon argues that we might expect such a result for any natural language – original explanations relate to a much earlier time and has been lost while the class assignment is retained (1972:310). Nonetheless, the different distributions into the four genders of the various entities in the natural world are of interest in relation to lexical fields covered in Chapters 4 to 8 of this study.

Lakoff (1987) suggests that the significance of Dixon's research is that distributions of nouns between these various categories are demonstrated organised according to a semantic schema, with the addition of other crucial principles. However, even with these additional principles, a small number of nouns in Dyirbal remain unaccounted for since Dixon can find no

explanation for dog, bandicoot, platypus, etc. being in Class II rather than Class I. Nor can he account for a loan word such as 'money' being in Class I when there is no pre-existing comparative concept in Djirbal on which that distribution might be based (Dixon, 1972:312).

Lakoff (1987:5) questions the nature of a conjunction between the various entities within each of the categories, such as between women, fire and dangerous things in Dyirbal and suggests that, while common properties may be significant, the situation is more complex. He relates the classification process in Dyirbal to other more fundamental general principles of human categorisation, particularly centrality, chaining, and experiential domains (1987:95-96). For example, he suggests that while the sun can be linked by myth to women, fire may be linked to the sun via some experiential connection, and that fire, being dangerous, links other dangerous things together.

Another more complex semantic system is that of Ngangikurrungurr (Tryon, 1974, in Corbett, 1991:140), where classifications are associated with a range of features, as in (2):

- |     |             |  |
|-----|-------------|--|
| (2) | Gender I    | most natural objects, kinship terms, some body parts |
|     | Gender II   | hunting weapons                                      |
|     | Gender III  | most body parts                                      |
|     | Gender IV   | trees, most wooden implements                        |
|     | Gender V    | most animals hunted for meat                         |
|     | Gender VI   | edible plants  |
|     | Gender VII  | male animates (excluding dogs)                       |
|     | Gender VIII | female animates                                      |
|     | Gender IX   | canines  |

Even so, problems emerge in this organising schema since categories apply only to 'most' but not all, for seven of the nine categories. Thus, a considerable number of nouns in the lexicon are not fully accounted for.

However, Corbett also notes that some gender systems formerly considered to be problematic are now shown to be semantically based. One such language is Anindilyakwa, a language spoken on Groote Eylande in the Australian Northern Territory. Certain regularities of this language had been identified by Wolsely in the mid-1950s (in Corbett, 1991:29), but Leeding's

(1989) research demonstrates that inanimate noun classes once considered to be arbitrary are, in fact, organised according to culturally significant oppositions – between those that are visible and those that are not, and for those that are visible another set of contrasts – between those that are lustrous or shiny and those that are not (Leeding, 1989:252-268). Both Corbett and Harvey (1997:3) point to the significance of her findings.

Certain difficulties can be observed in relation to noun classification amongst Australian Aboriginal languages. Merlan's (1983) documentation of Ngalakan, the Northern Territory Aboriginal language mentioned in Ch. 2, shows that nouns are distributed between four classes which are identified through a prefix; however, the form of the prefix may vary – from long (*nugu-*, *jugu-*, *gungu-*, *mungu-*), to short (*nu-*, *ju-*, *gu-*, *mu-*), to  $\emptyset$ -form. These zero forms occur most commonly amongst inanimate nouns, but they occur 'often' in the case of human and animate nouns (1983:37). Distributions amongst the four classes varies from regular to irregular. For instance, the masculine *nu-* class contains human and animals that are male, and the feminine *ju-* class contains humans and animals that are female (eg. 'female agile wallaby' (1983:192). However, while most generic nouns identifying animals are in the masculine class some are not (*gu-* class for 'short-nosed native bee', 'echidna', etc.) (1983:208, 210). Some nouns allow alternative gender assignments according to specific contexts, eg. 'turtle shell' – which occurs also in French, eg. *aigle* (M/F) 'eagle'. Other nouns in Ngalakan have no inherent gender and vary according to the sex of the referent (Merlan, 1983:34), again in a similar way to French. Distributions for *gu-* and *mu-*, two other two classes that relate to inanimate nouns, are less regular. Most trees are in the *gu-* class but some are in the *mu-* class; most implements are in the *gu-* class but some are in the *mu-* class; most vegetation is in the *gu-* class but some is in the *mu-* class. Body parts are also distributed between these two classes, as are 'river' and 'water' (*gu-* class) and rain, small creek and floodwater (*mu-* class). However, some inanimates are even found in the masculine *-nu* class ('pandanus mat', etc.) (1983:36, 191). Thus, apart from 'male' and 'female', overall distributions are unhelpful when it comes to a specific case – both as to noun class and prefixation.

Gender is also identified in other Australian Aboriginal languages as, for instance, Northern

Territory languages analysed by Harvey (1997) including Gaagudju, Mayali, Maung, Nunggubu, Unggumi and Warndarrang, each of which has more than two genders. However, there is some similarity with French gender assignment in that lexemes with a human referent are classified into contrasting genders or classes according to biological sex 'in nearly all cases' (Harvey, 1997:17). A distinction between biological sexes can extend to animals where lexemes are sex-specific, particularly for kangaroo or wallaby species. The classification of other animate entities is suggested to relate to another opposition – a contrast between ground-dwelling flora and fauna and air/tree/water-dwelling fauna and flora since the latter are found in the same gender as females while the former, ground-dwelling, are found either in the same gender as males, or another gender – but not in the same gender as females (Harvey, 1997:24). However, this paradigm is not without exception in that some birds, eg. brolga, are in the masculine class, and some fauna, eg. 'echidna', are included in the feminine gender in each of these languages – since its quills provide 'pain-inflicting defence' (Harvey, 1997:27). In fact, regardless of differences between the various languages covered in Harvey's analysis, each language presents some anomalous classifications since some animals, or birds, or fish, or plants, are assigned to a different class from most others – although the number of anomalous classifications for the various languages may vary. Harvey (1997:26-27) suggests that these languages share the same motivation for anomalies associated with female in their classification – largeness and harmfulness – consistent with explanations offered by Dixon (1972) for distributions in Dyirbal, discussed above.

Harvey (1997:35) identifies certain prototypical oppositions beyond that between male:female as set out in (3) below which he suggests underlie gender systems across the range of Australian languages.

(3)	Feminine	Masculine
	Air/tree/water-dwelling	Ground-dwelling
	Large/more potent	Not large/less potent
	Harmful/pain-inflicting	Not harmful
	Edible	Inedible
	Alienable	Inalienable
	European/Macassan	Aboriginal

Rather than prototypes being formed from entities to create prototypical exemplars, the notions themselves form oppositional prototypes as a result of our cognitive predisposition to recognise particular types of differences (Harvey, 1997:35). Harvey suggests that an oppositional framework fits with Saussure's focus on the 'differential nature of meaning', particularly the various ways difference can be formed and the nature of oppositions:

(L)anguage, in a manner of speaking, is a type of algebra consisting solely of complex terms ... (where) units and grammatical facts are only different names for designating diverse aspects of the same general fact: the functioning of linguistic oppositions.

Saussure (1957, in Harvey, 1997:34-35)

Again, across the range of languages the classifications of a number of nouns do not fit his paradigm, but Harvey is able to account for them by drawing on their relationship with myth and ritual – a framework suggested by Bourdieu (1977, in Harvey, 1997:39), although Bourdieu also ties many of them to:

'.. movements or postures of the human body, such as going up and going down (or going forward and going backwards), going to the left and going to the right, going in and coming out (or filling and emptying), sitting and standing (etc.).'

The crucial element amongst these various studies the same distinctions between 'male' and 'female' for humans and certain animals that occurs in Dyirbal, Ngangikurrungurr and the other noun class languages discussed above occurs also in French. Taken together, the criteria on which the semantic systems are based commonly include oppositional features such as animate:inanimate, human:non-human, male:female. Some features associated with gender assignment are argued to be culture-specific, such as 'edible' and a contrast between large and small for Dyirbal, or liquids in Falu, and diminutive in Bantu languages (Corbett, 1991:30). For Alamlak, a Papua New Guinea language, research (Bruce, 1984, Foley, 1986, in Corbett, 1991:32) shows that masculine is associated with males and also with tall, or long and slender, or narrow – a set that includes entities such as fish, crocodiles, long snakes, arrows, spears, and tall, slender trees – while feminine is associated with short, squat or wide – which covers turtle, frog, house, fighting shield and trees which are typically more round and squat than others.

In other languages, semantic connections between entities are less obvious. For instance, in Archi, a Caucasian language, genders I and II cover 'male' and 'female', while genders III and IV are arranged in the following way, set out in (4).

- (4) Gender III: domestic animals and birds, larger wild animals and birds, all insects, mythical beings, musical instruments, cereals, trees, water phenomena, astronomical and meteorological phenomena
- Gender IV: young animals and birds, smaller wild animals and birds, most tools and cutting instruments, cloth, metals, liquids, abstracts.

Corbett (1991:29) states that while the basis for these assignments may relate to a prototypical exemplar in some cases, it is not always straightforward.

### 2.1.3 Systems in European languages

Amongst European languages, Corbett (1991:33) suggests that the gender of some nouns is semantically based while for other nouns, gender can be explained via formal morphological or phonological rules. Russian is one such language, in that semantics account for gender in relation to 'male' and 'female' with very few exceptions (1991:34-35) and for the remaining nouns gender is argued to be morphological, according to its declensional type within the four main noun paradigms – leaving only a few exceptions. In showing us that closely related words are found in different genders, eg. *věč* 'evening' (masculine), *noč* 'night' (feminine), *utro* 'morning' (neuter), Corbett (1991:35) suggests that such distributions cannot be accounted for by semantic factors; on the other hand, gender according to declension type is 'highly predictable' and relates to formal factors. Nonetheless, there are examples where no rule works (1991:35). Further, some nouns are not declinable and, for these nouns, gender relates to a mixture of semantic and morphological rules (Corbett, 1991:41). Overlapping semantic, phonological and morphological systems make gender assignment in German equally or even more complex, given that semantic rules are themselves complex. For instance, 'male' is associated with masculine gender for *Mann* 'man' but not for *Männchen* 'boy', which is neuter (as is *Mädchen* 'maiden/girl') since the suffix *-chen* is one of several suffixes associated with a specific gender.

In Lak, a Caucasian language, genders are traditionally discussed as 'noun classes', of which

there are four (Corbett, 1991:26). However, research in the second half of the twentieth century has shown that classes I and II relate to distinctions between 'male' and 'female' for humans and deities, with few exceptions (*dūs* 'girl/daughter' in class III). The use of Class III agreements to convey politeness in some contexts led to other nouns denoting females also being transferred to Class III. Class II was so greatly reduced that in some dialects it has disappeared entirely. Classes III and IV concern distributions for other animates and all inanimates, but no research has so far been able to account for the different distributions, even amongst similar entities, eg. some days of the week are in III and others are in IV. Even more perplexing is *qāṭa* 'house', which takes Class III in the singular and Class IV in the plural (as occurs for some nouns in French, eg. *orgue* (M.SG)/*orgues* (F.PL) 'organ', identified above).

The research into gender assignment in German by Zubin and Köpke (1986) suggests to them that some distinctions between masculine, feminine and neuter can be related to different levels of semantic content. For instance, at the superordinate level terms are typically neuter, particularly amongst lexical fields in the natural world (1986:166-167). These distinctions can be observed in their analysis of various categories related to 'foodstuffs' (1986:162) where superordinate nouns such as *das Obst* (N) 'fruit' and *das Gemüse* (N) 'vegetable' are typically neuter while nouns at a basic level are typically masculine, eg. *der Apfel* (M) 'apple', *der Rettich* (M) 'raddish', or feminine, eg. *die Beere* (F) 'berry', *die Tomate* (F) 'tomato'.

However, an explanation such as this does not account for feminine nouns at the superordinate level, eg. *die Frucht* (F) 'fruit', a count noun, nor is it clear how *die Frucht* differs in usage from *das Obst*, a collective noun. Nor is there any explanation for the different masculine and feminine gender assignments at a basic level. The superordinate count noun *das Gemüse*, is also neuter and makes it difficult to argue that contrasting genders of the two superordinate nouns denoting 'fruit' – neuter for the collective *das Obst* and feminine for the count noun *die Frucht* – relate to a distinction between collective and count terms. Beyond this contrast between collective/mass and singular/plural, the two superordinate nouns for 'fruit', *das Obst* and *die Frucht*, differ in their meanings – as produce in a shop for *das Obst*, to a fruit living on the plant for *die Frucht* (The Maschler German-English Online Dictionary @



<utils.exeter.uc/german/dict>, 2009, <www.lingvosoft.com>), which would seem to be an important consideration, particularly in light of Tversky's argument, that:

... the explanation for a preferred level of reference does not lie in language, but rather in cognition. When we name things, we place them into the categories that have the greatest utility across a wide range of situations.

Tversky, 1986:64

The implications of this statement do not appear to have received any consideration in relation to French, nor in relation to others of the Romance languages. Zubin et al. (Table 7, 1986:158) argue that masculine gender for *der Baum* (M) 'tree' relates to its sense as a basic level term rather than superordinate term. However, Tversky (1986:66) suggests that there is no consensus as to what the basic level is. Anthropological research amongst rural communities had shown 'oak' to be more basic than 'tree', and while psychological research had surmised that 'tree' would be more basic for urban communities, no direct evidence supports this claim (1986:66-67).

In Lak, a Caucasian language, genders are traditionally discussed as 'noun classes', of which there are four (Corbett, 1991:26). However, research in the second half of the twentieth century has shown that classes I and II relate to distinctions between 'male' and 'female' for humans and deities, with few exceptions (*dūs* 'girl/daughter', which is in class III). The use of Class III agreements to convey politeness in some contexts has led to other nouns denoting females also being transferred to Class III, and Class II has become so greatly reduced that in some dialects it has disappeared entirely. Classes III and IV concern distributions for other animates and all inanimates, but no research has so far been able to account for the different distributions, even amongst similar entities, eg. days of the week some of which are in III while others are in IV. Even more perplexing is *qāta* 'house', which takes Class III in the singular and Class IV in the plural. As mentioned above, contrasting gender assignments for singular and plural forms also occurs in French, eg. *orgue* (M.SG) and *orgues* (F.PL) 'organ'.

#### 2.1.4 Interaction between phonology and gender

For a number of languages, gender is said to be phonologically determined since it can be

established by reference to a single form (Corbett, 1991:51). Such languages include Hausa, a Chadic language of northern Nigeria and the Niger Republic; Godie and Kru languages of southern Liberia and the Ivory Coast; Yimas, a Papuan language, and Qafar, an East Cushitic language of Ethiopia and Djibouti. Corbett also includes French in this set (1991:58) in that, outside of the semantic core, 'major generalizations can be stated in terms of phonology' as demonstrated by Tucker et al. (1977). Even so, as Aikhenvald (2000:25) states, '(n)o noun class system in the world' is assigned purely via phonological principles, and that where they are found, they are restricted to certain sets of inanimate nouns.

In Qafar, gender for vowel-final nouns is allied with the stress of the high tone which varies in placement in that it occurs on the final vowel for some nouns and on the penultimate vowel for others (Parker & Hayward, 1985, in Corbett, 1991:51). In this language where the accent occurs vowel-finally, nouns are feminine, eg. *catò* 'help', *karmà* 'autumn', and all other nouns – vowel-final, eg. *tàmu* 'taste', and consonant-final – are masculine. These rules permit exceptions, such as *abbà* 'father', which has feminine stress but is masculine, and *dodnik* 'sail-boat', which is consonant-final but feminine. Corbett (52) suggests that, for these exceptions, semantic rules take precedence (although the precise nature of the semantic associations is not made clear). It is noted, however, that in each case phonological systems are found in company with semantic systems.

In many languages nouns may be irregular in that they do not find a comfortable fit within the semantic, morphological or phonological frameworks into which most nouns can be incorporated. Such nouns are treated by Corbett as 'defective' (1991:175), for instance, nouns that lack singular or plural forms such as 'talkativeness' in Russian, which exists only in the singular, and 'scissors' which exists only in the plural. Others are nouns that 'may have, or may be claimed to have "double gender"' (Corbett, 1991:181), eg. Lak and Archi. Amongst examples Corbett provides is *hakin* 'doctor', a Lak noun that can take agreements associated with Gender I, Gender II and Gender III according to age and sex of the referent (man, older woman, or younger woman). In Archi, nouns such as *lo* 'child' and *misgin* 'poor person' can take Gender I agreement for a male referent, Gender II agreement for a female referent, and

Gender IV singular and gender I/II plural when sex is unknown or unimportant (Kibrik, 1972, in Corbett, 1991:181). However, while the same noun in French may have different genders, Corbett does not consider them as having double genders, eg. *trompette* (F) 'trumpet', the instrument, and *trompette* (M) 'trumpeter'. Corbett (1991:182) argues that masculine gender relates to the meaning of *trompette* for 'trumpeter', but feminine gender does not relate to the meaning of *trompette* as 'trumpet', while differences in genders for homonyms in French (*le livre* (M) 'book' and *la livre* (M) 'pound' are 'not specially significant'.

Corbett argues that the different agreements for common-gender nouns are motivated by semantic or pragmatic reasons. Corbett notes that nouns may also undergo changes in gender assignment, particularly borrowings. The circumstances under which these different treatments occur is considered to relate to different stylistic effects, or to ambiguity in the initial gender for borrowings (1991:182-3). However, for the present research we will seek to provide an explanation that will account for the different treatments of all nouns.

Different gender assignments can also allow meanings to convey hostility, or personify via metaphorical extension relating inanimate referents to animates. For instance, in Russian 'it is more insulting to call a man by the feminine *dura* 'fool' than the masculine *durak* 'fool' (Rothstein, 1973, in Aikhenvald, 2000:313), while the use of masculine diminutives of feminine names expresses affective jocularity in Polish (Wierzbicka, 1989, in Aikhenvald, 2000:313).

### 2.1.5 Potential universal factors

Both Corbett (1991) and Aikhenvald (2000) discuss difficulties in establishing a relationship between entities in particular noun classes or classifier sets even where they are related to universal parameters. An early attempt was that of de la Grasserie (1898, in Corbett, 1991:30), whose review of a wide range of languages identified eight parameters along which semantic systems could vary – animate/inanimate, rational/non-rational, human/non-human, male human/other, strong/weak, augmentative/diminutive, male/other, masculine/feminine/non-sexed. Corbett (1991:31) notes that several of these criteria are also found in other areas of

morphology and syntax; for instance, semantic distinctions relating to diminutive and augmentative may be morphologically marked on nouns although they are not reflected in gender assignments.

The characteristics by which different languages and cultures determine their noun classes may not always be immediately apparent; however, certain characteristics seem to be salient. Allan (1977:297) is able to identify seven inherent characteristics, set out in (4):

- (4)
- material make-up (human-like, animate, tree-like)
  - shape (long, saliently one-dimensional), flat, round
  - consistency (rigid, flexible, mass)
  - size (including diminutives, augmentatives)
  - location (for inherently locative entities such as towns)
  - arrangement (row of, coil of, heap of)
  - quanta (head of cattle, packet of cigarettes)

He later added a further category – function (piercing, cutting; used for writing, for eating or drinking) (Allan, 2001:307).

Corbett (1991:32) notes that systems of language are determined by the world views of the speakers, and suggests that '... an eventual aim should be to draw up a definitive list of criteria underlying gender assignment systems' (1991:31). The research in subsequent chapters is directed towards that end.

However, many linguists find it difficult to establish any semantic associations amongst apparently unrelated criteria (Corbett, 1991:31); in many linguistic descriptions, distinctions between classes appear as lists. Aikhenvald describes such systems as 'opaque' although she, too, notes Leeding's (1989) analysis of Anindilyakwa that reveals previously unrecognised classificatory parameters according to culture-specific domains (Leeding, 1989, in Aikhenvald, 2000:280). As Aikhenvald states (2000:341), culture-specific domains provide an additional level of complexity; societal changes may accompany changes in gender assignments (2000:311), and may bring about restructuring of classifier systems (2000:341).

Research by Aikhenvald (2000) into noun categorization devices, and by Grinevald (2002) into nominal classification systems and the different ways they are grammaticalised, shows that languages do not sit obligingly within one system. They may fall somewhere along a continuum of noun categorisation devices, according to a mixture of universal and culture-specific parameters. In her (2002) typological study of nominal classification systems, Grinevald (2002:260) suggests a grammaticalization continuum between lexical systems (measure terms, class terms) and morphosyntactic systems (gender, noun classes) as the furthest extensions, with classifiers falling someway in the middle. She draws attention to the argument by Corbett (1991) and Creissels (1999, in Grinevald, 2002:261) that gender and noun classes are one major system, suggesting that this position is challenged by certain data from Amazonian languages where co-occurrence of gender systems with other 'diversified and complex systems are either multiple overlapping systems of classifiers or yet unestablished systems of noun classes'.

Together, the various classification devices, semantic features, and underlying principles on which classifications are suggested to be based, will inform the semantic analysis of French nouns.

## 2.2 The French language – relevant historical information

The history of the French language is typically presented as a division between Old French and Modern French. French is, in its basic vocabulary and morphology, clearly derived from Vulgar Latin. Gaulish can be shown to have contributed a relatively small amount of vocabulary. From the second to fourth centuries AD the weakening in declension systems of Latin occurred across the Roman Empire; for instance, neuter plurals terminating with *-a*, e.g. *materia* (neut.pl.), the same terminal vowel as 'feminine' first declension, were frequently reassigned to that class (Rickard, 1974:3). Some Celtic influence on the Latin vocabulary can be observed in texts as local words made their way from Gaul across the Roman empire (Rickard, 1974:4), e.g. *ivos* 'yew tree.' Posner (1997:163) also identifies early borrowings from Celtic that are found in Modern French but are not found in the Romance languages of its neighbours, Gaulish nouns such as *mouton* ('sheep') and *berceau* ('crib'). Other Gaulish words

she identifies include:

'alouette, balai, briser, changer, chemin, cloche, jarret, quai, sapin, suie, valet, vassal'  
('lark', 'broom', 'to break', 'to change', 'path', 'bell', 'hock/leg', 'embankment', 'fir', 'soot',  
'footman', 'vassal')

Posner, 1997:164 (trans. M à Beckett)

Spelling in texts of the time show that both Gaulish names and Latin appear to have undergone some common changes, such as distinctions in vowel quality rather than (Roman Latin) length (Rickard, 1974:9ff).

With the collapse of the frontiers of the Roman empire during the fifth century AD Germanic tribes, including the Franks, started to invade Gallo-Roman France. These invasions eventually led to further changes beyond the incorporation of Frankish nouns, and the split between northern and southern France. As the Latin case system gave way to old French, further changes occurred in syllable structure and stress patterns under the effect of the strong expiratory Germanic language of the Franks. In northern France this led to syllable collapse preceding stress, and syllable reduction following the stress, until all final unstressed syllables disappeared to the extent that today only one unstressed word-final vowel, [ ə ], remains (Rickard, 1974:14). On the other hand, vowels lengthened in stressed open syllable [ CV# ] constructions. The use of the Latin *ex* to express 'movement away from' was superseded by the Frankish/Gaulish *de*, and newly-coined words replaced Latin nouns, eg. *homme*, from the Latin *homo* (M/F) 'human' (male or female) which replaced *vir* (M) 'male human'. Rickard notes that by the late eighth century, the Franks had extended their influence over northern France and '... the spoken language ... had changed so drastically that it could hardly be called Latin anymore' (Rickard, 1974:16). Other changes occurring in texts between 800 to 1100 or so include the development of definite articles, and a gradual shift from SOV word order to SVO word order.

The language of the people, the *lingua rustica romana*, was judged as unsuitable for literary purposes. As a result, documentary evidence of the language during this extensive period is extremely limited. The earliest examples come from two ninth century texts – the *Serments de Strasbourg* 'Strasbourg Oaths' of 842 AD and *Cantilène de sainte Eulalie*, ca. 878.

2.2.1 Serments de Strasbourg

The *Serments de Strasbourg* 'Strasbourg Oaths' were sworn in 842 AD by Charles the Bald (later Holy Roman Emperor Charles II) and Louis the German, two of the grandsons of the French emperor Charlemagne to solemnise their alliance against a third brother, Emperor Lothair I. In the Strasbourg Oaths, one can observe a contrast for terminal phones of nouns between those that are vowel-final, eg. *ajudha* 'aid', *poblo* 'people', *cosa* 'thing', and those that are consonant-final, *podir* 'power', *amur* 'love', *savir* 'knowledge'. Examples show that word order was organised around an SOV sequence, following that of Latin.

2.2.2 Cantilène de Sainte Eulalie

The longer *Cantilène de Sainte Eulalie*, Hymn to St. Eulalia, was written in the vernacular in the late ninth century. In this early text are examples of noun phrases that include both article and agreement, as set out in Table 2.1 below.

Table 2.1: Old French gender assignment observed in articles and agreement principles

Old French	Modern French	English translation
<i>les mals conselliers</i>	'les mauvais conseillers'	'the wicked councillors'
<i>la polle</i>	'jeune fille'	'the young woman'
<i>lo suon element</i>	'sa force'	'her strength'
<i>li rex</i>	'le roi'	'the king'
<i>une spede</i>	'une épée'	'a sword'
<i>lo chief</i>	'la tête'	'her head'
<i>(L)a domnizelle</i>	'la jeune fille'	'the young woman'
<i>sa virginitét</i>	'sa virginité'	'her virginity'
<i>la mort</i>	'la mort'	'her death'
<i>souue clementia</i>	'sa clémence'	'his mercy'

The above examples illustrate the emerging use of definite articles, not a feature of Vulgar Latin. The full text (at <[www.restena.lu:80/cul/BABEL/T\\_CANTILENE.html](http://www.restena.lu:80/cul/BABEL/T_CANTILENE.html)>, 2006) shows other instances where articles that might have been expected in comparison with Modern French are not found. In the examples above, the feminine definite article *la* is found alongside feminine nouns. The masculine article appears as *li* or *lo*, which I understand reflects a distinction between direct and indirect case respectively. The plural article *les* is also found.

Word order for subject, object and verb shows considerable variation in the placement of the verb, as in examples (5) VOS, (6) SVO and (7) SOV show.

(5) Verb-initial (VOS)

- OF *Voldrent la veintre li Deo inimi,*  
F 'Les ennemis de Dieu voulurent la vaincre'  
E 'The enemies of God wanted to defeat her, ...'

(6) Verb-medial (SVO)

- OF *Elle no'nt eskoltet les mals conseilliers*  
F 'Elle n'écoute pas les mauvais conseillers'  
E 'She listened not to evil counsellors ...'

(7) Verb-final (SOV)

- OF *Elle colpes non avret ...*  
F 'Elle n'avait pas commis de faute'  
E 'She had committed no sin ...'

Thus, while these two texts are considered contemporaneous, the fixed SOV word order of the *Serments de Strasbourg* compared with variations in word-order sequencing in the *Cantilène de Sainte Eulalie* may reflect differences beyond changes in syntax taking place. They may reflect differences in register – the more formal Oaths contrasting with the vernacular of the lament.

### 2.2.3 Later changes in the French language

From the time of the Crusades the crusades there was considerable contact with other languages, including Anglo-Saxon, Norse and Arabic, leading to a significant growth in vocabulary. The celebrated twelfth century French text *Chanson de Rolant* or 'Song of Roland' (ca. 1100), a poem that appears to have been inspired by the First Crusade, found in copied MS c. 1150 (Rickard, 1974:55), shows a reduction from three to two genders. Many neuter plural words had become singular in form and meaning, eg. *gaudia* (N) 'joys' became *joie* (F) 'joy', *bracchia* (N) 'both arms' became *brace* (F) 'arm' although some neuter plurals became masculine plural, eg. *digita* (N) 'fingers' became *deie* (M) 'fingers' (Rickard, 1974:32-3). Articles did not occur before abstract nouns or plural nouns, but were included where the referent had been referred to previously in the discourse (Rickard, 1974:55) as per examples in



(8) and (9).

(8)	<i>boire vin</i>	'to drink wine' (not previously referred to)
	<i>boire del vin</i>	'to drink the wine' (previously referred to)
(9)	<i>manger pain</i>	'to eat bread' (not previously referred to)
	<i>manger del pain</i>	'to eat the bread' (previously referred to).

The regional split between the north and south occurred elsewhere in other geographical sub-groups and during the Middle Ages many dialects flourished: in the north, Francien, Picard, Norman, Lorrain, while in the south Southern French, or Provençal, split into Langue d'Oc, Auvergnat and other dialects. Over time the political prestige of Paris led to the increased spread of its dialect, and in 1539 it was made the official language of administration and court proceedings in France.

As identified earlier, grammarians of the sixteenth century were tasked to determine basic rules and characteristics of French through analysis of the spoken and written language. These Renaissance grammarians used Latin, the three-gendered language in which they had been trained, as the basis for such analysis. Rickard reports that they were 'somewhat uneasy' in discovering that French had only two genders (1974:91). Following a period of unification, regularisation and purification, the French language of the seventeenth to the eighteenth centuries came to form what is called 'Modern French'.

Despite that 'regularisation', a great deal of diversity remains today – involving regional accents and lexical distinctions, but there are also more substantial differences as, for instance, between definite articles marked for gender opposition (*le/la*) in standard French while in the regional French of Picardy *le* is 'regularly used as the only form of the definite article' (Hawkins, 1993:71).

### 2.3 Current linguistic research into gender assignment in French

Overall, the area of gender assignment in French seems to have attracted less interest than areas such as phonology, morphology and syntax – except in relation to the more 'political' area of *la féminisation des titres et des fonctions* 'the feminisation of titles and functions'. Much of the

research into gender assignment has focussed on the relationship between phonology and gender assignment, but other areas have also been examined and they are discussed below.

### 2.3.1 Gender assignment and word-final phonology

Corbett (1991:57) identifies two pieces of research into the potential relationship between gender and word-final phonology – research undertaken by Mel'čuk first published in 1958 in Russian, and later (1974) in English, and a subsequent separate and entirely independent phonological analysis by Tucker, Lambert & Rigault (1977).

Mel'čuk (1974:13) takes as a starting point the broad acceptance that grammatical gender in Spanish is indicated by the phonetic form of a noun and since these rules do not cover all nouns, only the majority, exceptions are within an acceptable limit. In that French and Spanish are closely related, if gender and word-ending are related in Spanish, this determination must 'of necessity' be true of French (Mel'čuk, 1974:14). His research into Spanish suggests that exceptions are related to less frequently used nouns, and that gender is characterised for feminine nouns by the marker *-a*, while masculine nouns are characterised by the absence of any feminine marker.

Mel'čuk (1974:24) uses the relationship between gender and frequency established by the French pedagogue Constantin (1876, in Mel'čuk 1974:24) and the relationship between gender and word-final phonology he has established for Spanish to analyse French nouns. Constantin's statistical calculations relating to the presence or absence of a word-final orthographic <e> could account for gender assignment for 87% of French nouns, and exceptions were suggested to relate to less frequently encountered words (Constantin, 1876, in Mel'čuk, 1974:24).

Mel'čuk finds that differences in gender assignment are associated with phonetic forms, and that feminine gender relates to a word-final contrast between obstruent consonants, which are feminine, while vowel-final nouns and those with sonorant consonants are masculine (1974:28-9). These findings can account for 124 of 187 of the most common consonant-final nouns in

French, while similar rules for Spanish can account for 85% of the first two hundred most common nouns and 76% of the first one thousand.

While Mel'čuk (1974:30) notes that these rules cannot account for vowel-final feminine nouns, he suggests that the frequencies established by these rules are within an acceptable range, based on Jacobson's association between approximate laws and rules with high statistical probability (1958, in Mel'čuk, 1974:33).

Mel'čuk (1974:11-12) also suggests that a connection exists between certain grammatical properties and gender assignment, as in the case of substantives formed from infinitives, adjectives and compound nouns, as well as substantivised phrases such *cessez-le-feu* (M) 'ceasefire', finding that all are masculine – although the basis for this distribution is not clear. He finds that nouns identifying male or female sex 'usually' have correlating gender assignment, but for remaining nouns '... there is no connection between meaning and gender' (1974:12).

The most detailed analysis of the association between word-final phonology and gender assignment in French is that conducted by Tucker, a Canadian psychologist working with applied linguists Lambert and Rigault (1977) in the area of bilingual education. That research continued an earlier (1970) statistical analysis into gender that followed from their research into French speakers' skill in gender assignment. The (1977) review of material covering gender assignment is gleaned, in the main, from grammar books, particularly those written for second language learners, and those written for French children, containing advice such as:

*'Pour savoir si un nom commun est au masculin, essayez de mettre  
devant lui 'le' ou 'un' ...*

To ascertain if a common noun is masculine, try putting a 'le' or 'un' in front of it ...

(Galichet et Mondounand (1964), in Tucker et al., 1977:14)

Such advice is of little help to the non-native learner. Similarly, advising that a word is masculine when one can place 'le' or 'un' in front of it (Gramont & Hamon, 1965, in Tucker et al., 1977:14) is equally unhelpful. The analysis by Tucker et al. (1977) of every rule or

regularity on gender assignment they were able to uncover to that date drew attention to three common problems – that rules and regulations were either incomplete or incorrect, that many rules were open-ended so that regularities were neither well established nor helpful, and that many generalisations were actually misleading. But that research did tell them that by the time French children come to these grammar books, they have already acquired the system and need merely to test a word out in order to make the correct choice.

Taken together, this research allowed Tucker et al. (1977) to make the following interesting observations about the implicit knowledge of the system by native speakers:

'This process (acquisition of rules relating to gender) ... has certainly been mastered before the child begins formal schooling' (1977:14)

'... native speakers of French ... make gender assignments unhesitatingly and unerringly, in contrast to ... non-native (speakers), even those who have studied French for many years' (1977:57)

'Native speakers, even very young children, have no apparent difficulty choosing the gender of nouns ... (1977:13).

Tucker et al. (1977:59) report the observations of French psycholinguist Borel-Maisonny in 1967 that deaf children who learn to speak ' ... never acquire the ability to make gender assignments correctly' although they acquire other linguistic rules such as noun-verb agreement and accuracy with word order. They concluded that the development of rules for assignment of gender must, therefore, involve experience with the sounds of the language.

Tucker et al. (1977) tested the ability of four groups of native speakers to assign gender – for real and invented nouns, and common and rare nouns. Consistent patterns were produced across the four studies (Tucker et al, 1977:58), although gender assignments for real and common nouns were more accurate than for rare nouns. A number of arguments support their claim that consistent patterns can be explained only by some rule-based system derived from linguistic experience. Firstly, memory is not sufficient to explain the consistency produced across these studies (1977:57). Secondly, contradictions that emerged in relation to

predicted outcomes occurred for sounds where few real exemplars exist in the language, eg. *-age*, suggesting to them that the acquisition of gender was tied to linguistic exposure (1977:58). Thirdly, errors in gender assignment on nouns occurred consistently with one particular group, vowel-initial nouns such as *école* 'school', suggesting that gender acquisition is tied to gender-marking experience, and that the absence of the normal supporting information on gender provided by articles and adjectives in such cases might contribute to errors (1977:59). Fourthly, gender is not acquired by deaf children who learn to speak (1977:59). Fifthly, non-native speakers who lack the exposure provided to native speakers are unable to develop skill in gender assignment (1977:59), suggesting to Tucker et al. that they are unable to build up the sensitivity to characteristics required to create the model (1977:61).

These insights suggested to Tucker et al. that grammatical gender in French is fundamentally a phonological system related to the word-final phone. They reasoned that confusion had resulted from the small sampling of words used by authors in previous research as well as use of orthographic forms for noun endings '... which are not reliable indicators for gender assignment patterns', and that a larger corpus would provide greater accuracy (Tucker et al., 1977:13). To this end, they constructed the largest possible database, taking every single noun in the 1955 *Petit Larousse* dictionary to produce a database of over 30,000 nouns. From this database they created an inverse dictionary of listings based on word-final phone and gender assignment, from which they constructed a series of Tables.

Tables organised by Tucker et al. (1977) related to word-final phones, and the pattern of frequency established for each table, either *Predominantly Masculine* or *Predominantly Feminine*. Tables for consonant-final phones are set out in Appendix I, and Tables for vowel-final phones are set out in Appendix II (1977:68-124). Each Tables in these two Appendices contains a number of examples and, in some cases, counter-example/s. However, in both Appendices, Tables are presented in alphabetical order rather than phonological class, and their internal organisation relates to orthographic representations based on the penultimate or, occasionally, antepenultimate phone. For consonantal phones in Appendix I, separate tables are drawn up according to a distinction between nouns terminating both phonologically and

orthographically with that consonant, and nouns terminating phonologically with that consonant but ending orthographically in the silent or mute <e> for singular nouns (and plural nouns in some cases). For instance, for the phoneme /d/ (1977:72-73) Table V *Predominantly Masculine* contains nouns with 'Written ending: -d' (1977:72), while Table VI *Predominantly Feminine* contains nouns with 'Written ending: -de, -des', yielding separate results in establishing the frequencies of co-occurrence between the specific phoneme and gender assignment.

For vowel-final nouns in Appendix II, tabulation is structured around phonological and orthographic distinctions, also based mainly on the final phone but, in some cases, according to the penultimate phone and set out in alphabetical order, although as a phonological representation. For some final vowel phones, separate tables are provided, depending on whether the noun ends phonologically and orthographically with a vowel, or with a vowel plus the mute <e>, or ends phonologically with a vowel but orthographically with a consonant. These distinctions allow them to handle variations. For instance, the sound [a] (Tucker et al., 1977:106-8) is organised into:

- Table I Last Phone: [a] or [a]', 'Written ending: -a'
- Table II Spoken ending [a] or [a], 'Written ending: -ac, -ap, -ats, -as, -at'
- Table III Spoken ending [wa], 'Written ending: -oi, -oids, -ois, -oigt, -oit, -oix'
- Table IV Spoken ending [wa] for nouns with 'Written ending: -oie, -oies, -oye'

Tabulations for frequency do not combine these sets. Tables in Appendix II may combine all the various orthographic representations of that phone, eg. vowel phone [ ã ], Table V, Appendix II (1977:109), which lists 20 different orthographic representations of that phone – 'Written ending: -an, -anc, -and, -anf, -ang, -aon, -amp, -ans, -ancs., -amps, -ant, -end, -eng, -ens, -ends, -emps, -empty, -ent, -ents, -ants'.

### 2.3.1.1 Word-final consonantal phones

As discussed above, subsets of the two Appendices were based on orthographic distinctions to a large extent based on the presence or absence of the mute <e>. For the purposes of this work, however, totals for each phone are combined in a summarised version and presented in Table

2.2 below. This summary also includes percentages calculated according to combined distributions.

Table 2.2: Distribution of gender assignment according to consonantal phones

Phone	Masculine	Feminine	% Masc.	% Fem.
/p/	104	110	48%	52%
/b/	84	45	65%	35%
/t/	1162	1107	51%	49%
/d/	272	442	38%	62%
/k/	333	276	54%	46%
/f/	12	4	75%	25%
/v/	2	9	18%	82%
/g/	172	63	73%	27%
/s/	531	848	38%	62%
/z/	61	551	10%	90%
/ʃ/	99	191	35%	65%
/ʒ/	1368	85	87%	13%
/m/	1292	114	92%	8%
/n/	358	777	31%	69%
/ɲ/	27	42	39%	61%
/l/	742	657	53%	47%
/r/	3974	1111	78%	22%
/j/	114	238	32%	68%

While the results for phones /m/ and /z/ display wider distributions in terms of masculine and feminine gender assignments, even these results are of little assistance for predictability of gender assignment according to word-final phone. In the case of /f/ and /v/, numbers of tokens are very low. For some, frequencies are influenced by the considerable weight of certain suffixes, eg. for /m/ the suffixes *-ium* (137) and *-isme* (695), and for /ʒ/, the suffix *-age* (1277).

However, as discussed above, more useful distributions could be obtained by separating out nouns for each terminal phone according to their gender assignments and orthographic differences. Where a noun terminated with both a phonological and orthographic consonant, it was placed in one table, and where a noun with the same word-final phonological consonant was followed orthographically with the 'silent <e>', either in the singular, or plural form <es>, it was placed in another table. Headings of each Table related to frequency of gender assignment

in subsequent tabulations, eg. *Predominantly Masculine*, *Predominantly Feminine*. Results for the phoneme /g/ are shown in Table 2.3 below.

Table 2.3: Appendix I, Tables IX and X Last phone [ g ] (Tucker et al., 1977:77-78)

	Masculine	Feminine
Table IX <i>Predominantly Masculine</i> Written ending: -g, -gs, -c	88	1
Table X: <i>Predominantly Masculine</i> Written ending -gue, -gues	84	62

The single feminine exception among the *Predominantly Masculine* set in Table IX is given as *legging* (although this noun is shown as the plural *leggings* in COFED (1985:312, which entry has two transcriptions of its pronunciation, [legins] and [legins], neither of which offers [ g ] as the final phone).

Distributions obtained by separating out sets of nouns according to spelling and the absence of the mute <e> provided a remarkable diagnostic – not only for nouns terminating with /g/ but across the range of consonantal phones (as had been found in 1876 by Constantin, in Mel'čuk , 1974:24). However, for nouns terminating orthographically with the mute <e>, distributions were of little more assistance in determining gender assignment than for -gue/s above.

Tucker et al. (1977) followed this same process for other consonantal phones as, for example, the phoneme /t/ set out in Table 2.4 below.

Table 2.4: Appendix I, Tables XXVII and XXVIII Last phone [ t ] (Tucker et al., 1977:94-96)

	Masculine	Feminine
Table XXV <i>Predominantly Masculine</i> Written ending: -t	115	5
Table XXVI: <i>Predominantly Feminine</i> Written ending: -te/s, -tte/s, -the/s	1047	1102

Again, that process obtains similar results as for those obtained for the consonantal phone /g/ in that, of the 120 nouns in this set, 115 are masculine and 5 feminine. For the 2149 nouns terminating orthographically with the mute <e>, 51% are masculine and 49% are feminine. That is, those consonantal phones that also terminate in an orthographic consonant are more likely to be masculine, while distributions for the same terminal consonantal phone where its



orthography includes the 'mute <e>' are of little assistance in predicting gender assignment.

### 2.3.1.2 Word-final vowel phones

Tabulations relating to gender assignments amongst terminal vowel-final phones produced in Appendix II (Tucker et al., 1977:106-124) are summarised below in Table 2.5

Table 2.5: Distribution of gender assignment and vowel-final phones (Tucker et al., 1977:106-125)

Front and back vowels	Total	Masc.	Fem.	% Masc.	% Fem.
/i/	2337	575	1762	25%	75%
/e/	2791	1398	1393	50%	50%
/ɛ/	839	564	265	67%	33%
/a/	960	791	169	82%	18%
/o/	865	841	24	97%	3%
/u/	171	150	21	87%	13%
Nasal vowels					
/ẽ/	1963	1949	14	99%	1%
/ẽ/	938	929	9	99%	1%
/œ/	17	17	0	100%	0%
/õ/	2669	794	1871	30%	60%
Rounded front vowels					
/ø/	189	184	5	97%	3%
/y/	199	144	57	72%	28%

Clear results in terms of exceptionless generalisations can be established for only one vowel-final phone, /œ/. Distributions for o/ and /ø/ and for nasal vowels /ẽ/ and /ẽ/ are also very helpful, but they become increasingly less so for other vowel phones.

### 2.3.1.3 Inclusion of further terminal phones

Results based on the final phone could not provide exceptionless generalisations and, in many cases, were of little assistance in identifying any tendency at all in relation to gender assignment distributions. However, the inclusion of the penultimate phone, the antepenultimate phone – extending occasionally as far back as the preceding syllable in some cases – gave Tucker et al. more promising results for gender predictability, as in their analysis of the vowel-final phone /õ/ in Appendix II, Table XVIII (1977:120-125), summarised in Table 2.6 below.

Table 2.6: Summary of terminal phone / -ɔ̃ / and penultimate phones (Tucker et al. (1977:120-125))

Total	Masculine	Feminine
pɔ̃	23	-
bɔ̃	13	-
tɔ̃	104	1
dɔ̃	45	1
kɔ̃	14	-
gɔ̃	21	-
fɔ̃	13	-
vɔ̃	6	-
sɔ̃	66	12
zɔ̃	17	72
ʃɔ̃	23	1
ʒɔ̃	17	-
mɔ̃	24	1
nɔ̃	21	1
ɲɔ̃	24	-
lɔ̃	58	-
rɔ̃	113	1
iɔ̃	10	-
jɔ̃	166	1785
eɔ̃	13	-
aɔ̃	3	-

Of the 19 different sets formed using the penultimate phone plus / ɔ̃ /, 12 contain no feminine exemplars at all, while another six have only one. These are remarkable results.

Some of the phones in Table 2.6 form a nominal stem, eg. single-syllable nouns, such as *don* (M) 'gift', *con* (M) '(vulg.) 'female genitalia', *ion* (M) 'ion', *son* (M) 'sound', *fond* (M) 'bottom', and two-syllable noun stems, such as *siphon* (M) 'siphon', *donjon* (M) 'dungeon', etc. Many relate to suffixations formed with *-on*, as follows:

(10) *jambon* M 'ham' formed from *jambe* F 'leg',

<i>ponton</i>	M	'pontoon'	formed from <i>pont</i>	M	'bridge'
<i>plançon</i>	M	'shoot'	formed from <i>plante</i>	F	'plant'
<i>peton</i>	M	'tiny foot'	formed from <i>pied</i>	M	'foot'
<i>salon</i>	M	'large reception room'	formed from <i>salle</i>	F	'room'.

The same suffix *-on* may also be found on Latin stems ending in *-io*, eg. *faction* (F) 'faction', *leçon* (F) 'lesson', *nation* (F) 'nation', *station* (F) 'station', *saison* (F) 'season', *oignon* (M) 'onion', *faction* (M) '. For some of these combinations, palatalisation reduces the vowel [ i ] to a glide, [ j ], eg. *faction*. In some cases the vowel is entirely elided, eg. *façon*, *leçon* and *saison*. The suffix *-on* may also be fixed to Latin stems ending in *-ia*, eg. *gabion* (M) 'gabion' (used in constructing underwater foundations). However, nouns with this word-final phone may come from various origins, eg. *sabayon* (M) 'sabayon' (a sauce), from the Italian *zabaglione*.

Regardless of their origins, phones in Table 2.6 were formed into Table XVIII, Appendix II (Tucker et al, 1977:120). However, the authors divided terminal phones [jĩ] into /ĩ/ and /jĩ/, treating them as if they were phonologically distinct, as in (11) below.

(11) Phone	Masculine	Feminine
ĩ	10	-
jĩ	166	1785

Nouns *gaglione*, *embryon* and *septentrion* are included in the subset /ĩ/, while similar nouns *gabion*, *sabayon* and *collodion* are included in the subset /jĩ/. The basis for this distinction between /ĩ/ and /jĩ/ is unclear but, as figures in (11) show, it produced a remarkable results in terms of gender assignment distributions.

In the case of word-final consonants, the inclusion of preceding phones could not bring about any regularities, and analysis of examples provided shows that many of the word-final sequences related to suffixes. For instance, nouns with the orthographic representation *-ste* contains suffixed forms *-iste*, as for *journaliste*, and *-aste*, as for *cinéaste*. Figures produced by Tucker et al. (1977:99) for these phones show that all but eight of the 512 nouns ending in *-iste* are masculine (eg. *journaliste*) while all but two of the 27 nouns ending with *-aste* (eg. *cinéaste*) are masculine. LRPT (1994) indicates that alternative masculine and feminine genders are now

accepted for both of these nouns – and, presumably, others in the two sets. Thus, these suffixes themselves do not appear to motivate gender assignment. Masculine gender for nouns denoting a human referent in relation to an employment or activity is possibly a reflection of pre-1955 social norms of the period during which the dictionary Tucker et al. used in their research was published, rather than any morphological or phonological motivation.

However, for the word-final structure / it /, that is, where < t > is preceded by the vowel / i /, examples illustrate a range of suffixes and bound morphemes, eg. -it for *accessit* (M), -ite for *appendicite* (F) 'appendicitis' and *israélite* (M/F) 'Israelite', -lithe for *monolithe* (M) 'monolith', -site for *parasite* (M) 'parasite' (1977:98). What is taken for granted in their analysis is the basis on which the 'Written ending -t' is or is not pronounced, such as for *accessit*, *deficit*, *transit*, etc. where the final / t / is pronounced, while for nouns such as *débit* and *bruit* it is not. The different phonological outcomes of the very same orthographic representations require further examination.

In relation to compounds, Tucker et al. (1977:19) also argue that a relationship exists between morphology and gender assignment. For example, masculine gender for *porte-monnaie* (M) 'purse' cannot refer to *monnaie* (F) 'money' (coins). It follows that masculine gender must relate to *porte* in its derivation from the verb *porter* 'formed from a verb 'plus some other element'.

The significance of suffixes and combining forms revealed in the analysis by Tucker et al. (1977) of penultimate (and further) phones for both consonantal and vowel phones suggests that morphology may play some role in gender assignment and requires further exploration.

The examination by Corbett (1991) of gender in an extensive number of languages suggests to him that semantic rules can be covered by two 'relatively straightforward rules' (1991:57):

#### Semantic Assignment Rules

1. Sex-differentiable nouns denoting males are masculine.
2. Sex-differentiable nouns denoting females are feminine.

Those nouns not accounted for by such rules he calls 'hybrids', such as nouns used in titles,

and they are dealt with separately (1991:183-4, 227ff). Corbett (1991:58) also identifies the morphological rule presented by Tucker et al. and discussed above regarding compounds formed from a verb plus some element, all of which are masculine. Corbett thus states that the '... derivational structure of such lexical items is required to establish their gender' (1991:58).

Corbett (1991:58) provides evidence of a further morphological rule concerning nouns formed from verbs plus the suffix *-ation*, such as *inondation* (formed from *inonder* 'to flood') in that nouns formed in this way are all feminine. This rule avoids confusion with *nation* (F) 'nation' where there is no 'motivating verb' (Corbett, 1991:58). Corbett ties this example to the more significant area of phonology and gender assignment since '... major generalizations can be stated in terms of phonology' according to Tucker et al.'s (1977) analysis. Of particular significance is their account of the phone /ɔ̃/ where the inclusion of preceding phones, eg. /stjɔ̃/ and, in some cases, even the preceding syllable, eg. /Vsɔ̃/, suggested to Corbett that some fairly simply written rules can account for differences in gender assignment amongst nouns with this terminal phone (1991:60), shown in (12) below.

- (12) Nouns ending in /ɛzɔ̃/, /sjɔ̃/, /ʒjɔ̃/ and /tjɔ̃/ are feminine  
All other nouns ending ɔ̃ are masculine.

Together these rules cover 98.2% of words ending in this phone. Corbett suggests that nouns not covered by these rules may be accounted for by semantic and morphological rules and may be treated as exceptions (1991:61); thus, '... phonological rules are powerful predictors of gender'. However, the problem of how to deal with common nouns that cannot be accounted for by those rules, such as the feminine nouns *façon* 'manner, style', and *leçon* 'lesson', and masculine nouns *bastion* (M) 'bastion' and the specialist term *cation* (M) 'positive ion', remains.

Corbett (1991:61) indicates that the crucial principle established by Tucker et al. is that '... the final phone may provide adequate predictions, but that in other cases it may be necessary to refer to the phone preceding it, and so on'. These various rules show that gender assignment for French is not 'irrational' but rule-based according to a system, although Corbett acknowledges that it is one '... that allows more exceptions than do other systems' (1991:61).

However, as Surridge (1993:38) points out, there still remains the difficulty of explaining how native speakers know when and where to take account of or ignore the final phone, and precisely what final sequences are relevant.

Corbett (1991) notes that the French language shares a similarity with systems of other languages in that 'the semantic rules take precedence', eg. while /m/ endings indicate (predominantly) masculine gender for nouns, *femme* 'woman' semantically acquires feminine gender unrelated to its ending' (1991:61). Corbett also reports findings of Spence (1980, in Corbett, 1991:61) that morphological assignment gives way to semantic gender, eg. *garde-malade* 'nurse', which can have either masculine or feminine gender depending on the sex of its referent rather than masculine for verb-based compounds according to the morphological rule established by Tucker et al. (1977:19).

Corbett (1991:61) also comments on the number of overlaps between these three systems, eg. a common suffix *-tion* which creates abstract nouns from verbs, involves an overlap of morphological (noun suffix), semantic (abstract noun) and phonological [ sjɔ̃ ] systems.

However, there is a certain tension between Corbett's observation (1991:61) that semantic rules take precedence over phonological rules of gender assignment, and his subsequent generalisation that 'the major rules of gender assignment are phonological', thus aurally based (1991:61). Corbett (1991) notes that the report in Tucker et al. (1977:59) that deaf children who learn to speak French fail to acquire principles of gender assignment on nouns is significant. His summary concludes that the French system of gender assignment may require reference to 'the whole range of phonemes' in its language and indeed to segments of varying lengths of a lexical entry (Corbett, 1991:62).

Surridge (1993:88-89) discusses the difficulty of accounting for phonological aspects of gender assignment amongst single-syllable common nouns frequently found in children's vocabulary. For these nouns, gender assignments as noted by Tucker et al. (1977:61) appear to be problematic in that they do not follow distributions otherwise suggested by the final phone. Indeed, appendices provided by Tucker et al. (1977:68-125) contain many such counter-

examples to their generalisations. For instance, although 94% of *-age* words are masculine, very common monosyllabic words such as *page* 'page' and *cage* 'cage' are feminine. Tucker et al. (1977:61) suggest that it is 'inappropriate to consider these nouns as consonant plus ending'.

Various issues raised above suggest that while word-final phonology appears to play some role in the acquisition of gender assignment, the precise nature of the different distributions does not seem to be adequately explained.

### 2.3.2 Gender assignment and morphology

The potential association between gender assignment and morphology has so far been mentioned only briefly, in relation to its interaction with phonology. However, researchers such as Mel'čuk (1974), Tucker et al. (1977), Spence (1980 in Corbett, 1991:61), Surridge (1986, 1990, 1993) and Gervais (1993) all suggest that a more independent relationship exists between morphology and gender assignment. Mel'čuk (1974:12) suggests that compound words such as *rendez-vous* (M) 'meeting', and "substantified (sic)" phrases such as *laissez-passer* (M) 'leave-pass', are masculine. Tucker et al. (1977:19) restrict this association to compound nouns formed from verbs, as does Surridge (1993:81) with examples of 'verb plus noun', such as *tire-bouchon* (M) 'bottle-opener', *porte-monnaie* (M) 'purse', and *casse-croûte* (M) 'snack'. For her, apparent counter-examples such as feminine compounds *saisie-arrêt* (F) 'attachment', and *porte-fenêtre* (F) 'French window', are explained as 'noun-based compounds'.

Surridge (1986, 1990, 1993) and Gervais (1993) identify certain relationships between suffixation and gender assignment. Those associated with feminine gender assignment are found in (13) and (14), while those associated with masculine are found in (15) and (16) (Surridge, 1986:274).

- (13) • nouns derived from adjectives plus suffixes *-eur, -ie, -ite, -icité, -té, -esse, -itude, -étude, -ance, -ence, -ise*
- (14) • nouns derived from a noun plus suffix, eg. *-elle, -ette, -elette, -iole, -ule, -aie, -eraie, -aine.*
- (15) • nouns derived from a noun plus suffixes *-eau, -ot, -on, -eron, -in, -et, -illon, icule*
- (16) • nouns formed with the suffix *-isme.*

Surridge is able to find some generalisations concerning these suffixes, suggesting that examples shown in (13) indicate ... *la qualité d'être* '...the quality of being', while those in (14) include 'diminutive', and ... *autre sens* 'other meanings' while those in (15) relate to 'diminutive' and those in (16) to *un autre sens* 'other meanings' (1986:275). That is, these suffixes contribute something more than 'feminine' and 'masculine' to the meaning of the noun.

In her later research on the relationship between certain suffixes and certain gender assignments in the *lexique savant*, 'academic' or scholarly vocabulary, particularly those items in the lexicon formed from Latin and Greek compound forms, Surridge (1990:76) proposes certain categories – for 'animate' nouns a division between 'human' and 'non-human'; for 'inanimate' nouns a division between names of certain objects and nouns designating a state, action, or result of an action. However, nouns identified by Surridge as masculine, such as *philosophe* 'philosopher', *gynécologue* 'gynaecologist' are generally accepted today as having alternative gender assignments (COFED, 1986:413, 263 LRPT, 1994:842, 543).

Her research leads Surridge to surmise that the different rules relating to grammatical gender assignment are acquired by native speakers in a chronological hierarchy, those relating to simpler structures and higher frequency being acquired initially, followed later by morphological rules based on lexical structures found in more complex vocabulary, particularly for suffixed forms and compound nouns (1993:79).

### 2.3.3 Gender assignment and semantics

According to Corbett (1991:57), early material provided by Bidot (1925) contains a 'wealth' of information on gender assignment in French, particularly rules relating to semantics and orthography and the number of nouns that covered by those rules – although Corbett provides no further details. Efforts to obtain that early material have not been successful.

As mentioned above, the most obvious association between semantics and gender assignment is the association between natural gender and correlating gender assignment – between 'male' sex and masculine gender, and between 'female' sex and feminine gender. Indeed, Mel'čuk (1958,



later 1974:11) notes the semantic relationship between gender assignment and male or female, but does not consider it further in his in-depth phonological comparison of Spanish and French. The correlation between biological sex and noun gender amongst such nouns has given rise to grammatical rules that state that nouns that denote human males will be masculine, and nouns that denote human females will be feminine (Corbett, 1991:57).

### 2.3.3.1 Correlation between sex of referent and gender assignment

There is widespread awareness that sex-related correlation can usually account for distribution of masculine and feminine gender on some French nouns. While support for semantic motivation of gender assignment in French can be demonstrated through the many examples of regular and predictable correlation between gender on the noun and sex of human referent, the complex nature of that semantic influence and the part it plays in the distribution of gender assignment among other groups of animate referents and inanimate (non-human) entities nouns is less well known and less well accounted for. In fact, despite the commonly held view that nouns designating male and female for humans are generally considered to provide the least difficulty in predicting gender on nouns, even here closer examination reveals that this area does not follow fully predictable patterns.

In Table 2.7 are examples of nouns that follow predictable patterns – correlation of masculine gender assignment with male referents, and feminine gender assignment with female referents.

Table 2.7: Correlation between gender assignment and 'male' or 'female' human beings

Noun	Semantic attributes	Gender (M/F)	Translation
<i>garçon</i>	human, male, young	M	'boy'
<i>fille</i>	human, female, young (offspring)	F	'girl'
<i>homme</i>	human, male, adult	M	'man'
<i>dame</i>	human, female, adult	F	'woman'

Gervais (1993:126) suggests that gender assignment on nouns may also derive from sex-specific 'male' or 'female' qualities of referents, e.g. *eunuch* (M) 'eunuch' and *nourrice* (F) 'woman who breastfeeds a baby'. However, although the semantic distribution of gender provided by the examples above appears to indicate a strong correlation between gender of noun and sex of referent, Surridge (1995:46) reports that '...(I)t is, however, extremely difficult to find examples

of nouns in which the male-masculine, female-feminine association is both simple and constant'.

Several researchers (Gervais, 1993, Surridge, 1989 b, Härmä, 2000) have identified other nouns which could feasibly relate to both women and men but are assigned to one gender or another, eg. nouns with male referents, as in (17) below:

- (17) *un chevalier* (M) (anc.) 'rider'; (mod.) 'knight'; 'escort' (male)  
*un mandarin* (M) 'high ranking (Chinese) official'; 'member of intellectual élite'

These nouns do not have feminine equivalents. There are also examples of feminine words which could have masculine equivalents, but do not, as in (18).

- (18) *une nonne* (F) 'devout person'; 'nun'  
*une amazone* (F) 'female rider'; 'Amazonian' (female)

Nonetheless, these nouns follow the semantic gender assignment rules of male/masculine and female/feminine gender noted above, in that *chevalier* is a masculine word with a male-only referent, 'knight', while *nonne* is feminine with a female-only referent, 'nun'.

Principles identified in the research of Tucker et al. (1977) would suggest that the final phones of *chevalier* (1977:117) and *mandarin* (1977:110) have phonological characteristics associated with the assignment of masculine gender whereas those for *nonne* and *amazone* (1977:85) are more closely associated with the assignment of feminine gender, although figures are less clear-cut. These examples might suggest that where conflict exists between semantic principles of gender assignment and phonological principles of gender assignment, resolution would favour the phonological principles. Further examination will be made of such examples to explore and determine the precise nature of phonological and semantic principles of gender assignment.

#### 2.3.3.2 Counter-examples in relation to sex and gender assignment

Of considerable significance are cases where the sex of the human referent conflicts with the gender assigned to the noun. These counter-examples are discussed below.

##### Feminine noun with male referent

Corbett (1991:58, 226) and Gervais (1993:125) both identify the conflict reported by the

French grammarian Grévisse in what Grévisse suggests is a 'grey' area. This refers to the conflict found in some cases between the gender of noun and sex of the referent, particularly one group of feminine nouns with characteristically feminine phonological and/or lexical endings that denote a male referent. Most of these examples pertain to military life, eg. *une sentinelle* 'sentry', *une ordonnance* 'orderly', *une recrue* 'recruit', *une vigie* 'look-out', *une vedette* 'scout', *une estafette* 'courier'. Corbett labels examples such as *une sentinelle* 'sentry' as 'hybrid' (Corbett, 1991:58), and describes hybrids as nouns whose agreement patterns are not consistent, and whose inconsistencies cannot be accounted for by multiple gender assignments (1991:183). However, if gender is reflected in behaviours of associated words, it calls into question the nature of agreement on the noun. Equally problematic is the inconsistency between the gender of the noun and sex of the real-world referent.

As further examples of nouns with hybrid characteristics, Corbett (1991:226) refers to titles such as *Sa Sainteté* 'His holiness' and *Sa majesté* 'His Majesty' in that these nouns frequently refer to men but typically follow grammatical rules of agreement with the (feminine) gender of the nouns, rather than masculine to reflect the real-world (male) referent, as in (19).

- (19)    *Votre Majesté*                      *partira*                      *quand elle*                      *voudra*  
          Your majesty (M)                      will leave                      when she (sic)                      wishes  
          'Your Majesty will leave when he wishes'

(Voltaire, quoted by Grévisse, in Corbett, 1991:227)

In this example, the feminine pronoun *elle* agrees with the feminine gender assignment of *Majesté*, rather than *il* in the context of the king, whom we know to be the addressee. However, the same agreement does not occur in the following example:

- (20)    *Sa*            *Majesté*            *fut*            *inquiète*            *et de nouveau*            *il*            *envoya*  
          His (M) Majesty            was            worried (M)            and of new            he            sent  
          *La Varenne à*                      *son Ministre*  
          La Varenne to                      his Minister  
          'His Majesty was worried, and again he sent La Varenne to his minister'

(J. & J. Tharaud, quoted by Grévisse 1964:405, in Corbett, 1991:227)

In this example, we find feminine agreement (*Sa, inquiète*) in the first clause, while the personal pronoun in the second clause is the masculine *il*. Corbett also notes that these kinds of 'hybrid'

variations are 'severely restricted' in that gender agreement depends on the target constituent, in this case affecting the personal pronoun only, where the more usual requirement is for syntactic agreement (Corbett, 1991:227). Perhaps it is significant that, in this example, the masculine pronoun is in a separate sentence conjunct. Härmä (2000:617), however, reports the growing frequency in *français populaire* – the casual speech register used by young French people – of another kind of inconsistency in agreement, but one which does not depend on the target, eg. in constructions such as *Ma femme il est jaloux* 'My wife (he) is jealous'. Here the pronoun does not follow the semantic sex/gender female/feminine, and the adjective then agrees with the semantically male/masculine pronoun. Such examples are described by Härmä (2000:617) as a type of gender neutralisation, which he relates to another gender-neutralising context involving the use of the demonstrative *ça*. These examples denote both male and female referents in expressions such as *Les femmes ça parle toujours beaucoup* 'Women (it) always speak a lot', and also inanimate referents, as in *L'art moderne, c'est pas très intéressant* 'Modern art it's not very interesting'. While such examples are of interest as a diagnostic of gender, a comprehensive study of agreement is beyond the scope of this thesis.

#### Masculine noun with female referent

Gervais (1993:122) provides examples of masculine words that traditionally denote a female-only referent, as in (21) below.

- |      |                    |                                    |
|------|--------------------|------------------------------------|
| (21) | <i>un souillon</i> | 'a slut' (female)                  |
|      | <i>un laidéron</i> | 'unattractive girl or young woman' |
|      | <i>un bas-bleu</i> | 'blue-stockings' (female)          |

She notes, however, that these nouns may on occasion be assigned to either sex through alternation of article, eg. *un/une souillon*, *un/une laidéron*, a practice that is discussed further in the following section on morphological assignment of gender. Gervais (1993:122) also points out a series of diminutives and terms of affection heard in current colloquial French where 'grammatically masculine' forms may be permitted to have female referents, eg. *mon poulet* 'my little chicken' (to young boy or girl), *mon chéri* 'my darling' and *mon petit* 'my little (one)', but that the opposite, eg. *ma vieille* 'my old (friend/mate)', while possible, is rarely heard to denote a male referent. Although Gervais does not discuss abuse terms, Aikhenvald (2000:313) notes

that, in Russian, abuse terms become more insulting when a feminine form is applied to a male referent.

Generic masculine for male and female referents

A rule taught both to French children and to second language learners of French is that '*le masculin l'emporte sur le féminin*' (Gervais, 1993:124). In other words, traditional grammar dictates that where male and female co-occur, the presence of female referents will be subsumed within the masculine gender assignment. This is also noted by Corbett (1991:279) as in his example in (22).

- (22) *un père et une mère excellents*  
a (M) father (male) and a (F) mother (female) excellent (M.PL.)  
'An excellent father and mother'

Indeed, it can be demonstrated that other plurals, such as the pronoun *ils*, include male referents but not exclusively, and any case where previous reference involves both male and female, or masculine and feminine, resolves to the masculine. This was an observable feature of Middle French that continues in Modern French. Corbett (1991:296) suggests that this process of 'gender resolution' in favour of masculine is typical of languages having two or three genders .

The generic masculine occurs not only in relation to plurality for nouns but also on pronouns. However, the examples of singular nouns in (23) below – obtained from Spence (1983:21-2), Grévisse (in Gervais, 1993:126) and Gervais (1993:131-2) – and supplemented by examples of my own, suggest that generic masculine applies to some singular nouns as well as those in (17) above.

- |      |                          |                     |                         |
|------|--------------------------|---------------------|-------------------------|
| (23) | <i>un témoin</i> (M)     | 'witness'           | male or female referent |
|      | <i>un servent</i> (M)    | 'servant'           | male or female referent |
|      | <i>un professeur</i> (M) | 'teacher'           | male or female referent |
|      | <i>un mannequin</i> (M)  | 'model'             | male or female referent |
|      | <i>un assassin</i> (M)   | 'assassin'          | male or female referent |
|      | <i>un gourmet</i> (M)    | 'gourmet'           | male or female referent |
|      | <i>un familier</i> (M)   | 'one of the family' | male or female referent |

These masculine nouns are not restricted to males in their application. For instance, *un professeur* 'a teacher' applies to male referents but is routinely used for female referents, eg. *elle est professeur* 'she is a teacher'; *un témoin* and *un servent* may refer to a male or female person. For these nouns, the sex of the real-world referent and grammatical gender of the noun seem not to be related.

Traditional accounts have noted the generic function of masculine nouns to include feminine referents, as in the slogan reported above by Gervais (1993:124) where *le masculin l'emporte sur le féminin* 'masculine incorporates the feminine'.

#### Generic feminine for male and female referents

However, we may also note some cases of generic nouns denoting humans in which a grammatically feminine noun may denote a male or female referent, eg. *personne* (F) 'person'. Other words in this group are *victime* (F) 'victim', *connaissance* (F) 'acquaintance', *vedette* (F) 'scout', *star* (F) 'famous person/actor' (Gervais, 1993:127). Although these nouns are feminine, they can be regarded as generic in that their referent may be either male or female.

It is surprising that the very frequently-used feminine noun *personne* 'person' surely must be the quintessential generic, but is not mentioned by Corbett (1991). While Gervais (1993:123) notes its generic nature, her interest in *personne* is in relation to the masculine, or 'genderless', form it acquires when it functions as an indefinite negative pronoun, and she groups it with other similarly 'genderless' pronouns, as in (24).

- |      |                |                  |
|------|----------------|------------------|
| (24) | <i>quelque</i> | 'some'           |
|      | <i>cela</i>    | 'that'           |
|      | <i>tout</i>    | 'everything/all' |
|      | <i>rien</i>    | 'nothing'.       |

#### Alternations in gender assignment

The change of function/change of gender feature noted by Gervais (1993) above for *personne* 'person' warrants further exploration. For instance, the word *gent* 'race' or 'species' is feminine in the singular, but in its plural form *gens* 'people' it becomes generic (that is, *personne et*

*nombre indéterminé*, in LRPT, 1994:517) and may take either masculine or feminine gender.

This gender alternation is reflected in agreement and is dictated by word order, as Gervais (1993:126) notes, in that where all adjectives precede the noun, it has feminine agreement, as in (25) below:

- (25) *ces bonnes* (F.PL) *gens* 'these good people'

Where an adjective must follow the noun in a sequence, eg *brave* in (25) below, *gens* has masculine agreement.

- (26) *ces gens bons* (M.PL) *et braves* (M/F.PL) 'these good, brave people'

Gervais also observes that the generic use and feminine form of *gens* (PL) appears to be fading due to the widespread popular use of the masculine/male expression *jeunes gens* 'young (adolescent) men' used in contrast with *jeunes filles* 'young (adolescent) girls', rather than as the generic *personnes jeunes et célibataires* 'young and single people' (Gervais, 1993:126). As has been previously noted, Gervais (1993:127) identifies a gender alternation for *personne* 'person', a feminine generic noun that becomes masculine where it is used in the negative, eg. *personne n'est venu* (rather than \**venue*) 'no-one came'. These examples would better fit, perhaps, within Corbett's (1991:183) definition of hybrid nouns (see above, Feminine Noun with Male Referent) in that they belong to 'two or more genders'. Given the otherwise supposedly clear-cut pattern of semantic assignment of gender assignment for humans, the different gender assignments of these nouns require further explanation.

#### Professions, occupations and gender attribution

Certain professions and occupations have alternative gender assignments, and the entrance of women into traditionally male occupations or professions provides some interesting test cases of assignment of gender according to sex of referent. Gervais (1993:131-2) provides a list of nouns which have been involved in such a process. Many of the new usages have now been officially recognised by the *Office de la langue française* (Gervais, 1993:131-2).

Examination of this list reveals three processes for creating feminine nouns. The first, and least controversial, process appears to be through alternation of the article from masculine to

feminine, such as in the following example, *un/une chimiste*, where the masculine article *un* denotes 'a male chemist' and the feminine article *une* denotes 'a female chemist'.

The set in Table 2.8 below contains nouns in which alternative gender assignments are possible without any change or addition to the noun itself.

Table 2.8: Nouns whose gender is revealed through the article

---

<i>un cadre</i>	<i>une cadre</i>	'officer, manager'
<i>un ministre</i>	<i>une ministre</i>	'minister'
<i>un poète</i>	<i>une poète</i>	'poet'
<i>un mannequin</i>	<i>une mannequin</i>	'model'
<i>un marin</i>	<i>une marin</i>	'sailor'
<i>un médecin</i>	<i>une médecin</i>	'doctor'
<i>un substitut</i>	<i>une substitut</i>	'substitute'
<i>un chef</i>	<i>une chef</i>	'chief, head'
<i>un commis</i>	<i>une commis</i>	'clerk'
<i>un docteur</i>	<i>une docteur</i>	'doctor'

---

Interestingly, Gervais (1993:131-2) includes *un/une juge*, *un/une médecin*, *un/une chef*, *un/une docteur*, for which feminine alternatives are not offered by LRPT (1994:638). It is possible that the alternatives presented by Gervais reflect more recent social practices than any dictionary has yet recorded.

The second process codes gender through alternations of the article between masculine and feminine forms and a concomitant word-final orthographic addition to the masculine form with the letter 'e' (known as the 'silent' or 'mute <e>') to reflect female sex of referent. In these cases, the orthographic changes do not involve any phonological change. Some examples are provided in (27) (Gervais, 1993:131).

- (27)
- |                      |                        |            |
|----------------------|------------------------|------------|
| <i>un ingénieur</i>  | <i>une ingénieure</i>  | 'engineer' |
| <i>un consul</i>     | <i>une consule</i>     | 'consul'   |
| <i>un gouverneur</i> | <i>une gouverneure</i> | 'governor' |
| <i>un sculpteur</i>  | <i>une sculpteure</i>  | 'sculptor' |
| <i>un député</i>     | <i>une députée</i>     | 'deputy'   |

It is noted that the feminine alternative suffix form *-eure* for above nouns *ingénieure*, *gouverneure* and *sculpteure* is amongst those feminisations considered unacceptable by the



*Académie française* in its (1984) declaration (discussed above). It finds that the only acceptable cases of *-eure ... sont ceux qui proviennent de comparatifs latins en -or* 'are those which come from Latin comparative meanings. The terms *prieure* and *supérieure* are acceptable since both are considered to be derived from comparative Latin terms – for *prior* in its meaning 'former, previous, prior', and for *superior* as the comparative form of *superus*, 'upper, higher' (ELD, 1966:650, 833) – although it is not clear why such a restriction exists, nor why it would be lifted only for comparative forms.

In the third group of nouns set out below (28), the biological sex of a referent is encoded via alternative masculine and feminine forms of the article, and an additional morphological (inflectional) change in suffixation on the noun; many of these morphological forms are based on the gender agreement principles also found on adjectives, for example, *courageux/courageuse* (M/F) 'courageous', or *ancien/-ienne*:

(28)	<i>un chirurgien</i>	<i>une chirurgienne</i>	'surgeon'
	<i>un écrivain</i>	<i>une écrivaine</i>	'writer'
	<i>un arpenteur</i>	<i>une arpenteuse</i>	'surveyor'
	<i>un amateur</i>	<i>une amatrice</i>	'amateur'

Nouns in (29) provide a fourth, but small, set where forms may be modelled either on the process exemplified in Table 2.8, or exemplified in (27) and (28) above.

(29)	<i>un maire, une mairesse</i>	<i>un/une maire</i>	'mayor'
	<i>un contremaître, une contremaîtresse</i>	<i>un/une contremaître</i>	'foreman'

Of similar interest are those cases where alternative forms were once acceptable but now are not, eg. *savant/-ante* (M/F) 'a learned or erudite person' (LRPT, 1994:1015), *amateur/-rice* (M/F) 'amateur', and *guerrier/-ière* (M/F) 'warrior' (COFED, 1985:262). For these nouns, gender assignments would also once have reflected the sex of the referent intended by the speaker. Today, however, *savant* and *amateur* continue to be used but gender assignment is fixed as masculine. The meaning of *savant* is restricted to a 'person whose knowledge and research contributes to the progress of a science' (LRPT, 1994:1015). The terms *guerrier/-ière* have fallen into disuse and have been replaced by the fixed masculine noun *soldat* (M) 'soldier'

(since the feminine *soldate* appears to be acceptable only in informal contexts (LRPT, 1994:1044). Through examples such as these, we are able to observe changes in social mores over time.

### 2.3.3.3 Areas of resistance to correlation between sex and gender assignment

One of the problems in determining the feminine forms that will correlate with female sex relates not so much to the absence of possible feminine forms, but to the large range of possible choices (Grévisse in Gervais, 1993:131). The deliberations of *Commission de terminologie* set up in 1984 to examine this area provoked an outcry in France, not least from the *Académie française* (see Appendix I). For the present study the most interesting aspect of this outcry relates to those forms which seem to have provoked the greatest resistance. The noun *auteur* 'author' provides a most interesting example – firstly in the widespread public resistance to its use for females, and secondly, for the rejection by authorities of such possible alternatives as *auteuse/auteure/autrice*, which have also failed to find acceptance with women authors (Härmä, 2000:610).

Other words for professional women have also created certain problems. For instance, broad resistance was encountered to feminine gender assignment in the following cases, not just within the professions:

Table 2.9: Nouns showing resistance to alternative feminine gender assignment

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<i>une avocate</i>	'a barrister/lawyer'
<i>une magistrate</i>	'a magistrate'
<i>une officière</i>	'an officer'
<i>une lieutenant</i>	'a lieutenant'
<i>une chirurgienne</i>	'a surgeon'
<i>une médecine</i>	'a doctor'
<i>une dermatologue</i>	'a dermatologist'

---

(Gervais, 1993:134).

However, Härmä points out (2000:610) that the feminine *avocate* 'barrister/lawyer(female)' is now an acceptable form extended from the masculine *avocat* 'barrister/lawyer(male)'. If *avocate* is now an acceptable form, alongside other examples such as *candidat/-ate* (M/F) 'candidate',

one must look elsewhere to explain the resistance to the feminine *magistrate* as an acceptable alternation for the masculine '*magistrat*', or *soldate* as an acceptable alternation for *soldat* 'soldier'. As Fleischmann's (1997) study finds, the significant resistance to language change in this area in France is the reverence for *le bon usage* 'correct usage'. Further examination of such examples should unravel crucial information concerning the semantic, morphological and phonological processes by which gender is assigned. Further analysis is required for those nouns whose meanings generate such resistance, or that cannot be generalised to include a feminine/female alternative form where others can.

#### 2.3.3.4 Other semantic associations with gender assignment in French

SurrIDGE's (1989b) research into semantic categories of French nouns calls attention to a number of other groups identified in traditional grammars whose gender assignment appears to be associated with semantic rules. For instance, nouns denoting days of week, months of year, points of compass, trees, colours, chemical elements and other metals are amongst those sets associated with masculine, while nouns denoting arts and science philosophies, and fruits are sets associated with feminine categories. SurrIDGE (1993) later attempts to account for these categories, and suggests that there may be some association between frequency of use and a chronological stratification in the acquisition of such nouns for young learners.

#### 2.3.4 Gender assignment of homonyms and other French nouns

Gervais (1993) raises certain issues in relation to gender assignment, particularly the confusion caused by the many homophones with different gender assignments, such nouns as *manche* (M) 'handle' and *manche* (F) 'sleeve'/'hose'/'channel', *tour* (M) 'turn' and *tour* (F) 'tower', and *Pâque* (F) 'Passover', and *Pâques* (M) 'Easter', Easter Day in particular – although it is feminine in certain plural expressions relating to Easter, eg. *joyeuses pâques* 'Happy Easter' (1993:125). Gervais (1993:125) suggests that differentiation of the semantic meaning of these words is provided by the gender pertaining to the article rather than the phonetic or morphological realisation of the noun. However, while this suggestion may account for our ability to convey the different meanings, it provides no understanding of the basis for differences in gender assignments in the first place.

Gervais (1993:125) also identifies a number of nouns whose gender assignment changes from singular to plural, eg. *un amour* (M) 'love affair', *de folles amours* (F) 'love affairs', *un orgue* (M) 'an organ', *les orgues* (F) 'organ' as in the case of *les grandes orgues de Notre Dame* 'the great organ of Notre Dame' (LRPT, 1994:795). She argues that these changes in gender assignment appear to be associated with grammatical changes between singular and plural, but that such changes do not occur in any widespread way.

## 2.4 Summary – literature review

The above research reviews various classification systems of other languages and their semantic groupings, as well as historical, phonological and morphological aspects related to the classification of nouns in French. Phonological and morphological interaction are argued to be particularly significant, although regularities are difficult to find beyond certain tendencies. Much of the research on French has identified that gender assignment has a semantic core, but analyses so far have been unable to extend this area beyond humans, and certain other well-known sets such as days of the week, winds, etc. (Bidot, 1925, Surridge, 1993).

The classification systems of other languages and their semantic groupings may be of some assistance in uncovering further explanations, not only for distributions of gender in French, but possibly for differences or alternations in word-final pronunciation patterns as well. Also of interest will be the existence of any nouns that appear to contradict the gender of their apparent semantic grouping, and examples that challenge the phonological principles identified by Tucker et al. (1977). One such example is *dimanche* 'Sunday', which has an otherwise-feminine phonological word-final ending [ ǝf ] (1977:96) but where masculine gender is argued to be generated by its membership of the semantically masculine group, 'days of the week', identified by Surridge (1993:85) – although the basis for that classification is not itself clear. In that much of the literature focuses principally on nouns representing the natural world, this domain will continue to be of major interest in the analysis of gender in French. Given the opposition between 'male' and 'female', other oppositions might also be significant in differentiating between certain entities.

The analysis of French that follows will take into account the nature of material raised in this review.

## 2.5 Methodology

Cross linguistic research shows that many languages have semantically based classification systems, of which gender relating to humans forms a part. For animate non-humans and inanimate entities, other explanations suggest that criteria are culture-specific, and where semantics cannot account for distributions, morphological and phonological explanations are offered. It seems worthwhile, therefore, to examine the semantic principles of classifier languages in assigning gender, and to investigate the outcome of the application of such principles to nouns in French. Such a process should provide additional insights into gender assignment of French nouns.

The research into gender assignment of French nouns discussed above raises certain challenges to the view that gender assignment in French is arbitrary. In particular, it suggests that there may be some interaction between gender assignment and phonology in relation to word endings (Mel'čuk, 1974, Tucker et al., 1977), morphology (Tucker et al., 1977, Surridge, 1986, 1990), and gender assignment and semantics (Bidot, 1925, Corbett, 1991, Surridge, 1989a, 1989b, Gervais 1993).

This present research will examine the relationship between gender assignment and word-final phonology, word-final morphology and semantics in French. Chapter 3 will present the phonological and morphological analysis of a database of over 8000 nouns, as well as an analysis of semantic explanations of nominal classification systems offered so far, particularly any organising principles beyond numerical tendencies. Phonology and morphology will continue to be explored alongside the semantics of nouns in the different lexical fields covered in Chapters 4 to 8. Of crucial importance to the current research are loan words, synonyms, and nouns offering alternative gender assignments and/or alternative word-final pronunciations, since any explanation must also account for variations amongst these different sets of nouns.

In its focus on the natural world, this research examines the range of entities considered to be included within the framework of 'living things', separated into the following five lexical fields:

- birds (Chapter 4)
- fish (Chapter 5)
- other members of the animal kingdom (Chapter 6)
- plant kingdom, limited to two areas – woody plants (trees, shrubs, vines), and fruits (Chapter 7)
- human beings (Chapter 8).

Within each lexical field, the potential relationship between phonology and gender assignment is examined in relation to word-final syllable structure and morphology. This process not only responds to some of the productive results of Tucker et al. (1977), but also proved useful in a pilot study for this project. Semantic features relevant in classifier languages, particularly as they relate to form, shape, relative size, for example, are also examined for any potential interaction with gender assignment and/or word-final pronunciation in each of the domains, and a summary for each domain is provided. The analysis of each subsequent domain proceeds without initial reference to the previous domain in order to allow for the fact that particular domains may be sensitive to phonological, morphological and semantic information in different degrees. Where relevant, however, insights from previous chapters will be tested.

For a robust semantic analysis, synonyms provide crucial test cases while homonyms provide a diagnostic to compare the relative importance of phonology to semantics. Counter-examples to any potential explanation, and nouns whose gender assignments have altered over time, will also be crucial in the investigation.

The word-final analysis in this thesis is phonological and is based on the synchronic spoken form of the language. However, historical background, particularly relating to any change in the semantics or change in gender assignment or word-final pronunciation of a noun, will also be considered. For ease of readability French words are written in standard French orthography except where a phonetic/phonological point is being made that needs phonetic documentation. However, in this regard, it is stressed that the use of expressions 'consonant-final pronunciation'

and 'vowel-final pronunciation' are used to differentiate this study from that of Tucker et al. (1977:68-127) whose analysis relied heavily on word-final orthography.

Data relating to French nouns, their pronunciation, and meaning, were initially drawn from *Le Robert pour Tous* (LRPT, 1995) and the *Concise Oxford French Dictionary* (1985) which incorporates both the *Concise Oxford French-English Dictionary* and the *Concise Oxford English-French Dictionary*. As it became clear that semantic attributes were significant, the internet was used to identify specific entities and gain information in regard to physical features, habitat, habits, and resulted in the addition of further nouns to the database. Such information, and the richness of the database, is crucial to a study such as this.

## Chapter 3 Review of phonological, morphological and semantic explanations

### 3.0 Introduction

This chapter examines the relationship between 'formal' rules relating to systems of gender assignment for French nouns, in particular phonological rules associated with word-final phones, and morphological rules that consider a noun from the point of view of its derivational structure, including compounding, suggested to be significant in French (Corbett, 1991:58). Also included is a brief examination of semantic explanations for other languages that might have some bearing on French.

During the 1950s, Mel'čuk's analysis of the relationship between word ending and gender assignment in Spanish led him to examine the possibility that the same relationship might exist in French. Some twenty years later, a review by Tucker et al. of available material on gender assignment in French and the insights gleaned from that review also suggested a possible relationship between word-final phonology and gender assignment. These conclusions led to their entirely independent analyses of gender assignment and word-final pronunciation of nouns according to percentages – for Mel'čuk (1958, later 1974) limited to the most common nouns in the lexicon, and for Tucker et al. (1977) the inclusion of every noun in the lexicon. These independent studies were able to identify certain tendencies. However, as Surridge (1993:83) points out, tendencies produced by Tucker et al. (1977) are of little assistance in predictability of gender assignment:

Of all the phonic endings, only one provides certainty as to gender, and in four cases the phonic ending would give the speaker no help at all. In between these extremes lie a range of different degrees of probability.

While the review of the research of Tucker et al. (1977) provided in Ch. 2 identified that many tendencies were based on orthography rather than phonology, nonetheless the insights they gathered suggested that phonology – word-final phonology in particular – plays a crucial role in gender assignment. Accordingly, for this research a phonological analysis was also undertaken with a corpus of more than 8,000 nouns randomly selected from The Concise Oxford French Dictionary (1985 edition) and *Le Robert pour Tous* (1994). Those results are examined below.



The research of Mel'čuk (1958, later 1974), Tucker et al. (1977) and Surridge (1985, 1986, 1990) led them to consider some relationship between gender assignment and compound nouns or combining forms. Accordingly this area is also examined below.

### 3.1 Gender assignment in relation to word-final phone

An analysis of the distributions of gender assignment according to consonant-final and vowel-final pronunciation amongst over 8000 nouns in the current database was carried out. Results are set out in Table 3.1 below.

Table 3.1: Phonological analysis of consonant-final nouns in current database

Phone	Total	Masc.	%	Fem.	%	Alternative M/F
Vowel-final nouns						
/i/	524*	159	(30)	365	(70)	-
/e/	402*	199	(49)	203	(51)	....2
/ɛ/	216	191	(88)	25	(12)	-
/a/	376	307	(82)	69	(18)	....3
/o/**	213	205	(96)	8	(4)	....2
/u/	72	55	(76)	17	(24)	....-
/ǫ/	690	687	(99)	5	(1)	....3
/ẽ/	213	207	(97)	6	(3)	....-
/œ/	13	13	(100)	0	(0)	....-
/ĩ/	1141	384	(33)	757	(67)	....
/ø/	54	49	(91)	5	(9)	....-
/y/	105	61	(58)	44	(42)	2
Totals	4025	2509	(62)	1504	(38)	12
Consonant-final nouns						
/p/	108	33	(32)	70	(68)	5
/b/	72	33	(46)	39	(54)	-
/t/	352	98	(28)	237	(78)	17
/d/	282	82	(29)	200	(71)	-
/k/	218	142	(65)	76	(35)	-
/g/	61	20	(33)	37	(67)	4
/f/	105	65	(63)	34	(37)	6
/v/	71	14	(22)	54	(78)	3
/s/	300	104	(37)	195	(63)	1

/z/	220	49	(21)	173	(79)	8
/ʃ/	178	68	(39)	110	(61)	4
/ʒ/	155	207	(21)	75	(79)	2
/m/	219	167	(76)	50	(34)	2
/n/	305	74	(25)	230	(75)	3
/ɲ/	58	14	(25)	44	(75)	-
/ŋ/	25	25	(100)	-	(0)	-
/l/	376	192	(51)	172	(49)	13
/r/	713	431	(60)	269	(40)	13
/j/	169	47	(28)	121	(72)	1
/tʃ/	13	13	(100)	-	(0)	-
/dʒ/	3	3	(100)	-	(0)	-
Totals	4153	1881	(46)	2188	(54)	84

\*Homonyms with different masculine and feminine gender assignments are counted individually, eg. *oublie* (M) 'forgetfulness' and *oublie* (F) 'wafer', *bamboula* (M) 'tom-tom' and (F) 'African dance', *alto* (M) 'viola' and (F) 'alto voice'. Terms that offer alternative gender assignments, such as *égrisé* (M)/*égrisée* (F) 'diamond dust', *coca* (M/F) 'coca bush', *aigle* (M/F) 'eagle', are included in the final column. Figures for /ɑ/ and /a/ are combined as /a/.

These results reveal many cases where nouns offer alternative gender assignments, although no such examples can be identified among Tables produced by Tucker et al. (1977).

Among nouns with vowel-final pronunciation, results are very similar to those obtained by Tucker et al. (1977) – particularly for nasal vowel /œ̃/ where all are masculine, although this set is tiny, with only 13 nouns (cf. 19 for Tucker et al., 1977). Vowels /ɛ/, /a/, /ø/ and /o/, and nasal vowels /ɑ̃/ and /ẽ̃/, are strongly associated with masculine gender, while /i/ and /ɔ̃/ are more closely associated with feminine gender. Distributions for /e/ are evenly divided. However, as Surridge (1993:83) states, even strong tendencies are unhelpful in predicting precisely which noun will be masculine and which will be feminine.

Tabulations above for consonantal phones do not provide any clearer picture in relation to predictability of gender assignment than figures provided by Tucker et al. (1977), except in relation to /ŋ/ (found in loan words such as *swing* (M) 'swing'), /tʃ/ (as in *catch* (M) 'catch'), and /dʒ/ (*bridge* (M) 'bridge') none of which are part of the native French system. Nonetheless they indicate that the language can accept nouns with such endings not only from English but

from other languages such as (Norwegian) *lemming* (M) 'lemming', (Russian) *tsarévitch* (M) '(eldest) son of tsar' (Russian), and (Khmer) *Cambodge* (M) 'Cambodia', although in some cases transcriptions offer alternative pronunciations, eg. *lunch* as /lœ̃tʃ/ or /lœ̃ʃ/ (LRPT, 1994:628). Exemplars for these phones are all loan words, and while most are masculine, some loan words amongst these consonantal sets are feminine, eg. *schlague* (F) 'flogging', *star* (F) 'filmstar', and some also offer alternative gender assignments, eg. *snob* (M/F) 'snob'. These different treatments among loan words are not unlike the different treatments of native French nouns, and together these overall results suggest that the process involved in gender assignment is less likely to be related to a phonological system than to some other system.

The analysis also reveals that orthographic material is not consistent in assisting predictability as, for instance, with /e/, the phone representing suffixes *-él-ée*. While *-é* is suggested to be associated with masculine, it is the terminal orthographic component of the suffix *-ité* which is closely associated with feminine gender in nouns such as, *humanité* (F) 'humanity', *utilité* (F) 'utility', while *-ée* is more closely associated with feminine nouns, eg. *arrivée* (F) 'arrival', *cuillerée* (F) 'spoonful', but occurs also in the case of masculine nouns, eg. *lycée* (M) 'secondary school', and *musée* (M) 'museum'.

Tucker et al. (1977) were able to obtain more meaningful distributions in their analysis by including penultimate and antepenultimate phones, in some cases extending as far back as the previous syllable. However, those results, while couched in phonological terms, are not based on phonological distinctions. More crucially, the inclusion of more and more word-final elements obscured the fact that in many cases word-final phones related to suffixes such as *-ard/e* 'somewhat like/kind of' eg. or morphemes (bound or unbound) with their own semantics, eg. *-cyte* 'indicating a cell', *-age* 'indicating an aggregate'. However, neither semantics based on biological sex, nor additional phonological or orthographic information, can account for alternative gender assignments among nouns that have no basis in distinctions for 'male' and 'female', as for the consonant-final *aigle* (M/F) 'eagle', or vowel-final *angora* (M/F) 'angora' in its application to an animal.

The previous chapter discussed the word-final consonant /t/ and implications of including penultimate phones, /it/ in particular. That discussion suggested that phonological distinctions produced by Tucker et al. (1977:97-100) in Tables XXVII and XXVIII related not only to suffixes such as *-ite* (LRPT, 1994:1233) but also to 'combining forms' found in a range of bound morphemes, such as *-lyte* and *-lithe*. These morphemes suggested the possibility of some association between morphology, word-final pronunciation and gender assignment – even though, as Surridge (1993:86-87) points out, morphological complexity is acquired considerably later than the vast majority of single-syllable morphemes that form the early vocabulary acquired by speakers.

It is also possible that syllable structure itself may play some part in gender assignment. Both of these key areas – word-final syllable structure and word-final morphology, are examined below in relation to gender assignment.

### 3.1.1 Single syllable nouns – gender assignment and word-final syllable structure

The database established for this research contains more than 1500 single-syllable nouns (listed in Appendix III), and distributions are laid out in Table 3.2 below.

Table 3.2: Gender assignment and word-final pronunciation patterns for single-syllable nouns

	Vowel-final	Consonant-final	Total
Masculine	209	577	786
Feminine	40	767	807
Total	249	1374	1583

Results are interesting in that gender assignment is fairly evenly distributed between masculine (49.6%) and feminine (50.4%). Results for word-final pronunciation are more interesting particularly for the 249 vowel-final nouns, where 84% are masculine and 16% feminine. That is, there is a clear statistical preference for an association between masculine gender assignment and vowel-final pronunciation. For consonant-final nouns, distributions are fairly even, 45% (577) being masculine and 55% (727) being feminine.

The separation of the same phones into different sets and inclusion of penultimate and

antepenultimate phones in tabulations allowed Tucker et al. to obtain certain tendencies between word-final phones and gender assignment. However, they did not consider the possibility of any relationship between word-final syllable structure and gender assignment.

The analysis below concerns single-syllable nouns in the database (listed in Appendix III) since they avoid any potential influence from preceding syllable(s). Syllable structure of such nouns shows considerable variation, from those formed from a single vowel (V), to those tolerating consonant clusters (CCC), as shown in the following Table 3.3.

Table 3.3: Syllable structure of single-syllable nouns

Vowel-onset	
/V#/	eg. <i>haie</i> (F) 'hedge', <i>han</i> (M) 'han' (guttural grunt), <i>haut</i> (M) 'height'
/VC#/	eg. <i>air</i> (M) 'air'/'wind'/'aria', <i>aire</i> (F) 'area/space', <i>honte</i> (F) 'shame'
/VCC#/	eg. <i>affres</i> (F) 'pangs', <i>arche</i> (F) 'arch', <i>œuvre</i> (F) 'work'
/VCCC#/	eg. <i>arbre</i> (M) 'tree', <i>isthme</i> (M) 'narrow passage'
Consonant-onset	
/CV#/	eg. <i>son</i> (M) 'sound', <i>baie</i> (F) 'bay'
/CVC#/	eg. <i>page</i> (F) 'page', <i>page</i> (M) 'pageboy', <i>paire</i> (F) 'pair', <i>père</i> (M) 'father'
/CVCC#/	eg. <i>larme</i> (F) 'tear', <i>rythme</i> (M) 'rhythm', <i>fourche</i> (F) 'fork'
/CVCCC#/	eg. <i>muscle</i> (M) 'muscle', <i>pourpre</i> (M/F) 'red-purple colour/dye'
/CVCCCC#/	eg. <i>dextre</i> (F) 'right hand'
/CCV#/	eg. <i>nuit</i> (F) 'night', <i>pré</i> (M) 'meadow', <i>pneu</i> (M) 'tyre'
/CCVC#/	eg. <i>blâme</i> (M) 'disapproval', <i>nuage</i> (M) 'cloud', <i>crème</i> (F) 'cream'
/CCVCC#/	eg. <i>Flandre</i> (M) 'Flanders', <i>tremble</i> (M) 'aspen'
/CCVCCC#/	eg. <i>spectre</i> (M) 'ghost'
/CCCV#/	eg. <i>bruit</i> (M) 'noise', <i>strie</i> (F) 'score/groove'
/CCCVVC#/	eg. <i>strate</i> (F) 'stratum/layer', <i>scribe</i> (M) 'scribe', <i>gloire</i> (F) 'glory'
/CCCVCC#/	eg. <i>script</i> (M) 'scrip', <i>cloître</i> (M) 'cloisters'

There is no immediate evidence of any association between syllable structure and gender assignment in the case of single-syllable nouns. This result suggests that syllable structure does not appear to be significant since the single syllable /V#/ , may be feminine, eg. *haie*, or masculine, eg. *haut*, while the more complex syllable structure /CVCCC#/ shows that *pourpre* is masculine when designating the colour 'purple' but is feminine when designating 'red-purple

dye', the colouring material that produces that colour (LRPT, 1994:882).

The changes in gender assignment associated with changes in the semantics for *pourpre* can be found elsewhere, between *orange* (M) 'orange (colour)' and *orange* (F) 'orange (fruit)', and *Pâque* which is feminine and singular in its application to 'Passover', the Jewish festival, and in certain expressions relating to Easter, eg. *la Pâque russe* 'Russian Easter', (Gervais, 1993:125), is feminine and plural in its application to 'Easter' as a Christian festival; however, it is masculine and singular (and without article) in its application to *le jour, la fête de Pâques* 'Easter Sunday' (LRPT, 1994:809). These examples are very similar to those discussed Chapter 2 (Section 3.2.4) for languages such as Murinh-Patha with its noun-class markers, and Vietnamese with another kind of 'classifier' system, where changes in the function of a noun may be associated with changes in noun class or noun classifier. The same change in function and change in gender among French nouns indicates that semantic function may be crucial in gender assignment for French beyond oppositions for male and female.

Many nouns are constructed with alternative suffixes, and those syllable structures of alternative suffix forms are examined in (2) below.

(2)	Masculine form	Syllable structure	Feminine form	Syllable structure
	-eur	VC#	-eresse	VCVC#
	-ain	V#	-aine	VC#
	-ceau	CV#	-celle	CVC#
	-ard	VC#	-arde	VCC#
	-ateur	VCVC#	-atrice	VCCVC#
	-ier	VV#	-ière	VVC#
	-eur	VC#	-euse	VC#

Except in the case of *-eur/-euse*, there is some evidence of a contrast between shorter forms associated with masculine, and longer forms associated with feminine. Alternatives *-eur/-euse* provide an interesting counter-example since they share the same syllable structure. They are also interesting in that the masculine form in this pair, *-eur*, in some instances forms masculine nouns, eg. *bonheur* (M) 'luck, good fortune', *tonneur* (M) 'thunder', but in other cases forms

feminine nouns, eg. *chaleur* (F) 'warmth', *couleur* (F) 'colour', which suggests a degree of independence from gender assignment. This area is further explored in Chapter 9.

### 3.1.2 Interaction between word-final pronunciation and orthographic representations

What is not mentioned by Mel'čuk (1974) or by Tucker et al. (1977) is that word-final pronunciation is itself problematic – not only for second language learners; it can be equally problematic for French speakers. In the *Avant-propos* to its dictionary, LRPT (1994:X) states that it provides pronunciation details only where difficulties are foreseen. While such problems can occur with initial elements, eg. *choléra* (M) 'cholera', they also arise for the many nouns that have an orthographic word-final consonant, eg. *abricot* (M) 'apricot' (which is not pronounced), *iris* (M) 'iris' (which is), and *ananas* (M) 'pineapple' (where alternative word-final pronunciations are acceptable). While second language learners can only acquire their knowledge from dictionary entries, the fact is that native French people may also not know. For instance, is the <s> of *cas* (M) 'case' pronounced or is it not? What about the <s> of *sens* (M) 'sense'? For these more common words native speakers can draw on previous experience with such words, but for more uncommon nouns such as *prétérit* (M) 'preterite', or *macis* (M) 'mace', native speakers appear to require a similar level of information as non-native speakers. Alternative orthographies may also be offered for the same noun, eg. (vowel-final) *clé/clef* (F) 'key' and (consonant-final) *cuiller/cuillère* (F) 'spoon/spoonful' but these alternatives do not appear to be related to alternative vowel- and consonant-final pronunciations in the same way as they are for *coul/col* (M) 'neck' (although today the vowel-final *cou* is preferred over the consonant-final *col*) (<atilf.atilf.fr>, 2005, LRPT, 1994:201). For some nouns a single orthographic form may allow alternative vowel- or consonant-final pronunciations, eg. *ananas* (M) 'pineapple' [ anana(s) ] (<atilf.atilf.fr>, 2005, LRPT, 1994:39) and *anis* (M) 'anise' [ ani(s) ] (LRPT, 1994:42, COFED, 1985:24). Consonant-final pronunciation is assured only where a consonant occurs in combination with the silent <e> word-finally, eg. *réussite* (F) 'success', *poète* (M) 'poet'. Any explanation must account for the different phonological treatments of these word-final consonants.

Dictionaries attend to these irregularities through transcriptions (phonetic representations). For

LRPT (1994), the policy given in its *Principes de Notation de la Pronunciation* is not to provide a transcription except where a pronunciation does not follow the general rules or when confusion may occur (1994:1236). It indicates that consonants *b, c, k, f, g, l*, at the ends of words are 'generally pronounced', while consonants *d, p, s, t, x, z* are 'generally *muettes*', or 'not pronounced', and the letter *r* is 'generally pronounced', but not in the case of the combination *-er*. Even so, examples such as *fil*s (M) 'son' (pronounced as /fis/ rather than \*/fil/s) and *cuiller*, identified above, show that there irregularities occur. The qualifications for both sets would suggest that orthography itself cannot provide any certainty as to word-final pronunciation.

While for most nouns (and adjectives) non-pronunciation of the final consonant yields vowel-final pronunciation, eg. *habit* (M) 'habit', the result depends very much on word-final structure since in the case of *aspect* (M) 'crow-bar', the phonetic representation /äspek/ (COFED, 1985:25) shows that it remains consonant-final. However, in the case of *respect* (M) 'respect', which has the same word-final orthography *-ect*, the phonetic representation /rɛspe/ (LRPT, 1994:976) shows that neither of the final two orthographic consonants, <c> and <t>, is pronounced. Even if one were to posit distinctive underlying representations for the word-final orthographic consonants that are pronounced, this would be an arbitrary assignment. There appears to be no principled system, historical or otherwise, that can account for these variations in what is pronounced and what is not. From a linguistic perspective we would expect that spelling reflects some diachronic history of the language. However, given the recovery of the final consonant in liaison, these final consonants are not simply a relic of the spelling system. Liaison suggests that underlying representations of the word retain such consonants.

It is general practice in linguistics to refer to the surface pronunciation of words rather than the diachronic forms reflected in the spelling system, and it is a practice that is adopted for this study according to the phonetic representation of each word in its source in LRPT (1994), COFD, (1985), and the website dictionary <atilf.atilf.fr>. What is particularly significant for this thesis is the presence of alternative phonetic representations for the same noun since these alternative pronunciations provide interesting test cases for the analysis.



### 3.1.3 Changes in word-final pronunciation for loan words entering the French lexicon

Some loan words entering the French lexicon seem to undergo changes in word-final phones while others do not. Of course, the adoption of a foreign source word into any language may have a multi-faceted pathway. An interesting case is that of the French term for an Australian indigenous animal *wombat* (M) 'wombat' where the French pronunciation is vowel-final despite the fact that all transcriptions of the original indigenous spoken word ended in a consonant, represented variously as <ɖ>, <d>, <k>, <dj>, <ch>, <te>, etc. (see "The 'wombat trail' – David Nash", by Jane Simpson, 16.1.2009, @ Facebook on Endangered Languages, <[http://blogs.usyd.edu.au/elac/2009/thewombat\\_trail\\_1.html](http://blogs.usyd.edu.au/elac/2009/thewombat_trail_1.html)>).

Another interesting noun is the consonant-final *casuar/casoar/casouar* (M) 'cassowary'. ATILF (<[atilf.atilf.fr](http://atilf.atilf.fr)>, 2005) provides an early (1665) form '*Quessaouiârroe*', derived either from the early English form 'cassawarway' (later 'cassowary') or from a Malay-Polynesian dialect of Western New Guinea or the Moluccas (given as *kəsuari* in CED, 1986:246), all of which are vowel-final. Thus, for both *wombat* and *casuar/casoar* evidence suggests that elision of a final phone has occurred even though they offered no apparent difficulty or unacceptable structures. In each case they might have reasonably been expected to remain in their original forms since they offer no apparent difficulty or unacceptable structures. There are also examples of epenthesis, the introduction of a phone not found in the original language, eg. *cacatoès* (M) 'cockatoo' (derived from the vowel-final Dutch noun *kaketoe*, itself derived from the Malay vowel-final noun *kakatus* (LRPT, 1994:142, CED, 1986:304).

Any explanation must account for these different outcomes in relation to word-final pronunciation.

### 3.2 Morphology and gender assignment

The relationship between morphology and gender assignment is suggested by Tucker et al. (1977:19) to account for masculine gender assignment of compound nouns formed from verbs, and infinitival forms. Surridge suggests that some interaction exists between morphology and gender assignment in her analysis of morpho-syntactic structures relating to compound nouns

and suffixation (1986) and combining or bound morphemes (1990). These areas are further investigated below.

### 3.2.1 Compound nouns

A relationship between gender assignment and derivational morphology is suggested by Mel'čuk (1974), Tucker et al. (1977:19) and Surridge (1993:81). Mel'čuk (1974:12) states that compound words are masculine. Tucker et al. (1977:19) and Surridge (1993:81) suggest that compound nouns formed from verb plus some other element have masculine gender assignment. While verb forms are obvious in some compounds, eg. *savoir-faire* (M) 'experience' which is formed from two infinitives, *savoir* 'to know' and *faire* 'to do/make', in other cases it is less obvious, eg. *porte-monnaie* (M) 'purse', which is said to be formed from the verb *porter* 'to carry', and *tire-bouchon* (M) 'bottle-opener', arguably formed from the verb *tirer* 'to pull' (rather than *tir* (M) 'firing, shot) although these verb forms are not infinitival.

However, some compound nouns are feminine. Surridge (1993:81) argues that these apparent counter-examples can be accounted for in their formation from a noun rather than a verb plus some other element. These distinctions seem to have been regarded as self-evident – masculine gender would identify a verb-based compound, and feminine gender would identify a noun-based compound. However, that account would not explain masculine compounds formed from nouns, such as *avant-port* (M) 'outer-harbour' (from the noun *port* (M) 'harbour'), or *chef-d'œuvre* (M) 'masterpiece' (formed from two masculine nouns), or *beaux-arts* (M) 'fine arts' (from the masculine *arts*). Nor would it explain feminine compound nouns that appear to be formed from a verb, eg. *avant-garde* (F) 'vanguard' and *garde-robe* (F) 'wardrobe', both of which seem more likely to have been formed from the verb *garder* rather than from the noun *garde* (F) 'guarding, custody, watch'. It is difficult to see how *garde-robe* differs in structure from *porte-monnaie* or *tire-bouchon*. Such an explanation cannot account for two compounds formed with same noun *pince* (F) 'pinch' one of which is feminine, *pince à sucre* (F) 'sugar tongs', and the other masculine, *pince-nez* (M) 'eye-glasses (without side-pieces) although both are formed with a noun derived from the infinitive verb *pincer* 'to grip' (LRPT, 1994:849). Further, that explanation cannot account for compound nouns formed from adjectives, eg. *clair-*

*obscure* (M) 'chiaroscuro'. Examples such as these are not examined by Mečuk (1974), Tucker et al. (1977) or Surridge (1993).

The question that needs to be answered is whether the different gender assignments of *porte-monnaie* (M) and *garde-robe* (F) are motivated by interaction between morphology and gender assignment, or whether they relate to some entirely different process. The lack of consistency even among these few examples would tend to point to some other process.

One area where there appears to be some regularity is the use of infinitive verb forms in extension as demonstrated in Table 3.4 below.

Table 3.4: Nouns derived from infinitive verb forms

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<i>boire</i>	M	'drinking'	from <i>boire</i> 'to drink'
<i>déjeuner</i>	M	'breakfast'	from <i>déjeuner</i> 'to breakfast'
<i>lancer</i>	M	'throw', 'cast'	from <i>lancer</i> 'to throw', 'fling'
<i>lever</i>	M	'rising'	from <i>lever</i> 'to get up'
<i>parler</i>	M	'speech'	from <i>parler</i> 'to speak'
<i>pouvoir</i>	M	'power'	from <i>pouvoir</i> 'to be able'
<i>rire</i>	M	'laughter'	from <i>rire</i> 'to laugh'
<i>savoir</i>	M	'knowledge'	from <i>savoir</i> 'to know'
<i>toucher</i>	M	'touch'	from <i>toucher</i> 'to touch'
<i>vivre</i>	M	'living'	from <i>vivre</i> 'to live'
<i>vouloir</i>	M	'will'	from <i>vouloir</i> 'to wish'

---

It is noted that infinitival forms vary, but all are masculine and the association between masculine gender and 'infinitive verb form' appears to be regular and predictable. However, the same questions emerge – is gender assignment related to their derivational morphology, or is it related to some entirely different process?

Of particular interest is *penser* (M) '(lit.) 'thought/thinking', a noun formed from the infinitive *penser* 'to think' although it is no longer in current usage. The vernacular term today is *pensée* (F), a feminine noun which has the same meaning and same word-final phonological representation [ e ] as *penser*, but a different orthographic representation, *-ée* rather than *-er*.

The feminine noun is said to be formed with the past participle of an *-er* verb (LRPT,

1994:1229). There are many other similar cases of feminine nouns with the same phonological representation as the infinitive form, as in (3) below.

(3)	<i>entrée</i> (F) 'entry'	from <i>entrer</i> 'to enter'
	<i>allée</i> (F) 'garden path', 'lane'	from <i>aller</i> 'to go'
	<i>arrivée</i> (F) 'arrival'	from <i>arriver</i> 'to arrive'
	<i>fumée</i> (F) 'smoke'	from <i>fumer</i> 'to smoke'
	<i>mêlée</i> (F) 'fray'	from <i>mêler</i> 'to mix.'
	<i>tombée</i> (F) 'nightfall'	from <i>tomber</i> 'to fall'

Feminine gender assignment for these nouns formed from *-er* verbs with the same phonological representation but different orthography remains to be accounted for – particularly since the suffix *-ée* commonly associated with feminine is also present for *lycée* (M) 'secondary school', *musée* (M) 'museum', *trophée* (M) 'trophy', reasonably common masculine nouns. Since the same suffix occurs with different gender assignments, it seems unlikely that derivational morphology can account for gender assignments in these cases.

Also of interest are other masculine nouns formed from infinitival forms, such as *toucher* (M) 'touch', an *-er* verb, and *vivre* (M) 'living', since they contrast with feminine nouns derived from the same verbs, *touche* (F) 'touch' and *vie* (F) 'life'. While very similar in meaning, nouns *toucher* (M) and *touche* (F) are found in different contexts (LRPT, 1994:1120), which would tend to suggest that some semantic distinction between them might relate to their different gender assignments.

### 3.2.2 Semantic extensions, grammatical conversions, and loan words

The French language is renowned for the extraordinary number of homonyms, in large part due to the practice of using a pre-existing noun in extension to apply to some other entity. In some cases genders of the original noun remain the same in their extended meaning, eg. *coq* (M) 'cockerel', the bird, which remains masculine in its application to *coq* (M) 'cardinalfish', as does the feminine noun *barge* (F) 'flat-bottomed sail-boat' in its application to *barge* (F) 'godwit', a large, long-legged shore-bird that appears to be afloat as it wades through deepish water. In these cases some notion inherent in the semantics of the original lexeme exists for the new

referent which suggests the presence of some shared semantic notion. It is possible that a shared semantic notion may be associated with a specific gender assignment. We also find cases where a change in gender assignment is associated with a change in meaning, eg. *faune* (F) 'fauna', formed from the masculine noun *Faune* (M) 'faun', a male rural deity, and the masculine noun *brun* (M) 'brown', a dark colour between red and black, and the feminine noun *brune* (F) 'dusk, nightfall'. There is no superficial explanation as to why gender assignments change in some cases but not others, and such cases deserve particular attention. They will continue to be explored in the more detailed analysis in chapters to follow.

Amongst nouns formed from adjectives and participles are many masculine nouns

- (1) • *chaud* (M) 'heat, warmth' from *chaud/-e* 'hot/warm'
- *clair* (M) 'light' from *clair/-e* 'clear, well-lit'
- *bon* (M) 'good', from *bon/-ne* 'good'.

However, the presence of feminine nouns, eg. *claire* (F) 'oyster-park' (related to clear water), and *barbue* (F) 'brill' from *barbul-ue* 'bearded', an adjective that is more likely to be associated with masculine than feminine, suggests that morphological derivation from another grammatical class cannot account for the different gender assignments amongst these nouns.

Gender assignment for nouns derived from loan words is suggested by Corbett (1991:70) to be complex, and previous research is of little assistance since explanations vary and may be unrelated to any overall system (1991:71). However, Corbett notes that the treatment of loan words offers us the opportunity to examine assignment rules particularly for material that may be unlike native vocabulary. The study by Desrochers (1986) suggests that in some cases gender assignment of loan words is semantic, but in other cases it is phonological, particularly for non-humans, while Surridge (1982, 1984) suggests that gender assignment of English loan words into French occurs through semantic analogy.

Corbett (1991:74) suggests that loan words in French are distributed in the same way as other nouns, for humans according to sex, eg. *speaker* (M) 'announcer' is masculine since there is a derived pair, *speakerine* (F) 'announcer', while gender assignment in the case of non-human

loan words is phonologically determined '... in a relatively straightforward way'. The treatment of borrowings into other languages, Corbett suggests, '... is determined exactly like other nouns'.

The corpus of nouns for this research contains many loan words, eg. Russian nouns *spoutnik* (M) 'sputnik' and *artel* (F) 'artel' (a Russian quasi-cooperative), Arabic or Persian nouns, eg. *chèche* (M) 'long scarf', *smala* (F) 'retinue of Arab sheik', and English nouns, eg. *gang* (M) 'gang', *star* (F) 'film star'. While semantic analogy may account for gender assignment for *smala* in the face of similar nouns *famille* (F) 'family' and *tribu* (F) 'tribe', it is more difficult to reconcile masculine gender for the loan word *gang* (M) 'gang' in contrast with native nouns *bande* (F) 'band', and *troupe* (F) 'troop'. Thus, for loan words, semantic analogy may provide a level of predictability in some cases but not all.

### 3.2.3 Detailed morphological analysis related to word-final phones /it/

The phonological analysis undertaken by Tucker et al. (1977) included the penultimate and antepenultimate phones. However, in the discussion in Ch. 2 of their research, it seemed that certain combinations of phones might involve morphology, particularly for nouns ending in phones /it/. It suggested that the possibility should be explored of some relationship between morphology and gender assignment beyond that associated with compound or infinitive forms.

Analysis of all nouns in the current database with terminal phones /it/ (listed in Appendix IV) reveals the presence of various suffixes and combining (bound) forms in (4) to (18) below.

- (4) *-it* 'belonging to' via Latin *ita*, from Greek *-itis*, feminine of *iġes* 'belonging to'
- |               |   |                                  |   |
|---------------|---|----------------------------------|---|
| <i>aconit</i> | M | 'aconite' (monkshood, wolfsbane) | Latin from Greek <i>akoniton</i> 'monkshood' identifying certain poisonous plants |
|---------------|---|----------------------------------|---|
- (5) *-ite* 'belonging to' via Latin *ita*, from Greek *-itis*, feminine of *iġes* 'belonging to' (LRPT, 1996:627)
- |                  |     |                            |                                     |
|------------------|-----|----------------------------|-------------------------------------|
| <i>annamite</i>  | M   | 'Annamese' language        | Annam, ancient Indo-Chinese kingdom |
| <i>israélite</i> | M/F | 'Israelite' (male, female) | claiming descent from Jacob         |
| <i>barnabite</i> | M   | 'monk' (male)              | order of St. Barnabus               |
| <i>jésuite</i>   | M   | 'Jesuit' (male)            | Roman Catholic religious order      |

- (6) -it from Latin *ire* 'to go', from Greek *εἶμι* 'to go'(ELD, 1966:943)

<i>transit</i>	M	'transit'	from (Latin <i>trans</i> + <i>ire</i> 'go')
<i>obit</i>	M	(Cath. Lit.) 'memorial service'	from (Latin, <i>obiter</i> 'said in passing')

- (7) -ite from Latin *ire* 'to go', from Greek *εἶμι* 'to go'(ELD, 1966:943)

<i>limite</i>	F	'limit'	line separating two adjacent terrains
<i>orbite</i>	F	1. 'orbit'	curved trajectory of a celestial body,
		2. 'eye socket'	opening in cheekbone in which eye sits
<i>stalactite</i>	F	'stalactite'	drips form downward-facing deposit
<i>stalagmite</i>	F	'stalagmite'	drips form upward-facing deposit

- (8) -ite 'thing produced by action' (salt or ester, rock or mineral)

<i>nitrite</i>	M	'nitrite'	salt of nitrate acid
<i>epsomite</i>	F	'Epsom salts'	hydrated medicinal treatment
<i>cordite</i>	F	'cordite'	contains cellulose nitrate (stringy appearance)
<i>somite</i>	F	'dorsal pairs'	body or organ produced by division
<i>ammonite</i>	F	'partitioned shell'	
<i>méningite</i>	F	'meningitis'	-itis, 'inflammation' (reaction of tissue to injury, infection)
<i>entérite</i>	F	'enteritis'	
<i>Bakélite</i>	M	'Bakelite'	trademarked commercial product (named after inventor)
<i>vulcanite</i>	F	'vulcanite'	hardened rubber produced from natural rubber heated with sulphur
<i>albite</i>	F	'albite'	colourless mineral
<i>bauxite</i>	F	'bauxite'	mineral found in Les Baux (France)
<i>calamite</i>	F	'calamite'	carboniferous mineral
<i>météorite</i>	M/F	'meteorite'	(from Greek <i>meteoris</i> 'lofty')
<i>anthracite</i>	M	'rock'	hard black coal
<i>granite</i>	M	'granite'	hard rock
<i>ophite</i>	M	'ophite'	rock with ophitic texture
<i>quartzite</i>	M	'quartzite'	hard rock, white or grey sandstone
<i>trilobites</i>	M	'trilobite' (extinct animal)	extinct marine arthropod

- (9) -yte

<i>trachyte</i>	M	'trachite'	rough-textured volcanic stone from Greek <i>trakhus</i> 'rough'
<i>baryte</i>	F	'baryta'	white mineral (barium oxide)

- (10) -cyte combining form for 'cell', from Greek *kutos* 'vessel, container', (LRPT, 1994:281), related to *kuein* 'to contain' (CED, 1986:388)

<i>leucocyte</i>	M	'leucocyte'	white blood cell
<i>lymphocyte</i>	M	'lymphocyte'	type of white blood cell
<i>spermatoocyte</i>	M	'spermatoocyte'	(bot.) male germ cell

- (11) *-dyte* 'enter'  
*troglodyte* M 'troglodyte' via Latin from Greek *trōglodutēs*,  
from *trōglē* 'hole' and *duein* 'to enter'  
(CED, 1986:1628, LRPT, 1994:1140)
- (12) *-lite* 'chosen'  
*élite* F 'elite' (the chosen few) from (OF) *eslit* 'chosen'
- (13) *-lyte* follower  
*acolyte* M/F 'acolyte' via Old French and Medieval Latin  
from Greek *akalouthos* 'a follower'  
(CED, 1986:13)
- (14) *-lyte* *lyse, lytique*, 'substance able to be decomposed, broken down'  
*électrolyte* M 'electrolyte' from Greek *lusis* 'a loosening', from  
*luein* 'dissoudre/to release' (LRPT,  
1994:680, CED, 1986:919)
- (15) *-lyte* from Greek *luthos* 'stone'  
*chrysolite* F 'chrysolite' (mineral) combined with *chryso-* 'golden'
- (16) *-lithe* from Greek *luthos* 'stone'  
*mégallithe* M 'megalith'  
*coprolithe* M 'coprolite' huge stone  
stony nodules
- (17) *-phyte* plant from Greek *phuton* 'ce qui pousse'/that which grows' (LRPT, 1994:844)  
*épiphyte* M 'epiphyte' plant that grows on another plant but  
is not parasitic)  
*mésophyte* M 'mesophyte' any plant that grows in surroundings  
receiving an average supply of water  
*lithophyte* M 'lithophyte' plant that grows on rocky/stony  
ground  
*thallophyte* F 'thallophyte' any of group of plants that lacks  
stems, roots and leaves  
*bryophyte* F 'bryophyte' plant with stems and leaves that  
reproduces via spores
- (18) *-site*  
*parasite* M 'parasite' Greek, from *-sitos* 'qui mange'/that  
which eats' (LRPT, 1994:811)

In some cases, word-final phones /it/ are derived from Greek *-ita* 'belonging to', and in others from the Latin *iter* 'journey' or verb *-ire* 'to go'. Both have more than one orthographic representation in French (*-it*, *-ite*) as in English (*-ite*, *-itis*). While orthographic irregularities are not themselves of concern for the purposes of this thesis, phonological irregularities are, as discussed above, particularly where the very same orthographic representations are not pronounced, as for *barrît* (M) 'trumpeting of elephants', *réduit* (M) 'poor lodging', *débit* (M) 'debit', *appétit* (M) 'appetite', *bandit* (M) 'bandit', *esprit* (M) 'spirit'.



The various bound or combining forms, such as *-lythe*, *-cyte*, *-phyte*, etc., each have their own distinct meanings. For some, those meanings appear to be associated with masculine gender assignment, eg. 'hard (rock/stone)', 'language as a system', 'extinct animal', 'plant or living body identified by its association with a specific environment', 'male', 'momentary', 'commercial product'. For others, meanings appear to be associated with feminine gender assignment, eg. 'mineral', 'cavity or opening', 'natural product', 'female', 'plant identifiable by some aspect of its appearance', and possibly other concepts such as the typical shape associated with stalactite/stalagmite, and 'area between adjacent terrains'.

While some of the associations between semantic attribute and specific gender assignment can be understood, particularly in relation to human beings, the regularity of any other associations requires to be tested across a wider domain and the basis for such distributions needs to be made transparent.

### 3.3 Semantic explanations

In French, the clearest evidence of semantic principles in relation to gender assignment occurs in distinctions between 'male' and 'female' and the association between 'male' and masculine gender and 'female' and feminine gender – for humans and more broadly in the animal world. However, even here there are exceptions, as discussed in Ch. 2 and, thus, no certainty.

The current database gathered for this research contains many nouns – count nouns and collective nouns – denoting human beings. Tabulation of gender assignments for these nouns are set out below in Table 3.5.

Table 3.5: Human beings - count nouns and collective nouns according to gender assignment

	Masculine gender assignment	Feminine gender assignment	No fixed gender assignment
Count nouns – male referent	30	3	–
Count nouns – female referent	36	4	–
Count nouns – sex unknown	65	30	118
Collective nouns	19	62	–

It is difficult to say which of these figures is the most surprising – the extent of feminine gender for collective nouns, the three 'male' referents that are feminine, the four 'female' referents that are masculine, or the extraordinary number of nouns where sex is not identified but gender assignments is fixed, masculine for 65 and feminine for 30, or the considerable number that have no gender assignment (118), particularly since Tables created by Tucker et al. (1977) contain no such examples.

What is as interesting is that among creatures in the animal world we find similar patterns. Some collectives are masculine, eg. *vol* (M) 'flock', but more are feminine, eg. *volée* (F) 'flock', *meute* (F) 'pack of dogs trained for hunting'. A similar association between 'male' and masculine gender and 'female' and feminine gender occurs for most creatures, eg. *canard* (M) 'drake' and *cane* (F) 'duck', but two nouns denoting a 'female' bird of prey are masculine, eg. *lanier* (M) 'female lanner' (cf. *laneret* (M) 'male lanner'), and *sacre* (M) 'female saker' (cf. *sacret* (M) 'male saker'). In addition, some nouns have alternative gender assignments, eg. *aigle* (M/F) 'eagle', *angora* (M/F) 'angora'.

Distinctions for 'male' and 'female' and associated gender assignments in the various fields covered in this study will be of considerable interest.

Also of significance is the change of function/change of gender noted by Gervais (1993) for *personne* 'person', particularly since we can find other such instances in French, eg. the noun *orange*, which is feminine when its referent is the fruit 'orange' but is masculine when referring to the colour 'orange', and the noun *légume*, which is masculine in the context of the edible produce of plants but is feminine in the phrase *une grosse légume* 'an important person' (COFED, 1985:312). On the other hand, *barge* (F) 'barge' (a flat-bottomed boat) is also used in extension as *barge* (F) 'godwit', but there is no change in gender assignment in this case. The precise nature of function in relation to changes in gender assignment is expected to be important in the chapters that follow.

Slightly different from the examples above are two French nouns denoting the 'great spotted

woodpecker', the most common woodpecker in Europe – the general population uses the feminine term *épeiche* where specialists use the masculine *pic épeiche*. There is some similarity with the example in Vietnamese, where specialists use a different classifier for plants than the general population (reported by Huynh Sang Thong, 1983, in Adams, 1986:244). In German, however, Zubin et al. (1986) suggest that differences in gender assignment appear to be associated with different levels of meaning in that basic level terms are masculine or feminine, and superordinate terms are neuter. These various relationships will be considered in the analysis of French nouns.

In Chapter 2 other semantic sets were suggested to exist in French (Bidot, 1925, Surridge, 1993, Gervais, 1993). They include days of the week, winds, points of the compass, etc. where nouns share the same gender assignments that for the most part do not fit with any phonological motivation, eg. in Tucker et al. (1977) consonant-final phones for *dimanche* (M) 'Sunday' and *sud* (M) 'south' and vowel-final phones for *lundi* (M) 'Monday', *mardi* (M) 'Tuesday', etc. are more closely associated with feminine gender assignment. Examples such as *Pâque* (F) 'Passover', *Pâques* (M) 'Easter, Easter Day, and *joyeuses pâques* 'Happy Easter' (Gervais, 1993:125) provide no regularity in relation to phonology and gender assignment, nor does there appear to be any clear semantic basis that might account for their different gender assignments. Although the different sets refer to abstract entities, it is possible that within the world of living things other semantic sets may be found. The precise basis for shared gender assignments among members of any such semantic set needs to be made transparent and any counter-examples need to be explained.

The analysis will also take into account common features suggested to be associated with nominal classifications, such as animacy, spatial properties in directionality and orientation, physical properties – particularly shape (round, flat, etc.), consistency (rigid, flexible, etc.), social status, kinship, quanta, arrangement, etc. identified by Allan (1977) and Aikhenvald (2000).

### 3.4 Summary

Analysis of the relationship between word-final phonology and gender assignments reveals

only the most limited regularity. Tendencies suggested to exist between word-final phonology and gender assignment are, to a large degree, obtained through orthographic differences or through arbitrary addition of further phones. But regardless of the means by which these tendencies are obtained, they are unhelpful in determining gender assignment in any one case. Derivational morphology is helpful only in the most limited way, and again depends on orthographic rather than phonological distinctions. This lack of regularity can be contrasted with the considerable regularity obtained through semantic distinctions related to male and female for humans and members of the animal world, although this area also has its exceptions.

Given the importance and nature of physical properties identified above, as well as semantic distinctions for male and female – not only for human beings but for other creatures in the animal kingdom – and the lack of any full examination of such properties in relation to French, the analysis below considers nouns in the corpus in a more detailed semantic analysis within a set of 'living things' to explore the possibility of other features that may provide some regularity in relation to gender assignment. Variations in word-final phonology must also be considered.

The analysis of 'living things' in subsequent Chapters is separated into five lexical fields, as follows:

Chapter 4	Birds
Chapter 5	Fish
Chapter 6	Other living creatures
Chapter 7	Woody plants, fruits
Chapter 8	Human beings.

For the most part, the analysis in each of the chapters follows the same framework, commencing with a phonological analysis of nouns in the specific lexical field, followed by a morphological analysis of lexemes coined through a range of linguistic processes, and then a semantic analysis. The final chapter, Chapter 9 – Discussion, Conclusions and Theoretical Implications, draws together findings from each of these separate chapters.

## Chapter 4 Birds - Gender Assignment and Word-final Pronunciation

### 4.0 Introduction

This chapter examines gender assignment in relation to the lexical field of birds. It begins with an initial exploration of nouns in relation to phonology and distributions related to word-final pronunciation. It is followed by an analysis of loan words, synonyms and derived forms, and then a semantic analysis of a narrow set of nouns (superordinate terms and collective nouns) to observe any patterns of regularity in terms of gender assignment and word-final pronunciation, particularly in regard to notions 'male' and 'female' as they relate to birds since such notions are recognised as crucial in relation to semantic assignment rules (Corbett, 1991:9). This section leads to the larger body of the semantic analysis of nouns at more specific levels according to appearance, habits, and other aspects of their existence of importance in their identification.

#### General characteristics of birds that may be relevant to a semantic analysis

At one level birds can be distinguished from all other creatures through an outer covering of feathers that no other creatures have. Forelimbs are modified into wings and offer the potential for flight, but on land it requires them to balance on the two hind limbs resulting in an upright posture. The ability of most birds to hop, walk or run on two legs also distinguishes them from all other four-limbed creatures except humans. At a more specific level, different diets and environments in which the various species of birds find their specific foods have led to other crucial adaptations – in overall body shape, feet, legs and bill.

Plumage colouration is often crucial in the identification of specific birds, but colourations provide a less consistent diagnostic since only some birds of the same kind share the same colourations year-round. In some cases males and females of the same kind have year-round differences in plumage colouration, eg, 'blackbird' where the 'male' is black and the 'female' is brown (known as 'sexual dimorphism' or 'sexual dichromatism'). Others share the same colouration but undergo seasonal alternations between darker-coloured winter plumage and lighter-coloured summer plumage (known as 'dimorphism'). Then there are species that display differences in colouration at breeding time, when mature 'males' come to develop a colourful *plumage nuptial*.

Birds are typically gregarious, an adaptation that allows them to live in flocks. Where flocking provides greater safety for individuals, some birds lead a solitary existence except at breeding time, particularly carnivores. Birds have excellent vision and hearing to help locate vital resources, and extraordinary memories that allow them to find their way back to nests or undertake seasonal migrations – although not all birds are migratory.

The extensive range of differences amongst these feathered creatures is reflected in lexical distinctions and also in different gender assignments, eg. the white *cygne* (M) 'swan', bright *perruche* (F) 'budgerigar', and mythical *alcyon* (M) 'halcyon'. Even amongst similar birds gender assignment may differ, as for three nouns *freux* (M) 'rook', *corbeau* (M) 'raven' and *corneille* (F) 'crow'. These largish black birds are so similar in appearance that they are difficult to tell apart, yet denoting nouns have different gender assignments. These three nouns *freux*, *corbeau* and *corneille* are also illustrative of the statistical generalisation that the majority of masculine nouns have vowel-final pronunciation in the same way as *freux* and *corbeau*, and the majority of feminine nouns have consonant-final pronunciation, as for *corneille*.

Our ability to observe birds is often fleeting and at some distance and makes colour distinctions difficult to determine. Closer observation of any of these creatures is dependent on their acceptance or wariness of our presence, and in some cases we only become aware of their presence through their calls. In many circumstances, then, the only attributes we can be sure of are feathers, the potential for flight and perhaps more specific identification of kind.

Definitions and descriptions of birds are taken from a variety of sources, including <[www.oiseau.net](http://www.oiseau.net)>, <[www.oiseau-libre.net](http://www.oiseau-libre.net)>, <[atilf.atilf.fr](http://atilf.atilf.fr)>, LRPT (1994), CED (1986), and extraordinarily detailed descriptions by French eighteenth century encyclopaedist of natural history, Buffon (at <[www.oiseau.net](http://www.oiseau.net)>, <[www.editions-du-heron.com](http://www.editions-du-heron.com)>), as well as <[www.uk-birds.org.uk](http://www.uk-birds.org.uk)>, <[www.birds.cornell.edu/AllaboutBirds/BirdGuide](http://www.birds.cornell.edu/AllaboutBirds/BirdGuide)>, etc., images at <[www.fotosearch.com](http://www.fotosearch.com)> and other sources also provided within the text (see also Appendix V for sources).

The analysis below seeks to provide an understanding of the principles that relate to gender assignment for names of birds in French.

#### 4.1 Predictability – frequency based on word-final phonology and gender assignment

There are more than 200 nouns in the database denoting 'bird'. Distributions according to frequency of vowel-final or consonant-final pronunciation and masculine or feminine gender assignment are set out in Table 4.1 below in order to identify any level of predictability.

It is stressed that word-final phonology is unrelated to orthographic representation and that the terms 'consonant-final' and 'vowel-final' relate to pronunciation throughout.

Table 4.1: Distributions relating to gender assignment and word-final pronunciation

	Vowel-final	Consonant-final	Total
Masculine	89	51	140 (65%)
Feminine	9	64	73 (35%)
Total	98	115	213

The total includes three nouns with alternative masculine and feminine gender assignments, *aigle* (M/F) 'eagle' (LRPT, 1994:23-24), *grèbe* (M/F) 'grebe' (LRPT, 1994:534), and *rupicole*, the Guyanan grouse 'cock-of-the-rock', which is feminine in one source (COFED, 1985:495), masculine in another (on-line dictionary (<atilf.atilf.fr>, 2004) but since it is not found in any other sources (such as LRPT (1994, <www.oiseau.net>, 2004, etc.) it cannot be confirmed.

Distributions in gender assignment show that of the 213 nouns, two thirds are masculine and one third feminine. This result is not consistent with the strong association between birds and feminine classification for nouns analysed by Harvey (1997:20) in his comparison of vocabularies of several Australian Aboriginal languages, particularly since they would have been anticipated to fit in the class related to animate entities which includes other birds. Word-final pronunciations are also fairly evenly distributed, 98 being vowel-final and 115 consonant-final. Distributions for gender assignment are evenly divided between masculine and feminine gender for the 115 consonant-final nouns, but for vowel-final nouns 89 are masculine and only 9 feminine. Counter-examples to the statistical generalisations noted in Chapters 2 and 3, that is,

masculine nouns that have consonant-final pronunciation, eg *ibis* (M) 'ibis', *canard* (M) 'duck', and feminine nouns that have vowel-final pronunciation, eg. *oie* (F) 'goose', *pie* (F) 'magpie', will be explored below.

Also examined are those nouns that have vowel-final pronunciation even where orthographic representations may suggest otherwise, eg. *choucas* (M) 'jackdaw', *perroquet* (M) 'parrot', and nouns that offer alternative word-final pronunciations, eg. *tétras* (M) 'black grouse' where pronunciation of the word final < s > is optional (LRPT, 1994:1106), and *pipit* (M) 'titlark', where pronunciation of the word-final < t > is optional (COFED, 1985:417, <atilf.atilf.fr>, 2004). The full list of nouns denoting 'bird' is provided at Appendix V.

The precise nature of these distributions will form part of the analysis below.

#### 4.2 Initial explanation - word-final phonology and gender assignment

The potential relationship between nouns with open-syllable vowel-final pronunciation and masculine gender, and nouns with closed-syllable consonant-final pronunciation and feminine gender is explored below in relation to loan words and synonyms.

##### 4.2.1 Word-final phonology and gender assignment of loan words

For loan words borrowed into French from any other language, a system of surface constraints between word-final phonology and gender assignment would enable any loan word denoting 'bird' to be inserted easily into the French language with the appropriate gender assignment without requiring any additional information prior to its use. The only requirement would be awareness of word-final phone. Vowel-final pronunciations could then be associated with masculine gender, and consonant-final pronunciations with feminine gender. This explanation finds some support amongst loan words in the database, and they are set out in Table 4.2 below.

Table 4.2: Loan words denoting 'bird'

Masculine vowel-final nouns			
<i>agami</i>	M	'agami'	Galabi, French Guyana
		1. 'chestnut-bellied heron'	
		2. grey-winged trumpeter'	



<i>ara</i>	M	'macaw'	Tupi (South American Indian)
<i>canari</i>	M	'canary'	Spanish (Canary Islands)
<i>émeu</i>	M	'emu'	Austronesian, Molucca Islands
<i>hocco</i>	M	'hocco'	Caribbean
<i>jabiru</i>	M	'stork'	Tupi (South American Indian)
<i>pingouin</i>	M	'penguin'	Dutch

Feminine consonant-final nouns

<i>grouse</i>	F	'red grouse'	Scottish
<i>perruche</i>	F	'parakeet'	Spanish
<i>salangane</i>	F	'salangane'	Filipino

However, the database contains a number of other masculine loan words that have consonant-final pronunciation and therefore do not fit with this account, eg. *albatros* (M) 'albatross', from an English noun that is consonant-final (LRPT, 1994:37), *casuar* (M) 'cassowary' from the original Malay vowel-final noun *késuari* (CED, 1986:246), and *cacatoès* (M) 'cockatoo', derived from a vowel-final Dutch noun *kaketoe*, itself derived from the Malay vowel-final noun *kakatus* (LRPT, 1994:142, CED, 1986:304). These counter-examples, particularly the changes brought about as they enter the French lexicon, need to be accounted for.

A number of factors are involved in considering a noun as a loan word – testament from dictionary sources, closeness of form to that of the originating language, length of time in the French lexicon, and extent of any changes to the original form. For instance, the masculine consonant-final noun *ibis* is derived through Latin and Greek from the Egyptian vowel-final noun *hby*, but its long presence in the French lexicon and its non-foreign phonological structure suggest that it be considered with other French nouns – although its consonant-final pronunciation does not conform with the statistical preference in French for masculine nouns, nor with its original vowel-final structure. Where the source language cannot be determined, eg. *colibri* (M) 'hummingbird', whose origins are described as *obscure* (LRPT, 1994:202), they are not included here but are treated as French nouns and analysed below. However, regardless of their status, any explanation regarding the system of gender assignment must account for all nouns, including loan words.

We can observe that both *casuar* and *cacatoès* have undergone changes in word-final

pronunciation on entering the French lexicon – elision of the word-final vowel phone in the case of *casuar*, and a kind of intrusion of a word-final consonantal phone to *cacatoès* – different processes both of which bring about consonant-final pronunciation. Since these two loan words could both have remained vowel-final, the motivation for such changes is not clear. One would expect that any system would respond to new items in the same way regardless of their origin. These loan words demonstrate that changes can occur in word-final pronunciation that cannot themselves be explained and, as a consequence, cannot lead to a predictable and regular outcome in terms of gender assignment. Differences in gender assignments of nouns, and changes in word-final pronunciation for some nouns but not others, suggest the presence of some other motivating force/s.

#### 4.2.2 Word-final phonology and gender assignment of synonyms

The possibility of a phonological explanation for gender assignment based on word-final phone is examined for synonyms that vary in their word-final pronunciation patterns.

Table 4.3: French synonyms - gender assignment and word-final pronunciation

Vowel-final pronunciation		Consonant-final pronunciation		English translation
<i>bout-feumé</i>	M	<i>barge à queue noire</i>	F	'blacktailed godwit'
<i>cahouant</i> syn. <i>chat-huant</i>	M	<i>chouette hulotte</i>	F	'tawny owl'
<i>choucas</i>	M	<i>couette</i>	F	'jackdaw'
<i>erlé</i>	M	<i>marouette</i>	F	'crake'
<i>goéland</i>	M	<i>mouette</i>	F	'gull'
<i>héron blanc</i>	M	<i>aigrette garzette</i>	F	'little egret'
<i>hochequeue</i>	M	<i>bergeronnette</i> <i>lavandière</i>	F F	'wagtail' 'wagtail'
<i>linot</i>	M	<i>linotte</i>	F	'Eurasian linnet'
<i>pigeon</i>	M	<i>colombe, tourterelle,</i> <i>palombe</i>	F	'pigeon', 'dove'

Some of these synonyms have compound constructions but regardless of how they are formed, since nouns in the first set have vowel-final pronunciation and are all masculine, and nouns in the second set have consonant-final pronunciation and are all feminine, they provide some support for a phonological system of gender assignment. The *erlé/marouette* has further synonyms *griset* (M) and *grisette* (F), which examples follow the same distribution patterns.

However, there are also cases of synonyms that appear to denote the same bird but gender assignments do not match associated word-final pronunciations. For instance, among the three synonyms for the 'tawny owl', *strix* (M) and the compound form *chouette hulotte* (F) both have consonant-final pronunciation but different gender assignments, while *chat-huant* is masculine and vowel-final. Synonyms *piaf* (M) and *moineau* (M) 'sparrow' have contrasting vowel- and consonant-final pronunciations but both are masculine. These examples are problematic for any phonological explanation.

Equally problematic for some phonological explanation are other nouns whose word-final pronunciation patterns do not follow the anticipated distributions, such as eight feminine nouns with vowel-final pronunciation, and fifty-one masculine nouns with consonant-final pronunciation. As mentioned above, a phonological explanation would not account for variations in the pronunciation of word-final consonants found in orthographic forms, eg. *choucas* (M) 'jackdaw', and *héron* (M) 'heron' which are not pronounced, *duc* (M) 'horned owl' and *ibis* (M) 'ibis' which are pronounced, and nouns such as *tétras* (M) 'black grouse' and *pipit* (M) 'pipit/titlark', which offer alternative vowel- and consonant-final pronunciations.

A phonological explanation cannot account for these variations in word-final pronunciation patterns and different gender assignments, suggesting that some other explanation may exist.

#### 4.2.3 Word-final pronunciation and gender assignment of derived nouns

Nouns denoting a bird may be formed by extension from pre-existing nouns. In most cases nouns have the same form in extension as in their original meaning and the same gender assignments, as in (1), masculine nouns, and (2), feminine nouns.

##### (1) Masculine nouns

*duc* (M) 'horned owl', from the masculine *duc* (M) 'duke', nobleman of high rank  
*pic* (M) 'woodpecker', from the masculine *pic* (M) 'chisel', instruments that involve the same purpose

##### (2) Feminine nouns

*barge* (F) 'godwit', from the feminine *barge* (F) 'barge', a flat-bottomed boat, a similar

appearance on the water

*échasse* (F) 'stilt' (bird) from the feminine *échasse* (F) 'stilt', having the same long stick-like shape

*lavandière* (F) 'wagtail' from the feminine *lavandière* (F) 'laundress', both of which dip in and out of running water

*spatule* (F) 'spoonbill' from *spatule* (F) 'spatula', similarly flat instruments

*veuve* (F) 'harpy eagle' from *veuve* (F) 'widow', both alone, and both clothed in black.

Nouns denoting birds may also be derived from other grammatical classes as in (3) to (5).

(3) Verbs

*pluvier* (M) 'plover', slightly altered form of the infinitival form *pleuvoir* 'to rain'

*bondrée* (F) 'honey-buzzard', derived from the verb *bondir* 'to bound'

*rieuse* (F) 'white-fronted goose' derived from the verb *rier* 'to laugh'

*cane* (F) '(female) duck', from the Ancient French infinitive *caner* 'to quack'

(4) Adjectives

*fou* (M) 'booby', masculine form of the adjectival pair *fou/folle* 'mad'

(5) Combined grammatical classes

*hochequeue* (M) 'wagtail' from *hocher* 'to wag', and *queue* (F) 'tail'

*tournepierre* (M) 'turnstone' from *tourner* 'to turn' and *pierre* (F) 'stone'.

The different word-final pronunciation patterns and gender assignments among nouns in these three sets suggest that the derivational process itself is not a significant factor.

Compound nouns are of particular interest, particularly since gender assignment does not always follow that of the original form. For instance, *rouge-gorge* (M) 'robin red-breast' is masculine although both components are derived from feminine forms, *gorge* (F) 'throat', and the feminine adjectival form *rouge* rather than masculine form *roux* 'red', and *rougequeue* (M) 'redstart' is masculine although it is also derived from a feminine noun *queue* (F) 'tail' and feminine adjectival form *rouge*. It is not the case that all compound forms are masculine since we find feminine examples, eg. *chouette épervière* (F) 'hawk owl' (where *épervier* (M) 'hawk' is masculine), and *canepetière* (F) 'field-duck, little bustard', originally formed as two words, *cane* ('duck') *petière* (from *pet-*, the sound they make as they fly overhead) (<atilf.atilf.fr>, 2005).

Ornithologists also create compound forms but again, such names do not necessarily follow the

gender assignment of the general term even though they denote the very same bird. For instance, the feminine noun *épeiche* (F) 'great spotted woodpecker' is the vernacular term used to designate the most common European woodpecker; ornithologists, however, use the masculine compound form *pic épeiche*.

As with nouns formed from a variety of derivational processes in (5) above, the lack of regularity among compound nouns suggests that derivational morphology is unable to provide an explanation. The motivation for any such changes, where they occur, as well as for the original gender assignments, is not clear. Such nouns will continue to be of interest.

#### 4.2.4 Summary – word-final phonology in relation to gender assignment

Interaction between the phonological system and gender assignment cannot account for genders assigned to loan words, or variations in gender assignments of some synonymous terms, or the 59 nouns in the corpus whose word-final pronunciation is not consistent with any phonological explanation. As well as this lack of regularity is the lack of consistency for genders of nouns used in extension and compound nouns derived from other grammatical classes, particularly where nouns may be feminine in their simple forms but masculine in a compound form.

These findings suggest that some other explanation must account for differences in gender assignment and variations in word-final pronunciation patterns. A semantic analysis is undertaken below.

#### 4.3 Semantics and gender assignment - initial exploration

The possibility that a semantic explanation can account for differences in gender assignment is explored below, initially in relation to superordinate nouns and collective nouns, and nouns that denote 'male' and 'female' in the bird world since these notions form a semantic core in the gender assignments of nouns for humans and some other animals.

##### 4.3.1 Semantics and superordinate terms

While many count nouns in the database designate a single bird according to species, some

count nouns designate a 'feathered' creature more generally. The extent of unrelatedness between entities to which each can apply depends on the semantics of each noun; however, even where additional semantic content effectively narrows their application, these nouns remain superordinate.

The most general of these superordinate count nouns is *oiseau* (M) 'bird', which typically designates a smallish-sized, light-framed, winged creature having an outer layer of feathers. While on land most are able to move around on two legs, the combination of wings, feathers and a light frame allows many to lift themselves off the ground and remain in the air since they are capable of supporting their weight as they move through space. However, heavier birds are more likely to run than fly, while some very heavy birds have lost any capacity that they might have had for flight. The term *oiseau* can apply equally to *alcyon* (M) 'halcyon', a mythical bird, *dronte* (M) 'dodo', a flightless bird now extinct, *manchot* (M) '(Antarctic) penguin', a flightless bird that spends most of its life in a marine environment, and *oie* (F) 'goose', a migratory bird that grazes on land in the same way as four-footed animals. Thus, while certain attributes appear to be crucial, it is not possible at this stage to identify precisely that which is salient, nor the basis for masculine gender assignment of *oiseau*.

The superordinate noun *oisillon* (M) 'chick/fledgling' applies to any newly-hatched or very young bird. Some chicks are born 'altricial' (naked and blind) while others have a downy covering, but both forms take some time to come to maturity and develop the full complement of feathers that allow them to survive once they fledge (leave the nest). *Oisillon* continues to apply until they are sufficiently mature for *oiseau* to apply. Since adult birds lose their feathers in seasonal moulting, the application of *oisillon* in relation to *oiseau* appears to be determined by comparative differences in age, size and feathers.

Another superordinate term is *volatile* (M) 'farmyard bird', a term that applies to any 'feathered' creature kept and raised for eating or for its produce. An earlier meaning of this noun was once as general as today's *oiseau* (LRPT, 1994:1186). However, its derivational stem *vol-* 'flight' suggests the capacity for flight, where *oiseau* does not. *Volatile* appears to relate to an older,

feminine noun *volatille* (F) 'bird' (<atilf.atilf.fr>, 2006), which could apply not only to a bird but to any other creature more generally ... *qui a des ailes, qui peut voler* '... that has wings (and) can fly', serving to distinguish a winged creature (insect, animal) from terrestrial or aquatic creatures unable to fly (<atilf.atilf.fr>, 2006). The historical term *volatille* (F) 'creature able to fly' which was in use for several centuries, including de la Fontaine's seventeenth century 'Fables' (XII, 2, 56), had the same form as an old adjective *volatille* 'able to disappear quickly into the ether', as in the (14th century) expression *oyseaux volatilles*. The same stem, *volatil-*, also appears in the (12th century) feminine collective noun *volatilie* (F) 'flying flock (of birds)', as in the phrase *la volatilie au ciel* 'flight (or flock) of birds in the sky' (<atilf.atilf.fr>, 2007).

However, during the latter part of the seventeenth century another meaning is recognised for *volatille*, found in the first edition of *Dictionnaire de l'Académie française* (1694):

*Volatille*. Sub. f. *Se dit de tous les oiseaux qui sont bons à manger*.

Bird. Fem. noun. Applying to all birds that are delicious to eat.

(Trans. M. à Beckett)

The entry notes that this meaning is restricted to *le stile familier* 'informal contexts'.

Both of these older nouns, *volatille* and *volatilie*, have disappeared from the lexicon and today's much more restricted meaning for *volatile* (M) as 'domesticated feathered creature kept and raised for food', may have arisen from those earlier informal contexts involving 'flavoursome flesh'. There is a certain irony in the modern meaning of *volatile* in its derivation from *vol-* 'flight' since its semantics appear to have lost the attribute 'capable of flying away' and gained the attribute 'grounded', or 'kept in a captive state'.

The change in meaning over time from any 'flying creature', to one that is good to eat', to the domesticated 'farmyard bird' for *volatille/volatile* occurs alongside a change in gender assignment. This connection suggests that gender assignment may be semantically motivated, particularly since both nouns have consonant-final pronunciation as shown in (6)

(6) [j] for *volatille*                      [ɪ] for *volatile*

While at this stage no explanation is readily apparent for the suggested association between 'flying' and feminine gender, and between 'domesticated' and masculine gender, these attributes

and their associated gender assignments will continue to be of interest.

Other count nouns denoting birds apply much less generally than *oiseau* and *volatile*, but since they are non-specific as to kind, they may also be regarded as superordinate terms. One such term is *rapace* (M) 'raptor'. It applies to various kinds of birds but is restricted to flesh-eaters, swift, larger-sized diurnal or nocturnal 'carnivorous' birds of prey that typically obtain their flesh by hunting and killing their prey, usually vertebrates, as well as those that feed on carrion.

The superordinate term *charognard* (M) 'carrion-eating creature' is also associated with death since it applies to any creature that feeds on the dead flesh of animals. It is not restricted to two-legged 'winged and feathered' creatures such as the *vauture* (M) 'vulture' and scavenging birds such as the 'carrion crow', but can apply to unrelated kinds such as the various carrion-eating 'beetles', and possibly *chacal* (M) 'jackal'. Thus, 'two-legged', 'feathered', and 'winged' are not essential for this term to apply. In fact, the form of such a creature remains 'indefinite'. Amongst the various notions suggested here are 'connected with death' and 'indefinite' form or kind. While either might be associated with masculine gender assignment, the basis for any such association is not clear.

Another superordinate term that is narrower still is *aigle* (M/F) 'eagle'. Alternative gender assignments make it unusual amongst these superordinate terms. This noun does not apply to a 'natural group' in the same way as 'heron', or 'pigeon'; instead, it applies to any of various larger-sized, dark-coloured, solitary birds that hunt on the wing during daylight hours and kill to obtain fresh meat. Like other raptors, they have strong talons for gripping prey and a strong bill hooked at the tip for tearing through tough outer layers to reach the flesh beneath. In these contexts, *aigle* has masculine gender assignment.

In two very different contexts *aigle* has feminine gender assignment. One context concerns the *aigle* in the nest (LRPT, 1994:23-24) which it builds in very high locations for protection, and in which the egg (typically one) is incubated and the young eaglet is fed. These various notions, 'on high', 'nesting', etc., offer quite different attributes that may potentially be associated with



feminine gender assignment, particularly a parenting role which is typically more closely associated with 'female' for birds although, unlike most raptors, 'male' and 'female' eagles are well-known for sharing nesting duties (<[www.oiseau.net](http://www.oiseau.net)>, 2004). Thus, for eagles no direct association can be inferred between 'nesting' or 'parenting' and 'female' as is often the case for birds, particularly fowl, which might motivate feminine gender assignment.

The other context in which *aigle* is feminine is found in poetry in its association with flight, as in the phrase *l'aigle alti re* 'eagle aloft', or 'flying freely', and in the phrase *l'aigle d cha n e* 'eagle unloosed', or 'unchained' (<[atilf.atilf.fr](http://atilf.atilf.fr)>, 2004), perhaps in contrast with the verb *cha ner* 'to chain' (COFED, 1985:91). In these two cases feminine gender assignment can be observed through feminine agreement on adjectives *alti re* and *d cha n e* rather than the masculine forms *altier*, *d cha n  *. Again, feminine gender assignment applies regardless of whether the bird is 'male' or 'female'. In this latter sense one can identify a similar meaning 'flying', or 'free to fly' for the historical superordinate feminine noun *volatile*. At this stage, we can observe that the opposition between some attributes ('free', 'aloft', 'on high' and 'unchained') and others ('fenced in', 'captive' or 'not free to fly') finds a parallel opposition in feminine and masculine gender assignments.

To some extent the noun *pingouin* might also be included with superordinate terms since it applies to a range of largish black-and-white marine birds of the Arctic region that spend much of their lives in an aquatic environment, diving and swimming under water for food until they return to their terrestrial sites for nesting. Birds covered by this term include the *grand pingouin* (M) 'giant auk', a flightless bird now extinct, as well as flighted birds such as *petit pingouin* (M) 'razorbill' (aka *pingouin torda*), *mergule nain* 'little auk/dovekie' and guillemots (including the Canadian 'murre') (LRPT, 1994:849, <[www.littoral85.com/5oiseaux\\_marins.htm](http://www.littoral85.com/5oiseaux_marins.htm)>, 2009).

Attributes that appear to be significant for birds at this superordinate level include 'able/free to fly away', 'aloft/on high' and 'nesting', associated with feminine gender assignment, and 'dense covering of feathers', 'diminutive', 'deadly', 'underwater', 'extinct', 'flightless', 'captive', 'indefinite

or undefined' in form or kind, and 'different' (in relative age, size, feathering) for a young bird, associated with masculine gender assignment. For the generic term *oiseau*, a number of notions are raised, 'winged', 'fragile', 'feathered', and a mixture of 'flighted/less flighted/not flighted', etc. but no further clarification can be established at this time. Other attributes raised in discussing the masculine noun *aigle*, 'solitary', 'diurnal', etc., may also be associated with masculine gender assignment. Changes in gender assignment between *aigle* (M) and *aigle* (F), and different gender assignments for *volatile* (F), and for *volatile* (M) are associated with changes in meaning and provide some support for a semantic explanation of gender assignment. The various attributes identified here will inform the analysis of other nouns.

All of these superordinate terms have consonant-final pronunciation, except *oiseau*. These differences remain unexplained at this stage.

#### 4.3.2 Semantics and collective nouns

There are five collective nouns in the corpus and they are set out in Table 4.4 below.

Table 4.4: Collective nouns denoting birds

Masculine noun			
<i>vol</i>	M	'flight'	quantity of birds flying together
Feminine nouns			
<i>couvée</i>	F	'covey'	small flock of wild gamebirds (grouse, partridge) flushed out of hiding
<i>nichée</i>	F	'brood'	all the members of the same brood still in the nest (LRPT, 1994:766)
<i>volaille</i>	F	'poultry'	group of birds raised together for their flesh or eggs
<i>volée</i>	F	'flock', 'flight'	group of birds <i>qui volent ou s'envolent ensemble</i> (LRPT, 1994:1186) 'that fly or take off together' eg. <i>volée des moineaux</i> 'flock of sparrows'

There is one masculine noun amongst this set of collective nouns, the term *vol* (M) 'flock'. Its definition (in LRPT, 1994:1165) (*L*)a quantité (d'oiseaux ...) qui se déplacent ensembles dans l'air 'Quantity (of birds ...) moving together in the air' seems to mirror that of the feminine term *volée*. For the masculine term *vol*, certain notions such as a 'quantity', an 'indefinite number', or 'indefinite kind' may be significant, particularly since 'free to move about' appears to be associated with feminine gender, and there is already some association between 'indefinite' and

masculine gender through *charognard* (M) 'carrion-eating creature' above. The significance for *volée* in its application to a 'specific' kind, or set of the 'same' kind (since 'same' would appear to depend on 'specific') will continue to be explored, particularly among collective nouns in other lexical fields. There is a consistency between the contrasting gender assignments and semantic oppositions 'indefinite' and 'specific'.

Amongst feminine nouns, *couvée* (F) 'covey' may no longer be in common usage (it is not included in LRPT, 1994). This hunting term applies to gamebirds flushed from their hiding place that take off together in flight, a notion not unlike that for both *vol* and *volée* that also apply to birds taking off together. It is possible that for *couvée* and *volée* there may be some association between meanings that involve a 'specific' kind, or perhaps the notion 'acting in concert', even 'free to fly', and feminine gender assignment rather than 'quantity' of 'unknown kind' for *vol* (M) 'flock of birds together'. These notions will continue to be explored in the analysis of collective nouns in other lexical fields.

The collective term *niché* applies to hatchlings not only of the same kind but are 'blood relatives' since they share the same parents. This kinship distinction is important since some species may have more than one brood in a season, and parenthood among different broods may not necessarily involve the same pair.

The feminine collective noun *volaille* (F) 'poultry' is restricted to birds raised for their flesh and eggs, but its feminine gender contrasts with that of the count noun *volatile* (M) 'farmyard bird' which is also raised for its flesh (or produce). The question is whether or not differences in gender assignment relate to a difference between collective and count nouns, or whether they relate to certain other attributes associated with different classifications. The feminine terms *dinde* (F) 'turkey' and *poule* (F) 'chicken' apply to specific birds in relation to their flesh where default terms for their species are masculine, eg. *dindon* (M) 'turkey' and *coq* (M) 'fowl'; it may be that feminine gender for *volaille* also relates to poultry considered as 'natural produce'. However, *volaille* can be contrasted with the masculine collective *troupeau* (M) 'group of domesticated animals', whose French definition (LRPT, 1994:1143) suggests 'mixed farming' –

four-footed as well as two-footed creatures – some of which may be kept for food and others for transport, etc. while *volaille* pertains only to a single usage. For collective nouns a contrast between 'diverse' and 'same' as to kind or use would be useful as well as simple to apply.

Differences in word-final pronunciation patterns amongst these nouns are not yet accounted for, although it is noted that birds denoted as *volaille* typically have 'flavoursome' flesh and a plump-chested or heavy-bodied appearance. It is possible that these notions may be associated with consonant-final pronunciation. Other collectives, *couvée*, *niché* and *volée* have vowel-final pronunciation and the discussion raises various notions, such as 'feathered', 'light-bodied', and 'diminutive' (young/small). While they may be associated with vowel-final pronunciation, and while 'light-bodied' provides a nice contrast with 'heavy-bodied', any relationship between these notions and a specific word-final pronunciation pattern must await further evidence. They will continue to be explored.

### 4.3.3 Semantics related to 'male' and 'female' birds

Some nouns in the database designate a specific kind of 'bird' but they contain additional semantic information relating to 'male' or 'female' sex. They are set out below in Table 4.5.

Table 4.5: Male and female birds

Noun	Translation	Sex	Gender assignment M/F
<i>dindon</i>	'turkey-cock'	male	M
<i>dinde</i>	'turkey-hen'	female	F
<i>faisan</i>	'pheasant'	male	M
<i>faisane</i>	'pheasant'	female	F
<i>paon</i>	'peacock'	male	M
<i>paonne</i>	'peahen'	female	F

For each of the examples above, nouns denoting the 'male' bird have masculine gender and vowel-final pronunciation, and nouns denoting the 'female' bird have feminine gender and consonant-final pronunciation. For these birds gender and word-final pronunciation distributions match the statistical generalisation observed above, and gender assignment is fully predictable according to both phonological and semantic systems. As laid out in Table 4.5 above, they can be seen as pairs of the same kind, determining a bird both as to 'male' or 'female'

and as to a specific kind. Gender assignment, then, is consistent in its association with natural sex – more specifically, masculine gender for those birds that are 'male', and feminine gender for birds that are 'female'. We can also observe that these nouns have word-final pronunciation patterns associated with their specific gender assignments since those nouns identifying 'male' have vowel-final pronunciation, eg. *paon* / pā /, while those identifying 'female' have consonant-final pronunciation, eg. *paonne* / pan /.

However, the concord between gender assignment and associated word-final pronunciations for these pairs of nouns is not consistent across all pairs of nouns that identify a 'male' or 'female' bird of a kind, as vowel-final (VF) and consonant-final (CF) pronunciations for the following pairs of 'male' and 'female' reveal.

Table 4.6: Additional examples – male and female of a kind

Noun	Word-final (CF/VF)	Translation	Sex	Masculine (M) or Feminine (F) Gender
<i>canard</i>	CF	'drake'	male	M
<i>cane</i>	CF	'duck'	female	F
<i>coq</i>	CF	'rooster, 'cock' (fowl)	male	M
<i>poule</i>	CF	'hen' (fowl)	female	F
<i>jars</i>	CF	'gander'	male	M
<i>oie</i>	VF	'goose'	female	F

All these nouns have consonant-final pronunciation but one, *oie*. We can thus observe that gender assignments correlate with sex of the referent bird regardless of any classificatory link there might be between gender assignment and word-final pronunciation. These pairs of nouns allow us to make a distinction not only between the various kinds of fowl, but also between pairs of the same kind.

#### 4.3.4 Young terrestrial fowl - distinctions for 'male' and 'female'

The feathers of the young of various species of fowl are similar in colour to the female. As they mature, 'females' retain that colour, while 'males' gradually develop the colourful plumage of their kind. The standard colouration could therefore be said to be that of the 'female'. It could also be said that the standard size is that set by the 'female', with the fully mature 'male' being somewhat bigger, and the immature being somewhat smaller.

Although it is uncommon, distinctions between 'male' and 'female' can also be found for young birds, as in Table 4.7 below.

Table 4.7: Young birds identified as 'male' or 'female'

Noun	Translation	Sex	Gender assignment
<i>aiglon</i>	'male eaglet'	male	masculine (M)
<i>aiglonne</i>	'female eaglet'	female	feminine (F)
<i>coqolet</i>	'young male fowl'	male	masculine (M)
<i>poulette</i>	'young female fowl'	female	feminine (F)
<i>laneret</i>	'young male lanner falcon'	male	masculine (M)
<i>lanerette</i>	'young female lanner falcon'	female	feminine (F)

Some of these 'diminutive' forms are coined from a stem provided by the adult bird, *aigl-* 'eagle', *lan(i)er* (M) 'falcon' while two are coined from stems provided by the different sexes of the adult bird, eg. *coq-*, *poul-*, added to which are alternative suffixes associated with masculine and feminine gender assignments. Thus, in these cases masculine nouns come to have vowel-final pronunciation and feminine nouns come to have consonant-final pronunciation, regardless of their orthographic representation.

These concepts relating to the young parallel those of the adults in their correlation with specific gender assignments according to biological differences relating to sex. However, not all cases of nouns denoting young birds are paired in a mutually exclusive way. *Canette* (F) 'female duckling' and *caneton* (M) 'duckling' share the same stem *can-*, but their suffixes are unrelated since from *caneton* one might have anticipated \**canetonne* as the feminine form, and from *canette* one might have anticipated \**canet* as the masculine form. Moreover, the masculine term is generic in that it can apply to a male or female duckling (LRPT, 1994:151). These two nouns, *canette* and *caneton*, suggest that there is no requirement for a paired contrast between 'male' and 'female' as we might have assumed from 'male' and 'female' pairs in Table 4.7. However, despite the difficulties in recognising 'kind' at an early stage, and the even greater difficulty in identifying 'male' and 'female', the generic sense of *caneton* suggests that 'different' from adult birds may be more pertinent than 'indefinite' kind.

It is noted that where species make no such distinction for 'male' or 'female' young, eg. *dindonneau* (M) 'young turkey chick', *oison* (M) 'young goose chick', *pigeonneau* (M) 'young pigeon chick', the denoting terms are masculine. It is also recognised that until any 'young' bird reaches maturity, differences between it and the adult form make it difficult to know what kind it is. Such stories as the Western Australian family who took over the raising of a pet bird that eventually grew too big for its cage and turned into a wedge-tailed eagle are not unusual. The possible association between notions mentioned in this discussion of the various young, such as 'different', and 'diminutive', and the consistency in masculine gender and vowel-final pronunciation among these nouns is explored further below.

#### 4.3.5 Other historical terms for 'male' and 'female' of a kind

Other examples of possible pairs of 'male' and 'female' of the same kind are found in the database, but are rarely used today. Literary records (<atilf.atilf.fr>, 2004) indicate that *merle* was originally a term denoting 'blackbird' and was masculine, until the end of the thirteenth century when it became feminine for a time, but reverted to masculine in the sixteenth century, possibly at the same stage of the appearance of the overtly feminine form *merlette* coined with addition of the feminine suffix *-ette*, which applied only to the 'female blackbird'.

Today general usage finds *merle* (M) as the unmarked term designating 'blackbird' as a 'kind', regardless of sex. These changes suggest that distinctions between 'male' and 'female' may wax and wane amongst species. However, they do not explain the use of the masculine term as the 'unmarked' case today rather than *merlette* (F) 'female blackbird', whose use is limited to hunting circles (<www.chasseursdesavoie.com/fr>), and to web sites that display photographs of 'male' and 'female' blackbirds (<www.merlenoir.com/pagemerle.htm>, <www.users.skynet.be>, 2007). Buffon (Appendix VI) notes that the extraordinary contrast in appearance between the black male and brownish female at one stage suggested that they belonged to different species of the thrush family (which also includes fieldfares, redwings and songthrushes). Buffon also notes that while most European thrushes are migratory, blackbirds are not. The use of masculine gender as the 'unmarked' case is explored further below.

If visible differences in appearance between 'male' and 'female' of a pair led to different terms among 'fowl' and 'blackbirds', this cannot have been the case for look-alike *pigeon* (M) 'male pigeon' and *pigeonne* (F) 'female pigeon'. The 'female' term *pigeonne* has now largely disappeared from use, perhaps because of the pigeon's diminished importance to humans as food and its diminished role in the development of other means of communicating across distances. Those distinctions remain significant for those involved in breeding pigeons.

Even more rare are other 'pairs' of terms for male and female of the same kind, *sacre* (F) 'female saker' and *sacret* (M) 'male saker' (a large falcon), identified by the French naturalist Pierre Belon in his (1555) *Histoire de la nature des oyseaux*. At this time in Europe, falconry had enormous status, and the *sacre* was the only bird of prey permitted to be used in falconry. Since in this species, as for most birds of prey, the 'female' is bigger than the 'male' it was the 'female' bird that came to be trained and used in falconry. This association between *sacre* and 'female' is found in other sources, eg. *En fauconnerie le terme «sacre» ne se disait que de la Femelle* '... In falconry, the term) «sacre» was used only for the 'female' (<dictionnaire.mediadico.com>, 2007). However, by the time of Nicot's (1606) dictionary, the noun *sacre* is recorded as masculine.

One can argue that while *sacre* was understood to be 'female', for the general populace this term would have applied to a diurnal bird of prey kept in captivity for a sport that involved hunting and killing. For any of these meanings, masculine gender assignment would have been consistent not only with *aigle* (M) 'eagle', a diurnal bird of prey that hunts and kills, and most diurnal birds of prey, but with *volatile* (M), any 'farmyard bird' kept in captivity. Where masculine gender for *sacre* might have offered some conflict, for those involved in breeding such birds this would not have been the case – feminine gender for *sacre* would have formed a pair with *sacret* (M) 'male saker' – still used today in their breeding (<rjmonneret.free.fr>, 2007).

The same pattern occurs also for the pair *lanier* (M) 'female lanner' and *laneret* (M) 'male lanner' (<atilf.atilf.fr>, 2005), which is also the term used for 'male' young in a contrast with



*lannerette*, 'female' young of lanners. Again, the adult female is the larger bird and thus is more impressive in falconry, and its definition includes the same descriptive term *dressé pour la chasse* 'trained to hunt' as for *sacre*. These birds of prey were kept in captivity and their whole purpose was directed towards the sport of falconry, where breeding was almost as significant as the hunting. It seems that some notion associated with masculine gender is more crucial than any feminine/'female' relationship. Two notions connected with falcons, 'associated with death' and 'kept in captivity', are both previously associated with masculine gender – albeit for collective terms. These notions will continue to be of interest.

Two sources also suggest that *perroquet* (M) as 'cock (male) parrot' and *perruche* (F) as 'hen (female) parrot' (<atilf.atilf.fr>, 2004, COFED, 1985:410) form a mutually exclusive pair of the same kind. However, no ornithological or other dictionary sources employ these terms in this way. One definition (LRPT, 1994:835) suggests that *perruche* is a Spanish loan word that corresponds to *perroquet* in denoting a similar but smaller bird related in kind rather, not in any mutually exclusive relationship. However, in their anomalous meanings as 'male' and 'female', gender assignments for *perroquet* and *perruche* are consistent with other 'male' and 'female' pairs above.

#### 4.3.6 Attributes associated with 'male' and 'female' terrestrial fowl

Descriptions of the various birds known as 'fowl' suggest that they share many similar features. They are heavy-bodied birds that pass their daytime hours feeding on solid ground but roost in trees at the end of the day. They typically respond to threat by running rather than flying even though they are powerful in flight. They live in small polygamous groups dominated by a single adult 'male' who is tireless in fending off other 'males'.

Amongst those fowl with pairs of terms for 'male' and 'female' of the same kind, other attributes are strongly associated with one sex (such as colourful plumage for the 'male' pheasant) that are present either in a much lesser form, or are entirely absent, in the other sex of the same kind (such as quacking, where only 'female' ducks quack). In Table 4.8 below are some of the most distinctive differences identified in descriptions of various 'male' and 'female' fowl.

Table 4.8: Fowl - distinguishing features of 'male' and 'female'

<i>coq</i>	M	'cock' (male of domesticated or wild fowl)	rounded bird with ruff (long hairy plumes) around neck; large erect jagged crest; very long tail feather; loud crowing call at daybreak, to establish territory, warn off predators; can cluck
<i>poule</i>	F	'hen' (female, domestic or wild) of any fowl	similarly rounded, but lighter in colour; smaller; short tail feathers; lays eggs; clucks repetitively when brooding/feeding; keeps social order (<clibrary.unm.edu/sora/Auk/v111n04/p0863-p0872.pdf>, 2004)
<i>dindon</i>	M	'male turkey'	large black N. American fowl with beautiful iridescent plumage; longish tail feathers, 'bearded'; parades; gobbles (<www.wildturkeyzone.com>, 2007)
<i>dinde</i>	F	'turkey hen'	smaller, less colourful; longish tail feathers held downwards; lays eggs and rears young; only has yelp
<i>faisan</i>	M	'common pheasant' (male)	bright chestnut coloured feathers, coloured ring around neck; long tail feathers can be cocked up at angle; powerful spurs; tufted horn-like ears; loud harsh call; keeps other males away in breeding season; crows
<i>faisane</i>	F	'common pheasant' (female)	similar but smaller and lighter coloured than male, tail feathers much shorter; no spurs; lays eggs; if original hatch is destroyed can lay second clutch but hatches one brood per year
<i>paon</i>	M	'peacock'	spectacular plumage colour; crest; long tail feathers fan out, shed after breeding season; loud raucous cry; runs, not flies, from threat
<i>paonne</i>	F	'peahen'	similar but less brilliant colouring; short crest, no long tail feathers; smaller in size than male; lays eggs and rears young

These descriptions offer differences in appearance, call and habits that enable us to apply the different terms for 'male' and 'female' of the same kind without difficulty.

Differences amongst the various pairs of terrestrial 'fowl' can also be generalised. Unlike birds of prey, 'male' fowl are typically larger than 'females', and are typically gregarious, but not towards other 'males' of their own kind. 'Fowl' live in small polygamous groups dominated by a single adult 'male' who is tireless in fending off other 'males' while dominating its female consorts. Adult 'males' have plumage that is more brilliantly coloured, even iridescent, than that of 'females', and a loud crowing or gobbling call which they use to announce their presence,

attract a mate, alert hens (and other animals) to any threat, and defend their territory at breeding time, as for *coq, faisan, paon, dindon*.

'Females' are typically smaller in size than adult males and are either entirely different in colour or paler in colour than the 'male'. They do not crow or sing, but make a constant 'clucking' noise which appears to be related to establishing and maintaining social order amongst other females of their own kind in their constant engagement in finding food or keeping their broods close by. The 'female' also lay eggs, incubates them and raises its young, a parenting role in which the 'male' plays no part.

Amongst 'turkeys', the 'male', 'female' and immature young share the same 'yelp', but the adult 'male' *dindon* makes a gobbling sound that the 'female' *dinde* typically does not (although there appear to be isolated cases of a 'female' gobbling) (<[www.wildturkeyzone.com](http://www.wildturkeyzone.com)>, 2007) while the 'female' *dinde* makes a cackling sound that 'male' *dindon* does not.

The young initially develop a plumage that is similar in colour to the female. As they mature, 'females' retain that colour while 'males' gradually develop the colourful plumage and other features of their sex. The standard colouration could thus be said to be that of the 'female'. For fowl, the standard size is also set by the female since the fully mature 'male' is somewhat bigger and the immature young somewhat smaller. However, in the period until maturity is reached, the female becomes less and less easily distinguished from her young until the only distinction between them is in the nurturing role she continues to display.

4.3.7 Waterfowl

For the two most common waterfowl with separate terms for 'male' and 'female', ducks and geese, the situation is more complex, as descriptions in Table 4.9 convey.

Table 4.9: Waterfowl - distinguishing features of 'male' and 'female'

<i>canard</i>	M	'drake'	(breeding plumage) colourful plumage; whistles and grunts (eclipse plumage ) brown-coloured body, possibly; different-coloured head
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<i>cane</i>	F	'duck' (female)	light brown plumage; dark bill; quacks, is very vocal; incubates eggs, tends to young; lures predator from the nest by flapping wings and squawking, crossing the ground as if injured
<i>jars</i>	M	'gander'	grey bird, longish neck, loud honking call, guards the nest, helps raise the young
<i>oie</i>	F	'goose'	grey bird, longish neck, loud honking call, lays eggs, helps raise the young

Plumage colouration of a young *canard* is initially similar to that of the female. As for terrestrial fowl, 'females' retain that colour while 'males' become either black and white, or grey, or remain brownish, according to their species. Thus, the standard colouration for any kind of 'duck' is that of the 'female'. Even amongst species where the 'male' *canard* develops *plumage nuptial* 'breeding plumage' at mating time, the dull colouration of 'eclipse' plumage that follows breeding can make it difficult to distinguish 'male' from 'female'. Plumage colouration for ducks does not provide a consistent general diagnostic with regard to sex.

Although 'quacking' is closely identified with 'ducks', not all species of 'duck' quack and for those that do, it is only the 'female' *cane* that quacks. Although *cane* is suggested to be derived from *canard* (LRPT, 1994:151), the inability of males to quack makes it more likely that *canard* is derived from *cane*, both sharing the stem of the verb *cancaner* 'to quack-quack'. Male ducks can make other calls but, like fowl, calls are typically associated with display during the mating season. Otherwise they are silent.

Descriptions indicate that the mature 'male' *canard* is typically larger than the mature 'female' *cane*, but these differences rely on visual confirmation which is difficult to establish for a bird – on its own or within a flock. Since differences in colouration and in nurturing (an activity in which males take no part) can be observed for only part of the year, the only continuous distinction between *cane* and *canard* is through their different calls – which relies on close range contact and an extended period of time since males are generally silent.

Birds identified as *oie* (F) 'goose' are typically whitish, greyish or brownish, medium- to large-sized, web-footed, ground-feeding birds with broad curved chests, smaller in size and neck than

other similar birds, 'swans'. In turn, geese have longer necks and are typically larger than ducks, also web-footed (of which the most common, such as *canard colvert* (M) 'mallard', is also ground-feeding). For each species, *oie des neiges* (F) 'snow goose', *bernache* (F) 'barnacle/Brent goose', *anserelle* (F) 'pygmy goose', the 'male' (gander) and 'female' (goose) have the same shape, plumage colouration and loud honking call. Geese typically mate for life, and parents share the responsibility of protecting the nest and rearing the young. They remain together as a family for some years. Although 'males' grow a little larger than 'females', this difference in size is not readily apparent in a flock, particularly since geese take some years to grow to their fullest extent. One may presume that only for those involved in breeding and farming such animals would distinctions between 'male' and 'female' be salient or determinable.

In effect, terms for 'male' and 'female' amongst fowl can be applied largely because of a composite of separate factors – differences in size that are readily apparent for those that live in the harems, the different calls and their different purposes, differences in colouration and in ornamentation on the body (including crests and beards around the head and neck), different behaviours to others of their kind, differences at breeding time and in parenting the newborn to maturity. Together these 'male-like' and 'female-like' attributes provide a combination of features that suggest 'male' or 'female' of a kind for most fowl and can thus correlate with, and account for, their different gender assignments.

What is interesting about pairs of terms for fowl in Table 4.9 and earlier is differences in their formation. For some we find a consonant-final stem, eg. *cane*, *dinde*, feminine terms while the masculine pair is suffixed, eg. *canard*, *dindon*. For *paon/paonne*, and *faisan/faisane*, different gender assignments occur alongside elision and pronunciation of the final consonant which results in a contrast between vowel- and consonant-final pronunciations. But why we find the vowel-final suffixed forms associated with the masculine term for some birds as it is for *dindon*, but not for *canard*, and the consonant-final non-suffixed forms associated with feminine terms *dinde* and *cane* is an interesting question. These different formations, different suffixations, and different outcomes of terms denoting 'male' and 'female' fowl will continue to be of interest.

Another crucial question is why, in designating 'kind', we find the masculine term as the 'unmarked' case for *dindon* (M) 'turkey' and for *pigeon* (M) 'pigeon', but the feminine form for *oie* (F) 'goose'. This area is explored below.

#### 4.3.8 Kind – the unmarked case amongst pairs of terms

Among 'fowl' that offer pairs of terms in Table 4.10, the unmarked case designating kind is identified in the second column.

Table 4.10: Unmarked case amongst fowl

Marked term			Unmarked term	Masculine or Feminine (M/F)
Male	<i>canard</i>	'drake' (male)	<i>canard</i>	M
Female	<i>cane</i>	'duck' (female)		
Male	<i>coq</i>	'cock' (male)	<i>coq</i>	M
Female	<i>poule</i>	'hen' (female)		
Male	<i>dindon</i>	'turkey' (male)	<i>dindon</i>	M
Female	<i>dinde</i>	'turkey' (female)		
Male	<i>faisan</i>	'pheasant' (male)	<i>faisan</i>	M
Female	<i>faisane</i>	'pheasant' (female)		
Male	<i>jars</i>	'gander' (male)	<i>oie</i>	F
Female	<i>oie</i>	'goose' (female)		
Male	<i>paon</i>	'peacock' (male)	<i>paon</i>	M
Female	<i>paonne</i>	'peahen' (female)		

To this list could be added historical pairs of terms in (7):

(7)	Male	<i>merle</i>	'blackbird' (male)	<i>merle</i>	M
	Female	<i>merlette</i>	'blackbird' (female)		
	Male	<i>pigeon</i>	'pigeon' (male)	<i>pigeon</i>	M
	Female	<i>pigeonne</i>	'pigeon' (female)		

For all except one, the unmarked case identifying a particular kind of bird is masculine. The single counter-example is *oie* (F) 'goose', where the unmarked case is feminine. Although there is isolated use of the feminine term *dinde* as the unmarked case for 'turkey', it occurs only twice, and in related sources (the French version, and the French translation of the English version, relating to 'turkey' in 'wikipedia', the on-line dictionary (<en.wikipedia.org> and <fr.wikipedia.org>, 2006). All other sources use the masculine *dindon* as the unmarked term – dictionaries (<atilf.atilf.fr>, LRPT, 1994:326), ornithological web sites, (<www.buffon.cnrs.fr>, 2004,

<www.oiseau.net>, 2004), and more general web sites dealing with flora and fauna (<environnement.ecoles.free.fr/ dindon.htm>, 2007) in France and in Canada (<www.ffdp.ca>, <www.bsc-eoc.org>, 2004). In the context of turkeys farmed for their flesh the unmarked case is the feminine *dinde* (LRPT, 1994:326, <www.crdp-reims.fr/polegout/patrimoine\_ca/ dinde\_rouge.pdf>, 2004), as in:

.. (l)a *dinde sauvage a peu de chair, contrairement à la dinde d'élevage*

'... the wild turkey has little flesh, unlike the farmed turkey ...'

(<www.servicevie.com>, 2007, trans M à Beckett)

The one use of *dinde* as the unmarked case appears to be anomalous.

The unmarked meanings regarding species provide no information as to 'male' or 'female'. The different gender assignments for unmarked cases therefore suggest either the presence of some crucial characteristic or set of characteristics for birds designated by masculine terms that is not present for the feminine term *oie*, or the presence of some crucial characteristic for the feminine *oie* that is absent for birds designated by masculine terms. It is possible that these differences in call, behaviour and appearance may contribute in some way. It is also possible that the different environments, terrestrial, aquatic, aerial, and the different habitats in which the various birds live may be significant.

#### 4.3.9 Gender assignments – other terrestrial fowl

While unmarked nouns denoting terrestrial birds covered by the term 'fowl' are masculine, other nouns in the database also denote 'terrestrial' birds many of which also fall under the umbrella term 'fowl'. Some of these nouns are masculine, eg. *francolin (noir)* (M) 'francolin'/'black partridge', a heavy-bodied gamebird that once flourished from southern Europe to India but is today extinct in much of Europe and rare elsewhere. While it is a member of the pheasant family, in flight it looks more like a partridge. It prefers thick vegetation with plenty of low cover, preferably near water. While it has the explosive flight of pheasants, it does not fly off when disturbed, but prefers to creep away and reach cover unseen (<www.williamette.edu>, 2005).

The European *tétras lyre* (M) 'black grouse' is a member of the grouse family and was once hunted as a gamebird. It is typically sedentary (non-migratory), dark coloured, and round-bodied, and lives in polygamous groups among the mountainous coniferous forests of Europe. Another member of this family is the Eurasian *grand tétras* (M) 'Western capercaillie/wood grouse', the largest member of the grouse family, that inhabits coniferous taiga forests of northern Europe and Asia. Its body weight makes flight difficult, but its wings make a sudden thunderous noise as it takes off which deters predators. Their diet is highly specialised and these birds require a particular set of resources to survive that are best met in old, open canopies of coniferous forests that once provided endless opportunities for survival. Their exploitation, and the degradation of preferred terrains, has led to some populations of *tétras lyre* becoming extinct and many others are under threat since they are unable to adapt.

Thus, each of the various species known as *tétras* is restricted in the choice of environment, including the *tétras des armoises* (M) 'sage grouse' which requires wormwood trees in which to nest. Their inability to adapt or cope with changes around them places them at risk when such habitats come under threat, as for the *tétras des prairies* (M) 'greater prairie chicken' (syn. *cupidon*) whose preference for undisturbed tall grass prairies has meant that it is now extinct or extremely rare in much of its former habitat.

One species of grouse is equally specialised in its habitat but is denoted by a feminine noun, the loan word *grouse* (F) 'red grouse'. This noun designates a plump, pigeon-sized game bird that has succeeded in colonising the harsh heathlands and moors that extend in enormous expanses across much of Great Britain. Their development and spread in isolation from other species has made them unique, and these two notions – 'spreading endlessly', and 'unique' – both offer the possibility of some association with feminine gender assignment. However, it seems that this feminine loan word *grouse* is currently being replaced in the French ornithological lexicon by the masculine *lagopède* (d'Écosse) (M) at the same time as it is also being replaced in the English lexicon as 'willow grouse' or 'willow ptarmigan'. These changes place it alongside other sub-species of *lagopède*, such as *lagopède des saules* (M) 'willow ptarmigan' or 'willow grouse' – birds that typically respond to threat by remaining still. This response benefits the white



Alpine *lagopède* since it becomes undetectable in its snow-covered surrounds, and for the *lagopède d'Écosse* which has thick undergrowth in which to hide, but is less helpful for those living in more open terrains. The *lagopède (des saules)* is accepting of humans, even taking bread from their hands (Buffon, Tome 2:273, at <[www.oiseau.net](http://www.oiseau.net)>, 2005), which makes them easy to capture. For a bird so sought after for its delicious flesh, this response is potentially life-threatening. It is possible that these more general responses – acceptance of human presence, remaining still, are endangering, and may be associated with masculine gender assignment in some way. The basis for this distribution, however, is not readily apparent.

Those habits are not shared by the *perdrix* (F) 'partridge' which takes off immediately that a potential threat is perceived, the 'male' darting in one direction and the female in another (Buffon, Tome 2:408 <[www.oiseau.net](http://www.oiseau.net)>, 2005). This response makes for exciting hunting but for the birds it increases the potential for at least one of the pair to survive since it confuses the hunter. Individuals also display *un instinct naturel de défense* 'natural self-defense' by forming small groups and sticking close together. When disturbed at night the *perdrix* has an alarm call that alerts others nearby. The closely-related *gêlinotte des bois* (F) 'hazel grouse' is very wary and takes flight to escape since it flies easily amongst trees of its woodland habitat despite its heavy-bodied shape. This explosive flight response of the *perdrix* contrasts not only with *lagopède des saules* which remains still, but it also contrasts with *hocco* (M) 'hocco', a heavy-bodied terrestrial bird of the Caribbean and tropical America that, when faced with threat, prefers to run rather than hide since it can only fly a few metres (<[www.guyanecho.com/dossiers](http://www.guyanecho.com/dossiers)>, 2007).

The *caille* (F) 'common quail' is a heavy-bodied game bird that is notoriously difficult to observe. When disturbed, it takes to the air only when forced to, preferring to hide or run in the face of danger rather than fly, a response more commonly associated with masculine gender assignment. However, unlike most heavy-bodied terrestrial 'fowl' which are sedentary (non-migratory), the *caille* retains its instinct for migration and as winter approaches it migrates south in enormous numbers to winter in Africa. This instinct for migration has never been able to be bred out and continues to prevent its domestication (Buffon, Tome 2, at Appendix VI). This

attribute is perhaps less connected with 'free to fly' than with 'untamed' or 'seasonal', connected with its appearance and disappearance according to seasonal changes at particular times of the year. In the context of 'seasonal' in the natural world, there is considerable association with 'female' and with feminine classification, not least with *saison* (F) 'season'.

However, other terrestrial 'fowl' whose flesh has come to be highly prized are 'sedentary', yet denoting nouns are feminine. The *pintade* (F) 'guinea fowl' is native to Ethiopia and is able to withstand the harsh climate by resting during the day and feeding during the cool of the evening. As with other fowl, 'guinea fowl' live in small polygamous groups. However, when threatened they respond as a group, instantly and loudly, which makes them good watch-dogs. They also act together to protect themselves and are even capable of bailing up snakes. The *bartavelle* (F) 'rock partridge', like the *grouse* and *pintade*, flourishes in an environment that offers considerable difficulty for others since they survive with ease on the steep scree and bare rocks they inhabit. These birds move in coveys on the ground and in face of danger run uphill since their lighter bodies allow them to move over the scree without disturbing it, while heavier predators lose their foothold and cannot follow. Although the attributes of the *pintade* and *bartavelle* are very different, they may be associated with feminine gender assignment as adaptations that enhance their chances of escape from a potential threat.

#### 4.3.10 Word-final pronunciation

Amongst the range of superordinate nouns and pairs of terms for birds of a kind, some nouns have vowel-final pronunciation while others have consonant-final pronunciation. Only one of the superordinate nouns has vowel-final pronunciation, *oiseau*. Remaining superordinate terms *volatile*, *rapace*, *charognard* and *aigle* all have consonant-final pronunciation. The discussion of *oiseau* identifies certain attributes, two of which are very general – 'feathered', an attribute that can be discerned visibly, and 'light', which can only be established through touch and thus requires closer contact or previous experience. Any association between these attributes and vowel-final pronunciation, the pattern more closely associated with masculine gender, requires clarification.

Farmyard birds denoted by *volatile* are described as having thick-set, round-chested bodies. It is possible that this aspect of their appearance may be associated with consonant-final pronunciation of this noun. It is also the case that 'farmyard' birds are kept not only for the eggs they produce but for eating since their flesh is delicious. These notions are not relevant for *rapace*, a term that applies to a bird without any regard to its build since some are slender and others are thickset, and its consonant-final pronunciation more likely relates to some other attribute. Birds covered by this term are noted for their soaring flight, speed and agility as they move through the air such that many are able to take their prey on the wing. The vital nature of these various notions to birds covered by this term suggests that, individually or in combination, they may also be associated in some way with consonant-final pronunciation, although the precise nature of such associations cannot be established at this stage.

Among birds renowned for their stocky shape and curved chests are 'fowl'. However, the various nouns in the database denoting 'fowl' vary in their word-final pronunciation patterns, as Table 4.11 shows.

Table 4.11: Variation in word-final pronunciation for nouns denoting 'fowl'

Vowel-final pronunciation			
<i>dindon</i>	M	'duck'	/dēdō/
<i>faisan</i>	M	'pheasant'	/fēzā/
<i>paon</i>	M	'peafowl'	/pō/
<i>pigeon</i>	M	'pigeon'	/piʒō/
<i>tétras</i>	M	'black grouse'	/tetra/
<i>oie</i>	F	'goose'	/wa/
<i>perdrix</i>	F	'partridge'	/perdri/
Consonant-final pronunciation			
<i>canard</i>	M	'drake'	/kanar/
<i>coq</i>	M	'domestic fowl'	/kɔk/
<i>cygne</i>	M	'swan'	/siɲ/
<i>lagopède</i>	M	'willow grouse'	/lagoped/
<i>tétras</i>	M	'black grouse'	/tetras/

<i>bartavelle</i>	F	'rock partridge'	/bartavel/	
<i>caille</i>	F	'quail'	/kaj/	
<i>gélinotte</i>	F	'grouse'	/ʒɛlinot/	
<i>grouse</i>	F	'red grouse'	/gruz/	altern. /graus/
<i>pintade</i>	F	'guinea fowl'	/pitad/	

It is noted that *tétras* is found in both sets since dictionaries offer alternative vowel- and consonant-final pronunciations.

In some cases, gender assignment and word-final pronunciation match the statistical generalisations observed earlier between masculine gender assignment and vowel-final pronunciation, and between feminine gender assignment and consonant-final pronunciation. In other cases they do not since consonant-final pronunciation occurs alongside masculine nouns *canard*, *cygne* and *tétras*, and vowel-final pronunciation occurs alongside feminine nouns *oie* and *perdrix*. For both *oie* and *perdrix*, the statistical generalisation would have predicted either masculine gender because they are vowel-final, or consonant-final pronunciation because they are feminine. While there is potential for the former, the orthographic structure of *oie* prevents any possibility of the latter.

As mentioned earlier, many of these birds are particularly noted for their plump-chested forms, eg *canard*, *caille*, *coq*, *cygne*, *gélinotte*, *grouse*, *lagopède*, *tétras*, while others are equally noted for their flavoursome flesh, eg *bartavelle*, *caille*, *grouse*, *pintade*. The *perdrix* is plump-chested and its flesh is also highly regarded, notions that would appear to be associated with consonant-final pronunciation, yet it is vowel-final.

In contrast, the flesh of the 'wild' *oie* 'goose' is said to have a stronger taste even than wild duck ([www.huntingsociety.org](http://www.huntingsociety.org), 2007) requiring it to be treated before it is cooked, and the flesh of *faisan* only becomes delicious the moment at which it starts to decompose (Brillat-Savarin, at <[www.dumaspere.com](http://www.dumaspere.com)>, 2006). By the time the mature *paon* develops the full extent of its magnificent tail feathers, its flesh becomes *fort sèche* 'extremely dry and tough'. This was so well recognised by the Romans that although they pursued splendour, only the younger and tastier *paon* were eaten (<Buffon, Tome 2:321 in <[www.oiseau.net](http://www.oiseau.net)>, 2005). In each case, these

nouns have vowel-final pronunciation. While turkeys are raised for their flesh, the generic term *dindon* seems not to take account of this. However, the wild *dindon* has little flesh in comparison with farmed birds and is only eaten when young since the flesh of older, larger wild bird is tough and dry. It is the consonant-final, fleshier, farmed bird, *dinde*, that is eaten. As with the *faisan* (M) 'pheasant', the flesh of the vowel-final *perdrix* (M) 'partridge' is also highly-prized, but only that of young partridges. As for most fowl, the more mature they get the tougher the flesh becomes and, for the *perdrix*, after only a year the flesh becomes tough and dry. At that stage, like the *faisan*, older birds must be hung until the flesh starts to break down.

Thus, among the unmarked cases for fowl, most birds whose flesh is 'flavoursome' have consonant-final pronunciation, eg. *bartavelle*, *caille*, *canard*, *coq*, *cygne*, *dinde*, *grouse*, *lagopède*, *pintade*, but not in every case, eg. *perdrix*. Vowel-final pronunciation for fowl such as *dindon*, *faisan*, *oie*, *paon*, *perdrix*, seems less likely to relate to a negative or oppositional notion 'flavourless' since this does not precisely convey the sense of 'tough and dry'. It is possible that some other attribute is more crucial.

Alternative word-final pronunciations for *tétras* (LRPT, 1994:1106) place this noun in both the vowel-final and consonant-final sets, and both must be accounted for. The flesh of the *tétras* was once highly regarded, which perhaps is related to its former consonant-final pronunciation. However, today the rapid decline in its numbers and increasing environmental concerns for its survival have meant a lessening importance for its flesh but have increased our recognition of its extraordinarily fine plumage, particularly its extraordinary fanned tail – that may be associated with the vowel-final alternative.

It is possible that some very general attribute may be associated with vowel-final pronunciation amongst these nouns. For *faisan* and *paon* in particular, it might relate to the extraordinary colourations of their plumage, and since birds are the only creatures that are feathered, they provide a crucial means of distinguishing them from any other living thing, even at some distance. Further, humans have always hunted these creatures and their preparation for eating would first have required any bird to be plucked. The Canada goose has 33,000 feathers

(<www.ornithology.com>, 2007), and the *pigeon* is so thickly-covered that feathers that they make up more than half of its total body weight. While the number of feathers for each bird depends on its size, it is relatively constant within a species. For any of these birds trapped for eating, the extent of their feathering could not have failed to impress those involved in their preparation. However, as noted in the discussion of the superordinate term *oiseau*, above, the principle underpinning any association between 'feathered' and vowel-final pronunciation is unclear. It will continue to be explored. These potential explanations for vowel-final pronunciation seem less likely for *perdrix*, and it continues to be of interest.

#### 4.3.11 Summary

In an initial exploration of the potential for a wider semantic explanation of gender assignment, the analysis of superordinate terms suggests that certain attributes may be associated with specific gender assignments, such as 'upright', 'feathered', 'winged' for *oiseau* (M) 'bird', 'flesh-eating'/'associated with death' for *rapace* (M) 'bird of prey', 'grounded' or 'associated with death' for creatures covered by the term *charognard* (M) 'carrion-eater', 'flesh-eating', 'large-bodied', 'diurnal', 'feathered' for *aigle* (M) 'eagle', and 'immature form/diminutive age/size' for *oisillon* (M) 'chick'. Changes in gender assignment in certain superordinate terms appear to relate to changes in context, between *aigle* (M) 'eagle' as a 'diurnal bird of prey' and *aigle* (F) 'eagle' as a bird of prey 'free to fly'/'airborne' or 'nesting', as well as for the historical noun *volatille* (F) 'free to fly' and modern *volatile* (M) 'kept in captivity'. These examples suggest that the different gender assignments appear to be semantically motivated.

There is some evidence to suggest that contrasting attributes are associated with contrasting gender assignments. For instance, feminine nouns *aigle* (F) and the historical noun *volatille* (F) both relate to 'free to fly' and can be contrasted in both gender assignment and attributes with *volatile* (M) 'not free to fly', 'held in a captive state'. While 'flighted' itself may offer a freedom and advantage in terms of safety that increases the opportunity for survival, it does not have a direct link with feminine gender assignment, nor is there any explanation for a potential association between masculine gender and attributes 'captive'/'not free to fly', 'flesh-eating', or 'associated with death'.

In the discussion of gender assignments for collective nouns, certain attributes are identified as potentially salient. Masculine gender assignment for the only masculine term, *vol* (M) 'flight', may relate to an 'indefinite' number or 'indefinite' kind, while feminine nouns *couvée* (F) 'covey' and *volée* (F) 'flock' appear to apply to a 'specific' kind, that is, the species is known and/or identified. While 'free to fly' finds a plausible contrast with 'not free to fly' amongst masculine superordinate terms, the contrast between 'indefinite' and 'specific', and their possible association with contrasting gender assignments, is interesting and will continue to be explored.

The analysis of *volaille* (F) 'poultry' suggests that, unlike *troupeau*, it pertains only to birds. It may be that two-legged creatures are regarded as a 'specific' set, where *troupeau* involves a mix of two-legged or four-legged animals some of which could be raised for eating and others for transport or power. As birds raised for eating, it is also possible that we regard *volaille* as natural produce in the same way as *dinde* (F) 'turkey', a noun that also denotes a fowl raised for eating and is feminine. For *nichée* (F) 'hatchlings' not only of the 'same kind' but the blood relatives in the 'same brood', the focus seems to be on 'same' or 'related by blood' as distinct from 'other' earlier or later broods.

These findings suggest that gender assignment for collective nouns may be semantically motivated, but the number of examples is very small. With no additional data available in this lexical field, support will depend on further evidence from collective nouns in other lexical fields.

For terms denoting 'male' and 'female', most designate some kind of 'fowl', either terrestrial fowl or waterfowl. Those that designate 'male' are masculine, eg. *canard* (M) 'drake', *jars* (M) 'gander', *coq* (M) 'rooster', and those that designate 'female' are feminine, eg. *cane* (F) 'duck', *oie* (F) 'goose', *poule* (F) 'hen', regardless of word-final pronunciation patterns. Although they are rare, the same correlations occur even for nouns denoting very young birds, eg. *aiglon* (M) 'male eaglelet'/'aiglonne' (F) 'female eaglelet'. These examples provide further support for semantically motivated gender assignment since their masculine and feminine gender assignments are fully predictable from their meanings.

It is also found that certain characteristics occur on a regular basis amongst 'fowl' that allow distinctions to be made between 'male' and 'female' of the same kind. However, in the case of geese these differences are not present and it is difficult to tell the 'female' *oie* from the 'male' *jars* – in form, colouration, or behaviour. Distinctions between male and female can only be obtained at a specific time of the year and in relation to one characteristic, laying eggs – yet distinguishing terms persist.

However, amongst 'fowl' and waterfowl with these mutually exclusive pairs for 'male' and 'female', only one may serve as the 'unmarked' case in identifying kind. For seven of the eight pairs having different terms for 'male' and 'female', the unmarked case is the masculine noun, eg. *canard* (M) 'duck', *coq* (M) 'fowl', *dindon* (M) 'turkey', *faisan* (M) 'pheasant', *merle* (M) 'blackbird', *paon* (M) 'peafowl', *pigeon* (M) 'pigeon'. Only on one case is feminine, *oie* (F) 'goose'. The single source (wikipedia) use of the feminine term *dinde* (F) as the unmarked case for 'turkey' appears to be an anomaly.

The analysis of nouns denoting other 'terrestrial' fowl suggests that certain attributes appear to be associated with specific gender assignments. Various responses to intruders or threat are mentioned:

- immediately taking flight, eg. *perdrix* (F), *gélinotte* (F) 'hazel grouse'
- reacting in a way that predators cannot follow, eg. *bartavelle* (F) 'rock partridge'
- acting together to ward off a threat, eg. *oie* (F) 'goose', *pintade* (F) 'guinea fowl'.

Other attributes associated with feminine gender assignment include:

- 'unique', as for *grouse* (F) 'red grouse'
- instinct for migration, eg. *caille* (F) 'quail', *oie* (F) 'goose'
- able to spread across the landscape, eg. *grouse* (F) 'red grouse', *pintade* (F) 'guinea fowl'
- constant communication amongst members of the group having the same call/s, eg. *oie* (F) 'goose'.

Masculine gender assignment for fowl appears to be associated with different responses to



danger, as follows.

- a single male with a harem of females, eg. *coq, faisan, dindon*
- creeping off/running away from danger rather than flying off, eg. *francolin* (M) 'francolin'/'black partridge', *coq* (M) 'rooster'
- confronting danger individually rather than as a group, eg. *cygne* (M) 'swan'.

Despite most 'fowl' being heavily-built they are capable of explosive flight and most have excellent aerial skills. In running or creeping away, they fail to take advantage of a means of escape for which they are supremely adapted, the power to lift themselves up and remove themselves from harm. Further, the contrast between waterfowl – swans and ducks that obtain food by putting their heads beneath the water, and geese that have adapted to terrestrial grazing – cannot be ignored.

The different notions and the potential associations with specific gender assignments raised here are explored further as nouns in the corpus are examined in relation to their different aerial, aquatic or terrestrial existences.

Variations in word-final pronunciation may also be semantically motivated. Amongst certain attributes raised above are 'solid' or 'rounded' form, 'good to eat', and 'agile in movement', which appear to be associated with consonant-final pronunciation while 'light' and 'feathered' appear to be associated with vowel-final pronunciation. These associations will continue to be explored. There is also the question as to why, for some pairs, the masculine noun is vowel-final and the feminine noun is consonant-final, eg. *paon/paonne* (M/F) 'peacock/peahen', *dindon/dinde* (M/F) 'turkey', *faisan/-ane* (M/F) 'pheasant', for other pairs it is the other way round, eg. *jars/oie* (M/F) 'goose', but for both masculine and feminine forms of 'duck', *canard* (M) and *cane* (F), have consonant-final pronunciation. Moreover, these various pairs are formed differently. For the pair *jars* and *oie* we find lexical distinctions. For pairs *canard/cane* and *dindon/dinde*, the masculine forms are suffixed while the feminine forms are not, and for *paon/paonne* and *faisan/-ane* the different forms are achieved through elision or retention of the final consonant. These different constructions will also continue to be of interest.

#### 4.4 Analysis of count nouns in the corpus

The analysis below relates to remaining nouns in the corpus and their application to specific birds. They are examined in various sets according to a preference for aerial, aquatic, or terrestrial existence although it is recognised that such distinctions may not always be clearly defined.

##### 4.4.1 Aerial birds

'Aerial' birds listed below spend most of their active hours on the wing. This activity is directed towards finding sufficient food to meet individual diets, as well as the enjoyment of aerial skills. Many of these are birds of prey that locate and capture live prey on the wing, an activity that for the most part is undertaken in daylight while others have adapted in ways that allow them to locate and take prey at night.

For much of the time we can only observe aerial birds either fleetingly or from a considerable distance, and in such circumstances the only attributes we can be sure of for these creatures are the capacity for flight and a body that is feathered. Yet we are able to recognise differences between them that require a lexical distinction, as for nouns set out in Table 4.12 below.

Table 4.12: Aerial birds

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Masculine vowel-final nouns

<i>colibri</i>	M	'hummingbird'	wings specialised for flight
<i>corbeau</i>	M	'raven'	launches itself from its cliff top roost to plane in thermal currents
<i>émérillon/ émérillon</i>	M	'merlin'	smallest of the diurnal falcons
<i>émouchet</i>	M	'hawk'	small diurnal bird of prey that hunts from a perch
<i>engoulevent</i>	M	'nightjar'	heathland bird, nocturnal, active at dawn and dusk, more often heard than seen; has cricket-like chirring song
<i>épervier</i>	M	'sparrowhawk'	small diurnal hawk
<i>étourneau</i>	M	'common starling'	tiny aerial bird found in large flocks
<i>faucon</i>	M	'falcon' (eg. 'merlin', 'hobby', 'saker')	diurnal bird of prey with long pointed wings, long tail, short hooked bill
<i>freux</i>	M	'rook'	acrobatic in flight
<i>harfang des neiges</i>	M	'snow(y) owl'	diurnal owl with heavily feathered feet; usually silent; may hunt at night;

<i>hibou</i>	M	'long-eared owl'	nocturnal; long, tufted horn-like ears
<i>hobereau</i>	M	'hobby'	small diurnal falcon with hooked bill
<i>lanier</i>	M	'lanner'	larger diurnal falcon, female larger than male
<i>martinet</i>	M	'common swift'	narrow sickle-shaped wings, forked tail, with shrill screaming call; withered feet
<i>milan</i>	M	'red/black kite'	small diurnal hawk with long strong wings, weak legs, carrion eating; some migratory, adaptable, some sedentary
<i>moineau</i>	M	'house sparrow'	small bird that captures insects on the wing, has swift bounding flight
<i>loriquet</i>	M	'lorikeet'	small, noisy, screeches in flight, chatters when feeding; male guards and helps feed chicks; is easily tamed
<i>pèlerin</i>	M	'peregrine falcon'	has sickle-shaped wings, reaches enormous speeds in its dive for prey
<i>pigeon</i>	M	'pigeon'	capable of fast and extended flight
<i>sansonnet</i> syn. <i>étourneau</i>	M	'starling'	tiny bird often seen in large flocks flying in precision as a single unit, which protects individual members from predators

Masculine consonant-final nouns

<i>aigle</i>	M	'eagle'	any of various large diurnal birds of prey of order <i>Aquila</i> , <i>Harpia</i>
<i>autour</i>	M	'goshawk'	diurnal long-tailed hawk, female larger than male; migratory
<i>busard</i>	M	'harrier'	diurnal bird of prey of wetland habitats; migratory; female larger/darker than male
<i>chocard</i>	M	'Alpine chough'	all-black member of 'crow' family found in mountain regions
<i>condor</i>	M	'condor'	diurnal black New World vulture of high mountains and rocky scrubland; female smaller; can vary its requirement for food
<i>crave</i>	M	'chough'	inhabits isolated rocky cliffs, plays in thermal currents
<i>duc</i>	M	'horned owl'	nocturnal owl with horn-like ear tufts
<i>gobemouche</i>	M	'flycatcher'	Old World small slender bird, bill covered with bristles
<i>gypaète</i>	M	'lammergeyer'	large bearded diurnal vulture with hooked beak
<i>pygargue (à tête blanche)</i>	M	'bald eagle'	large N. American diurnal bird of prey with white tail and head
<i>sacre</i>	M	'saker'	large diurnal falcon of semi-desert and forests of E. Europe; largely migratory; female larger than male; hooked beak
<i>serpenteaire</i>	M	'secretary bird'	long-necked diurnal bird of prey with hooked beak; generally silent
<i>vauture</i>	M	'vulture', 'griffon'	diurnal carrion-eating bird that searches on the wing for dead or dying animals

Feminine vowel-final nouns

<i>bondrée</i>	F	'honey buzzard'	migratory diurnal bird of prey; feeds on wasp and bee larvae, also on live prey
<i>grue</i>	F	'crane'	excellent flying skills; flocks fly from food source to food source; migratory;
<i>harpie</i>	F	'harpy eagle'	large tropical diurnal American eagle
<i>pie</i>	F	'magpie'	black and white feathers; loud constant chattering call; direct flight

Feminine consonant-final nouns

<i>aigle</i>	F	'eagle'	large dark-coloured bird of prey in its nest, also (lit.) 'on the wing', 'unloosed'
<i>chevêche</i> ( <i>d'Athèna</i> )	F	'little owl'	nocturnal owl
<i>chouette</i>	F	'owl'	nocturnal bird of prey
<i>chouette</i> <i>épervière</i>	F	'hawk owl'	nocturnal owl with mottled colouration
<i>crécerelle</i>	F	'kestrel'	falcon capable of adapting its feeding to conditions in a number of ways
<i>hirondelle</i> ( <i>rustique, de</i> <i>fenêtre</i> )	F	'barn swallow', 'house martin'	adapted to aerial feeding; feet designed for perching; migratory
<i>hulotte</i>	F	'tawny owl'	best known of owls, nocturnal, round-faced, silent flight, constant call
<i>linotte</i> <i>mélodieuse</i>	F	'Eurasian linnet'	migratory in flocks of hundreds,
<i>perruche</i>	F	'budgerigar', 'rosella'	small, brightly coloured; noisy, highly nomadic; opportunistic breeders
<i>veuve</i>	F	'pin-tailed whydah'	dichromatic weaverbird; male grows very long tail feathers in breeding season, otherwise difficult to observe

It is noted that variant spellings *émerillon/émérillon* exist for 'merlin' (<atilf.atilf.fr>, COFED 1985:377, COEFD, 1985:147), though *émerillon* appears to be the most common and is used subsequently in this thesis.

Some of these aerial birds may also be identified by compound nouns, masculine, eg. (*corbeau*) *freux*, (*étourneau*) *sansonnet*, (*faucon*) *sacre*, and feminine, eg. *hirondelle rustique* but the vernacular terms are those identified above. These birds are discussed below in their different masculine and feminine sets in order to ascertain any regularity that might account for their different gender assignments. Word-final pronunciation patterns will also continue to be of interest.

#### 4.4.1.1 Masculine nouns – discussion

The *colibri* is a small bird that feeds on flies and nectar from flowers by hovering above, beside, or below, and is the only bird that is capable of flying backwards. While this habit is 'unique', it does not appear to warrant recognition in the same way as other birds that are 'unique'. Flying backwards is not altogether helpful since it may also place a bird in danger, and its hovering habit is extremely energy-draining, requiring each *colibri* to consume half its body weight in food per day in an unending daily grind. Males make spectacular courtship displays, *colibri d'Anna* climbing 130 ft in the air and then plummeting in a vertical dive before coming to a stop with an explosive squawk half a yard from the female, then making a circular arc back to its starting point to repeat the performance (<[www.oiseau.net](http://www.oiseau.net)>, 2007). The 'male' *colibri* defends its nectar territory aggressively, even from its own species and birds fight in midair by kicking and grasping to the point where they fall to the ground to get free. The *colibri* is polygamous and these risky habits are directed towards success in attracting multiple female partners, but they may also be costly in terms of disablement or death.

The migratory *engoulevent* (M) 'nightjar' is a nocturnal bird that feeds on moths and other insects that emerge between dusk and dawn although some 'nightjars' prey on bats. Although it nests on the ground in daytime it is rarely seen because its camouflage colouration is so extraordinarily effective. At nightfall, however, we can identify its presence since the male makes a loud, hollow, monotonous repeated chirring call, much like the cricket, that commences at dusk and continues all night. Its 'nocturnal' habit and silent flight are adaptations that offer the *engoulevent* the possibility of remaining undetected but they are offset by this continuous discordant cry that signals its presence and allows potential predators to locate its whereabouts.

While 'owls' are typically 'nocturnal', one is 'diurnal' – the masculine *harfang* (*des neiges*) (<[www.owlpages.com](http://www.owlpages.com)>, 2004). It typically sits and waits to capture prey passing by on the ground but can also take prey in the air and is also known to take fish from the surface.

The *martinet* (M) 'swift' is migratory and gregarious, and nests and forages in large flocks that are frequently mistaken for the feminine *hirondelle*. It has a varied diet, and both parents take

part in incubating eggs and rearing their young. In bad weather the young are able to become 'semi-torpid', which hibernating state reduces their requirement for energy and allows them to survive until better conditions arrive. These habits are more closely associated with feminine gender assignment, but *martinet* is masculine. However, the *martinet* is so exceedingly well adapted to its aerial existence that its feet have withered and are too small and weak to grip onto any perch, and it is forced to spend most of its life on the wing without coming to land at all, particularly during the first few years of its life, drinking, sleeping and mating in flight. When sufficiently mature to breed, it can touch down only where it finds a suitably sized crevice or hole, although the 'little swift' can rest at night by hanging upside down from suitable vertical surfaces, holding on with sharp opposable claws.

The term *gobemouche* applies to Old World and New World 'flycatchers', insectivores of various colours (pied, red-breasted, grey, spotted, blue, etc.). These birds are migratory, an attribute that appears to be associated with feminine gender, but this noun is masculine. Its typical method for hunting prey, like the *engoulevent*, involves sitting still for long periods until the moment it spies a flying insect, and it then leaps into the air and snaps its bill shut, trapping it. However, the *gobemouche noir* (M) 'pied flycatcher' is less interested in flying insects and instead prefers caterpillars, spiders and molluscs that it finds among the leaves or on the ground; at the end of summer it will also consume seeds and berries, an ability to vary its diet that might also be associated with feminine gender. At breeding time the 'male' *gobemouche noir* may have several females with whom it selects different sites for laying eggs, but females must incubate the eggs on their own. During this period the male will bring food, but only to one nest and the other 'females' and chicks must struggle to survive on their own. The specific food requirements of the *gobemouche* force them to become migratory, but for the *gobemouche gris* (M) 'spotted flycatcher', it must cross the Sahara to reach its winter grounds and then return to Europe the same way, provoking ... *une mortalité très élevée* 'a very high mortality rate' (<[www.oiseau.net](http://www.oiseau.net)>, 2004). For these birds, it seems that various attributes associated with feminine gender appear to be less salient than attributes such as a method of hunting that involves sitting and waiting, or one that threatens their own lives or the lives of their young.

The *loriquet* has adapted to living in large noisy flocks that screech in flight and chatter when feeding which defensive plays protect members of the flock, but these birds are accepting of humans and are easily tamed, as is the *serin* (M) 'canary' which readily adapts to captivity.

The *crave* is gregarious and lives in pairs, small groups or large flocks, depending on habitat since it typically inhabits inaccessible rocky cliff faces. It is hierarchical and territorial and when food is scarce, only the dominant birds can find food enough to survive and breed successfully. It is closely related in appearance to the gregarious *freux*, a bird that eats and sleeps in flocks, establishing rookeries of several hundreds of nests. This gregarious habit offers considerable protection to the group. Nests must be built in tree tops with close proximity to a water source and they are forced to fly out every day, sometimes for many miles, to find suitable pastures and then make the return journey. During harsh periods when food is limited, this habit is costly since they cannot migrate to richer resources. However, these harsh periods occur only intermittently, and we might expect some more constant attribute in relation to gender assignment.

Another member of the 'crow' family, *corbeau*, planes in the same way as birds of prey and is often taken for one because of the savagery of its attacks on live animals (Buffon, Tome 3, in Appendix VI). It is similar in appearance to the *corneille* (F) 'crow'. The *corbeau* and *corneille* share the same extraordinary intelligence in obtaining food but denoting nouns have different gender assignments. In addition, *corbeau* is the generic term that covers the range of species identified as members of the 'crow' family. Gender assignments for these similar all-black members of the crow family are discussed as a set below.

The *étourneau* (M) 'starling' has adapted to feeding, flying and living in large noisy flocks. The flock is able to fly as one with a precision that provides extraordinary protection for individuals against birds of prey in a similar way to large schools of fish that, in case of attack, can 'melt' away in an instant where their small size makes them otherwise defenceless. Such vocal and defensive adaptations elsewhere appear to be associated with feminine gender assignment. However, this bird is also tiny in size, an attribute that may possibly be associated in some way

with masculine gender assignment.

### Birds of prey

Eighteen of the masculine aerial birds are birds of prey. They are typically solitary, although birds identified as *milan* 'kite' form large flocks. Each attacks a very specific prey; for example, *condor*, *gypaète* and *vauture* feed on dead flesh while *émérillon* feeds exclusively on sparrows, and the *épervier* is restricted to jays. The *milan royal*, widely found across Europe and NW Africa, takes down larger pigeon- or jay-sized birds but it is also opportunistic and will prey upon any passer-by. Birds identified as *émouchet* take their prey on the ground rather than in the air.

Most of these birds of prey are 'diurnal', including the 'diurnal' European owl *harfang* (*des neiges*), the migratory *condor*, part-migratory *émouchet* (the 'lesser kestrel' migrates) and *milan royal*, and *autour*, which is migratory only in the northern latitudes. The *condor* lives in groups that have a well-developed social structure based on a pecking order dominated by the older birds, particularly at feeding time. They breed only every second year, laying one or two eggs. Although the *condor* prefers rocky scrubland and oak savannas, it bathes frequently and requires constant access to water. It travels enormous distances to find carrion and is an intermittent eater that often goes without for periods varying from several days up to two weeks, then gorging itself so much that it cannot lift itself from the ground (<en.wikipedia.org>, 2007).

The compound form *pygargue à tête blanche* (M) 'bald eagle' denotes a North American bird of prey while *pygargue pêcheur* (M) 'sea eagle' denotes a European bird of prey that feeds on fish and is discussed in the set dealing with aquatic birds. Both are 'diurnal'. However, this masculine set includes two birds of prey that are nocturnal, *duc* and *hibou*, and they are discussed further below.

The term *faucon* translates both as 'falcon' and 'hawk' (COFED, 1985:220). These English and French nouns are ambiguous vernacular terms that do not correspond to any biological taxonomy and, thus, their application varies from region to region. In English (European,



Australian), the terms 'falcon' and 'hawk' denote diurnal birds of prey that have different ways of hunting live prey. 'Falcons' hunt for their prey in the air and typically have narrow sickle-shaped wings that help them build up speed to make their fast downward dive from an elevated height. Hawks typically hunt for prey by waiting on concealed perches in woodland settings and then make a sudden dash to capture their prey; their wings are shorter, broad, and rounded at the tip to provide fast acceleration from a standing start and allow easy manoeuvrability around trees and branches. 'Kestrels' also have shorter, broader wings but are considered a 'falcon' since they hunt on the wing. Americans use the term 'hawk' to cover small-to-medium sized 'diurnal' birds of prey which makes it even more inclusive, incorporating 'falcons', 'kestrels', 'kites', 'eagles', 'harriers' and 'buzzards' (<en.wikipedia.org>, 2005).

Despite the French-to-English translations, in French the term *faucon* applies to falcons, hobbies and kestrels, while *émouchet* applies to 'goshawks' and 'sparrowhawks'. Since both terms apply to smaller-to-medium sized birds of prey, distinctions are more closely related to differences in hunting technique than size since they separate those birds that seek their prey on the wing from those that wait on a perch and rely on stealth. The various native European birds incorporated in the nouns *faucon* and *émouchet* have their own vernacular terms. Those covered by *faucon* include the smaller lowland birds *émerillon* (M) 'merlin', intermediate-sized *hobereau* (M) 'hobby', and larger *pèlerin* (M) 'peregrine' (as well as the feminine *crécerelle* (F) 'common kestrel'), while aerial birds include *lanier* (M) 'lanner', *sacre* (M) 'saker' and the feminine *crécellette* (F) 'lesser kestrel'. Those covered by *émouchet* include the *autour* (M) 'goshawk' and *épervier* (F) 'sparrowhawk', similar-sized birds. It is noted that ornithologists may use *faucon* to form compound terms such as *faucon lanier* (M) 'lanner falcon', *faucon pèlerin* (M) 'peregrine falcon', as occurs also in English. The *fauconnet d'Afrique* (M) 'pygmy falcon' is very much smaller than the standard 'falcon' and its comparative difference in size appears to be reflected in its coining, *faucon* related to its sickle-shaped wings, and the 'diminutive' suffix *-et*. The innovative feeding habits of birds identified as *faucon* are recognised as equal to the crow family (<en.wikipedia.org/wiki/Falcon>, 2006). They include storing of food and co-operative hunting, as the for *lanier* (M) 'lanner falcon', providing them with sufficient resources to remain in harsher territories where other birds are forced to migrate.

The most striking and constant habits of these birds are very specific requirements in their live prey, solitary existence, migratory or partially migratory habits to find richer resources in hard months, aggressive response to others of their kind, and single or part-time parenting that eventuates, for some, in leaving chicks on their own before they are fully independent. Many of these habits are consistent with habits identified with 'male' fowl. It is possible that the major unifying attribute amongst birds of prey, *aigle*, *condor*, *faucon*, *pygargue*, and one of the owls, *harfang* – their 'diurnal' activity – may be associated with masculine gender assignment. However, two birds of prey, *duc* and *hibou*, are not 'diurnal' but 'nocturnal' owls, yet they are masculine. Any association between 'diurnal' and masculine gender assignment requires an explanation for these apparent counter-examples – as do nouns denoting 'diurnal' birds of prey that are feminine, discussed below.

#### 4.4.1.2 Feminine nouns – discussion

Birds denoted by feminine nouns are very different in appearance from each other, but each displays interesting and specific habits. The *harpie* is an eagle native to Central and South America that is so powerful that it can take down and lift up prey of considerable size given its smallish (4 kg.) weight. While other birds of prey require food constantly, this eagle generally hunts twice a week and, if conditions require, it can go without food for up to a fortnight without suffering, which allows the *harpie* to survive where others do not. While this ability is not so dissimilar to the *condor*, another New World bird of prey, it does not gorge itself to the point that it cannot take flight, nor does it have the same requirement for water as the *condor*.

The English term 'buzzard' applies to a larger sized diurnal birds of prey with a robust body, broad wings and soaring flight. There are two terms in French denoting 'buzzards'. The feminine term *bondrée* (F) 'honey buzzard' denotes a robust medium-to-large-sized diurnal bird of prey that feeds mainly on larvae of wasps and bees using a variety of techniques including aerial searches for hives, hunting on foot with a fast run, or scratching the floor using its thickly-scaled talons and beak to uncover buried nests – a range of hunting techniques matched by its equally varied diet that includes other insects, reptiles, young of other birds, even fruit. When alarmed, parents bound out from the nest up to 50 m. uttering long loud whistles

interspersed with dives to frighten predators away from the nest.

The term *buse* denotes a largish 'buzzard' (European) or 'hawk' (American), specifically the 'European buzzard' or 'common buzzard'. It is the most common bird of prey in central Europe and has a more robust body than the typical hawk, and longer tail. It locates its prey in a similar fashion to other birds of prey, soaring in thermals or making low altitude flights using its keen hearing to trace prey. Like many raptors it is an opportunistic feeder, but unlike many its diet is not restricted to birds but is highly adaptable, ranging from rodents to rabbits, pheasant, snakes and lizards, or patrolling on foot to seek out worms and insects in recently ploughed fields (<[www.oiseau.net](http://www.oiseau.net)>, <[en.wikipedia.org](http://en.wikipedia.org)>, 2004). These birds of prey are noted for their cheeping, a repetitious 'loud drawn-out mewing call' (<[garden-birds.co.uk](http://garden-birds.co.uk)>, 2005). This high-pitched 'mew' – repeated when it lands, faster in flight, more raucous at the nest – is audible across long distances and continues throughout the year. During breeding time 'male' and 'female' communicate with each other using the same call, as do adult birds and young birds when travelling in flocks (<[www.oiseau.net](http://www.oiseau.net)>, <[www.oiseau-libre.net/Oiseaux/ Especes](http://www.oiseau-libre.net/Oiseaux/Especes)>, 2004). It thus provides a continuous source of recognition.

The French term *crécerelle* denotes the 'common kestrel', a diurnal bird of prey. At 15" (or 39 cm) from head to tail it is small compared with many birds of prey, but it fits in with other small-to-medium sized birds identified as 'falcons'. Birds denoted by the term *crécerelle* are able to hover because they have developed a technique of rapidly beating their wings as they face into a headwind to match the air speed precisely. They can thus drop directly down onto their prey where birds such as falcons must dive towards their prey at fantastic speeds. This ability to hover ... *le distingue de tout autre rapace* 'distinguishes it from all other raptors' (<[www.oiseau.net](http://www.oiseau.net)>, 2006) and thus makes the *crécerelle* unique. Kestrels in cool-climate environments are migratory, but elsewhere they are sedentary. There are several 'kestrels' denoted by this feminine term *crécerelle*. They include the *crécerelle aux yeux blancs* (F) 'greater kestrel', an African kestrel that inhabits open arid grasslands and preys on insects and other prey fleeing fires. This bird stores excess food under vegetation and stones. The *crécerelle d'Australie* (F) 'Australian kestrel' is adaptable and hunts in a number of different

ways. It can hover and then swoop or drop onto prey, but it can also perch and capture prey from a standing start. All share the ability to hover, a technique unique among raptors. There may be some association between feminine gender assignment and the attribute that makes them 'unique'.

The term *crécerelette* (F) 'lesser kestrel' denotes a bird of prey found in Europe and northern Asia that is outwardly similar in appearance to the 'common kestrel' but in other ways appears not to be related. It is sociable and forms flocks and although the *crécerelette* has long pointed wings, it can hunt from a perch or from the air although its flapping flight is shallow and rapid and is more conspicuous to prey (<[www.arkive.org](http://www.arkive.org)>, 2004) than the motionless hovering obtained by kestrels such as the *crécerelette d'Australie*. The *crécerelette*, however, can change its hunting style depending on kind of prey, weather conditions and energy requirements. While they feed mainly on voles and small mammals, they are 'very adaptable ... and will eat almost anything they can kill' (<[animaldiversity.ummz.umich.edu](http://animaldiversity.ummz.umich.edu)>, 2004). Prey is selected either for its abundance or because it is easily caught, and includes young rabbits, birds, small bats, lizards, snakes, frogs, insects, earthworms, fish, and crabs. Thus, among 'diurnal' bird of prey attributes found only for feminine birds include a 'unique' ability to hover, a highly adaptable diet, and the ability to vary hunting techniques.

Both smaller and larger aerial birds in this feminine set gather in enormous flocks for protection, eg. *hirondelle*, *linotte*, *perruche*, *veuve*, and the much larger, but shy, *grue* (F) 'crane'. The seed-eating marshland *grue* arrives *en masse* and stays at a site until pastures are eaten out, at which time the flock moves *en masse* to the newer richer pastures without having to return to a base since, unlike the *freux* 'rook', it does not have specific roosting requirements of height and permanent water supply. Cranes have some remarkable habits, as discussed by Buffon (<[www.oiseau.net](http://www.oiseau.net)>, 2004), a section of which is provided in Appendix VI along with other extracts of Buffon's tomes. On departing for the next meal, cranes form themselves into a triangle to take to the air more easily, but when strong winds threaten this formation they form a circle, which they also do when under attack by eagles since it offers better protection for individuals within the flock. In undertaking night voyages they choose a head bird that keeps

control by calling out the route, a call then repeated by each member of the troop which helps them to keep the line. When roosting they establish a guard each night and while others fold their heads and rest, the guard stands upright using its height to discover any potential threat. The crane has no vocal cords, but at the slightest disturbance it can set up a clacking sound using the two halves of its beak loud enough to alert the flock, which joins in to create a tumultuous noise sufficient to frighten off intruders. These various responses are not unlike the honking *oie*.

It is possible that these extraordinary behaviours may be related in some way to feminine gender assignment, but the principle on which such an association is based is unclear. There is some similarity between the protection of the flock offered by habits of the *grue* (F) 'crane' and the strongly social *perruche ondulée* (F) 'budgerigar', a term that applies to small, colourful birds that feed on the extremely nutritious seeds of grasses such as *spinifex* that are so energy-rich that these birds have no need to find alternative foods (<[animaldiversity.ummz.umich.edu](http://animaldiversity.ummz.umich.edu)>, 2004). They form huge flocks that quickly eat out an area, forcing them to move constantly on to the next meal in the same way as the *grue*, particularly in the arid areas in which they live. These small birds call out incessantly – in flight, when separated from their flock, and when reuniting – an effort that rewards the *perruche* since members can maintain contact and the flock can be better co-ordinated. For such nomadic birds this habit is of considerable importance (Farabaugh et al., 1998 at <[www.physiology.wisc.edu/~dent/1998\\_aussies.pdf](http://www.physiology.wisc.edu/~dent/1998_aussies.pdf)>, 2004). Budgerigars do not forage in the midday heat, nor during extremely hot weather, but find shelter and remain motionless. These birds are successful exploiters of food and water whenever available and are considered as intelligent as members of the 'crow' family.

*Hirondelle* designates both the migratory 'house martin' (*Delichon urbicum*) and migratory 'barn swallow' (*Hirundo rustica*). Both are similar in many ways to the migratory *martinet* (M) 'common swift' being particularly well adapted to aerial life and feeding on the wing but, as discussed above, the *hirondelle* is able to perch in a way that *martinet* cannot since its very short legs only allow it to cling to vertical surfaces. Until they reach maturity swifts spend most of their lives on the wing. They never settle voluntarily on the ground' (<[en.wikipedia.org](http://en.wikipedia.org)>, 2004).

The *pie* (F) 'magpie' is a member of the *corvidés* or 'crow' family (although the Australian black-and-white bird 'magpie', a carolling bird, is more closely related to 'butcherbirds' and 'currawongs'). As noted above, the loud, constant, harsh chattering of the *pie* has led to its identification – in French and in the English – as the quintessential example of constant chattering. It is noted, however, that *pie* is feminine (as are its numerous synonyms) while related members of the crow family such as *corbeau*, *choucas* and *crave*, are masculine.

There is some possibility of an association between feminine gender assignment and any of these attributes highlighted above – highly adaptable diet and diverse techniques for obtaining food, the ability to store food, an attribute that is unique, and constant communication the purpose of which seems to be maintaining the flock – although the precise nature of any such association is not clear at this stage and requires clarification.

#### 4.4.1.3 Birds of prey - nocturnal

The above analysis suggests that for birds of prey there may be some association between the different 'diurnal' and 'nocturnal' modes of existence in relation to masculine and feminine gender assignment that warrants closer examination. The following nouns in Table 4.13 include birds of prey described as 'nocturnal'. Full descriptions of the various owls denoted by these terms can be found at <[www.owlpages.com](http://www.owlpages.com)>.

Table 4.13: Nocturnal birds of prey

Masculine nouns			
<i>chat-huant</i>	M	'tawny owl'	synonym of the more common term <i>hulotte</i> , an 'earless' owl (see below)
<i>duc</i>	M	'horned owl'	nocturnal owl with horn-like ear tufts
<i>grand-duc d'Europe</i>	M	'eagle owl'	<i>des aigrettes... mobiles</i> , 'mobile ear-tufts' which act as antennae
<i>hibou</i>	M	'owl', 'short-eared/ long-eared owl'	nocturnal or diurnal raptor with hooked bill, mottled chestnut plumage, horn-like ear tufts; yellow and black circles around eyes
<i>petit duc</i>	M	'Eastern screech-owl', 'white-faced owl', 'African scops owl'	nocturnal raptors with horn-like ear tufts, rapid flight and steady wing-beats that rarely glide

## Feminine nouns

<i>chevêche</i> (d'Athèna)	F	'little owl'	small brown and white speckled owls, with yellow eyes and white eyebrows, the most diurnal of owls
<i>chevêchette</i> d'Europe	F	'owlet', 'pygmy owl'	applies to small owls including smallest European owl, nocturnal, earless; streaked plumage, facial disk indistinct
<i>chouette</i>	F	'owl'	mottled nocturnal bird of prey
<i>chouette</i> épervière	F	'hawk owl'	nocturnal owl with mottled plumage
<i>chouette des</i> bois	F	'tawny owl'	nocturnal owl with mottled plumage
<i>chouette</i> lapone	F	'great grey owl'	large N. American owl; has round head, streaked plumage, dark facial disk
<i>chouette</i> rayée	F	'barred owl'	nocturnal owl with mottled plumage
<i>effraie</i> des clochers	F	'barn owl'	nocturnal; round head distinguished by a heart-shaped facial disk; has loud drawn-out shriek
<i>hulotte</i> syn. <i>chat-huant</i> (M), <i>strix</i> (M)	F	'tawny owl'	best known of owls, round faced, silent flight; either chestnut or grey colouration; very vocal
<i>ninox</i> (rousse, <i>aboyeuse</i> )	F	'rufous owl', 'barking owl' 'bubook'	nocturnal owls with round head, facial disk, barred or streaked plumage; loud but intermittent call at dawn and dusk
<i>petite nyctale</i>	F	'saw-whet owl'	nocturnal migratory owl with facial disc and cryptic colouration

Ornithological sources regularly employ compound forms to denote particular species of owl, eg. *chouette hulotte*, *effraie des clochers*, but in general usage nouns have simple forms, eg. *hulotte*, *effraie*, particularly birds that are common or well-known in France.

Owls are noted for two adaptations. They are typically 'nocturnal' and are able to locate their prey extremely precisely in darkness, although 'tawny owls' may be observed flying in daylight. They are also typically rigged for silent running, having soft and furry upper surfaces of their feathers, a downy base, and fringed edges of the outer feathers which eliminate the flapping sound wings make and allows them to avoid being detected by their prey in the quiet of the night. Of the sixteen nouns denoting 'nocturnal' birds of prey, eleven are feminine and five masculine. If 'nocturnal' is associated with feminine gender assignment, these masculine nouns denoting 'nocturnal' owls must be accounted for.

The masculine term *hibou* and feminine term *chouette* are typically translated as 'owl'. These terms may occasionally be combined in the plural as *chouettes hiboux* (<lapensee.net>, <www.chouettealors.com>, 2005) identifying nocturnal raptors. This image suggests a recognition of distinctions between them if not an awareness of any association with their different gender assignments. For the four 'nocturnal' owls that are masculine, descriptions note the presence of *touffes auriculaires* – small tufts of feathers on either side of their heads somewhat like ears in that they are sensitive to sound waves and act as antennae. These 'ear tufts', however, have all the appearance of horns (as seen in images at <www.oiseau.net>, 2004), to the extent that in English these birds are called 'horned owls'. In the animal world 'horns' are strongly associated with 'male' sex, and it is possible that masculine gender assignment may result from this association, that is, masculine gender assignment relates not to 'male' but to the mediated quality of an 'appearance suggesting male'.

This association between 'appearance suggesting male' and 'correlating' (masculine) gender assignment finds a parallel association between 'nesting', another visible habit but one that is strongly associated with 'female' in the animal world, which has 'correlating' feminine gender assignment for *aigle* (F) 'eagle'. It is interesting to find that the facepage of the French owl website <www.chouettealors.com> (2005) presents an image of two owls, one larger than the other and which has ear tufts that the smaller owl does not. It could be argued that the term *chouette* applies when these 'nocturnal' birds are considered in their contrast with 'diurnal' birds of prey, and *hiboux* when the different 'eared' and 'earless' owls are considered in their combination.

The term *ninox* applies to several 'earless' agile and aggressive nocturnal 'hawk-owls' and other owls of Australia, New Zealand, Papua Guinea and other Oceanic islands, such as the 'boobook' or 'mopoke', 'rufous owl', and 'barking/winking owl'. These owls are all 'nocturnal' although the 'barking owl' hunts earlier in the evening and later in the morning than any other Australian owl, particularly on duller winter days. Regardless of difference amongst them, in prey and thus terrain, in cries such as the unique 'woof-woof' remarkably dog-like yapping chorus between male and female 'barking owl', and the intermittent, rhythmic call of the 'boobook' that can last



from several minutes to some hours through the night, the use of this feminine term suggests that 'nocturnal', the more global attribute, is more crucial for these earless birds of prey.

Not yet accounted for is the masculine term *chat-huant*, a synonym for the more common feminine noun *hulotte*, a 'nocturnal' bird of prey. The different gender assignments of these synonyms are discussed below.

#### 4.4.1.4 Synonyms with different gender assignments

The feminine noun *hulotte* (F) 'tawny owl', an earless owl, has a masculine synonym, *chat-huant*. The dappled or mottled chestnut- or grey-coloured plumage of this bird makes it difficult to observe and, like the 'nocturnal' *engoulevent* (M) 'nightjar', it is more likely to be heard than seen since it has *un long ululement* 'a long ululating cry' (<expobiologie. free.fr>, 2006) described as *hoo-hoo-ooo* (<www.garden-birds.co.uk>, 2006) that alerts us to its presence. It is possible that the most common term, the feminine noun *hulotte*, relates to its 'nocturnal' habit which is more widely-recognised in the community than a call that many would not have heard, while for people living where this bird is common and thus well-acquainted with its intermittent three-tone cry, the masculine term *chat-huant* might be more salient. Equally of interest, however, is the basis on which these contrasting distributions are founded.

As identified above, birds of prey have adapted in various ways to their 'nocturnal' hunting, including changes in colouration and changes to feathering that provide 'silent flight' that enable them to remain undetected while they hunt their own prey. For the most part, these birds are denoted by feminine nouns, eg. *chevêche* (F) 'little owl', *hulotte* (F) 'tawny owl', *chevêchette* (F) 'owlet', *effraie* (F) 'barn owl'. The extent of feminine gender assignment amongst this set provides a contrast with 'diurnal' birds of prey most of which are masculine. However, in some cases 'nocturnal' birds of prey also have an attribute that is strongly associated with 'male', eg. the 'horned' owls, or an attribute that undermines its ability to remain undetected, eg. *chat-huant* (M) 'tawny owl', and in these cases we find masculine gender. Thus, in addition to this contrast in gender assignment between 'diurnal' and 'nocturnal' for birds of prey, among 'nocturnal' birds of prey other attributes may also become salient – 'horns', an attribute associated with 'male', and

an intermittent call that counteracts the concealment otherwise offered by nocturnal hunting and silent flight.

Another synonym for 'tawny owl' is the masculine term *strix* (M), although it appears only in COFED (1985:526), translated as 'tawny owl' – an owl that shrieks rather than hoots. *Strix* is the Latin term for 'screech owl' (*effraie*) (ELD, 1966:811), and was first used by Linnaeus. French-language ornithological sources use the compound form *genre Strix* to designate a genus of 'earless' owls with eyes surrounded by large circles of differently-coloured feathers (the 'tawny/true/typical owls') that distinguish them from other earless owls, those with a heart-shaped facial disk ('barn owls'). Owls in *genre Strix* may be chestnut-coloured, or greyish, or a mixture of both, but in each of these variations they differ from the paler 'barn owls'. The potential for attributes 'different' and 'varied' to be associated with masculine gender will continue to be explored, although 'varied' is equally relevant for feminine terms such as *chouette* and *ninox* in their application various kinds of owls.

#### 4.4.1.5 Word-final pronunciation

Many of the 'aerial' birds that hunt for prey on the wing, particularly birds of prey are described as having a heavy build or broad curved chest, eg. *aigle*, *buse*, *condor*, *chouette*, *duc*, *serpenteaire*, *vauture*, and most of the owls, *duc*, *chevêche*, *chouette*, *hulotte*, *ninox*, *petite nyctale*. Each of these nouns has consonant-final pronunciation. Other descriptions identify a plump chest or stout body, eg. *gobemouche*, *perruche*, *merle*, *veuve*, and these nouns also have consonant-final pronunciation. Many birds in this set have bills with a hooked, pointed tip that allows them to tear through thick outer layers to reach the flesh beneath, but this attribute requires observation at close quarters and other attributes are preferred, particularly for the larger birds of prey.

However, aerial birds with a similarly heavy build are denoted by vowel-final nouns, eg. *effraie* (F) 'barn owl', and *bondrée* (F) 'honey buzzard'. Honey buzzards have an extensive range of coverings that protect them from the harm offered by their preferred diet, larvae of wasps – dense plumage, bristly feathers at the base of the bill to protect their head, feathered legs, and

heavily-scaled feet. The possibility that the sum of these bristly/scaly/densely feathered coverings may be associated with vowel-final pronunciation will continue to be explored. For the *effraie*, the 'unique' heart-shaped pattern of its facial disk allows us to distinguish 'barn owls' from other owls. Thus, while all birds have a feathered covering, for some feathering is even more crucial because of some distinctive quality and may become salient, and it appears to be associated with vowel-final pronunciation – particularly where a heavy-set build might otherwise suggest consonant-final pronunciation.

Some birds of prey are noted for their streamlined form, eg. the vowel-final *pèlerin* (M) 'peregrine falcon', or slender form, eg. *martinet* (M) 'swift', and *milan* (M) 'kite', described as *gracile* (slender/delicate). Thus, we find a contrast between 'slender'/streamlined' possibly associated with vowel-final pronunciation, and 'heavily built/plump-chested' possibly associated with consonant-final pronunciation.

Several smaller aerial birds are plump-chested but are denoted by vowel-final nouns, particularly birds noted for their tiny size such as *étourneau* (M) 'starling'. It is noted that 'diminutive' forms *oisillon* (M) 'chick' and *caneton* (M) 'duckling' have vowel-final pronunciation, and this potential association is examined below. The *hobereau* (M) 'hobby' is described as smaller than another closely related bird, the *pèlerin*, a 'majestic bird' (<falcon.unibase.com>, 2004). Many of the vowel-final birds of prey such as *épervier* (M) 'Eurasian sparrowhawk', and *émérillon* (M) 'merlin' are comparatively smaller than other birds of prey such as *autour des palombes* (M) 'northern goshawk', *busard Saint Martin* (M) 'hen harrier' that are nearly twice their size. There may be some relationship between vowel-final pronunciation and a comparative difference in size in relation to another similar bird. This example can be compared with *harfang*, described as *une grande chouette* 'a large owl' that grows to some 70 cm. (<fr.wikipedia.org>, 2004) making it 'the largest bird species in the arctic' (<animaldiversity.ummz.umich.edu>, 2005). While we might consider this notion a 'superlative', its domain is limited or restricted and, as a result, it can only be considered as 'larger' than most others – another comparative dimension that ties semantically with 'diminutive/augmentative' in accounting for vowel-final pronunciation.

Word-final pronunciation in two cases remains unexplained. The noun *hibou* (F) 'long-eared owl' also denotes a 'stocky' bird but is vowel-final, while the 'unique' *crécerelle d'Australie* (F) 'Australian kestrel' is described as 'svelte' (<[www.oiseau.net](http://www.oiseau.net)>, 2005) but is consonant-final. These relationships appear to be counter-intuitive to those suggested above. The term *hibou*, however, denotes comparatively larger owls such as *duc* and *grand-duc d'Europe*, and this comparative difference in size is consistent with other like examples in its association with vowel-final pronunciation. The *crécerelle* is not distinguished by its size, but given the nature of the feature that makes the *crécerelle* unique – the ability to hover – it is possible that movement, particularly in its agility and power, may in some way be associated with consonant-final pronunciation. The various considerations of 'comparative size' over 'shape' (well-built or slender), 'distinctive feathered appearance', and 'agility/power' in relation to movement, will be further explored in the analysis below.

#### 4.4.2 Aquatic birds

This set covers birds that forage or catch their prey in aquatic environments. Table 4.14 includes web-footed birds that spend time on or in the water, as well as fish-eating birds that take their prey live from the water (known as 'pelagic') and wading birds that trawl for prey in shallow waters.

Table 4.14 Aquatic birds

Masculine vowel-final nouns			
<i>bihoreau</i>	M	'night heron'	bluish-grey heron-like; nocturnal; long plumes develop at mating time; has light and dark seasonal phases in colouration
<i>cormoran</i>	M	'cormorant', 'shag'	migratory diving bird with long slender form; can swim under water for extended periods but feathers are not waterproofed
<i>erlé</i> syn. <i>marouette</i> (F)	M	'crake'	small migratory nocturnal wading bird, secretive; both sexes similar
<i>fou</i>	M	'gannet', 'booby'	marine bird; white body, black wing tips; both sexes similar in colour
<i>flamant</i>	M	'flamingo'	tall migratory wading bird, bill bent sharply downwards
<i>garrot</i>	M	'bufflehead'	diving duck with chubby form; male has white chest, females duller; migratory
<i>goéland</i> syn. <i>mouette</i> (F)	M	'gull'	marine bird with elongated form; sexes similar, but plumage colour varies with

			age group; typically migratory
<i>grand pingouin</i>	M	'giant auk'	large flightless black and white Arctic diving bird, now extinct
<i>guillemot</i>	M	'common guillemot'	diving bird with slender form; migration depends on latitude, conditions, etc.
<i>héron</i>	M	'heron'	wetland wading bird with seasonal changes between light/dark plumage
<i>jabiru</i>	M	'jabiru'	huge wading stork, powerful axe-like bill; non-migratory
<i>macareux</i>	M	'puffin'	chubby comical-looking diving bird, inquisitive and tame; both sexes similar
<i>manchot</i>	M	'(Antarctic) penguin'	marine bird; stout; unable to fly
<i>megule nain</i>	M	'little auk'	small black and white Arctic diving bird
<i>milouin</i>	M	'common pochard'	migratory diving duck; elongated form
<i>morillon</i>	M	'tufted duck'	migratory duck with black and white plumage, crest, elongated form
<i>pélican</i>	M	'pelican'	marine bird with long bill, distensible pouch for engulfing fish
<i>petit pingouin</i>	M	'razorbill'	flighted black and white North Atlantic marine bird
<i>pingouin</i>	M	'penguin'	denotes a number of northern latitude aquatic birds
<i>plongeon</i>	M	'diver'	marine diving bird with elongated form
<i>savacou huppé</i>	M	'boat-billed heron'	nocturnal heron-like bird, pale grey, with scoop-shaped but pointed beak
<i>vanneau</i>	M	'lapwing'	pigeon-sized wading bird that splashes up water with its wings

Masculine consonant-final nouns

<i>albatros</i>	M	'albatross'	oceanic bird
<i>balbuzard</i>	M	'sea eagle'	fish-eating predator, feathers not oiled
<i>butor</i>	M	'bittern'	wading bird related to herons, but shorter legs/neck, stouter body; booming call
<i>canard</i>	M	'duck'	aquatic web-footed bird with short neck and rounded body
<i>cygne</i>	M	'swan'	any large, long-necked bottom-feeding aquatic bird with long neck, webbed feet, and hoarse croaking call
<i>ibis</i>	M	'ibis'	wading bird with long legs, slender body and long slender pointed bill
<i>grèbe</i>	M/F	'grebe'	freshwater diving bird with lobate feet; can swim under water; tolerates salinity
<i>pétrel</i>	M	'petrel'	oceanic bird with sharp talons, hooked beak; typically diurnal and unimorphic
<i>pygargue (à queue blanche)</i>	M	'sea eagle'	large European fish-eating bird of prey whose feathers are not oiled
<i>râle d'eau</i>	M	'water rail'	wading bird with long slender bill

Feminine vowel-final nouns

<i>oie</i>	F	'goose'	migratory web-footed grazing bird with longish neck
<i>orfraie</i> syn. <i>balbuzard</i> <i>pêcheur</i>	F	'osprey'	large diurnal fish-eating bird of prey, migratory; oiled feathers enable it to dive into water to catch prey

Feminine consonant-final nouns

<i>aigrette</i>	F	'egret'	migratory wading bird, seeks prey in shallow water
<i>avocette</i>	F	'avocet'	sleek web-footed wading bird with long slender upturned bill; lives in colonies;
<i>échasse</i>	F	'stilt'	migratory nocturnal insect eater found in brackish or saline waters
<i>foulque</i>	F	'common coot'	nocturnal, aquatic, with rounded body, black plumage, white bill and frontal cap
<i>frégate superbe</i>	F	'magnificent frigatebird'	large black sea-bird with bright orange pouch, and deeply forked tail
<i>marouette ponctuée</i> (syn. <i>erlé</i> (M))	F	'spotted crane'	wading bird that prefers to run or swim rather than fly
<i>mouette</i>	F	'gull'	web-footed bird, seeks prey in water, rubbish on shore
<i>océanite</i>	F	'petrel'	migratory, nocturnal petrels, 'fork-tailed storm petrel' and 'European storm petrel'
<i>poule d'eau</i>	F	'moorhen'	small freshwater bird that enjoys foraging on land, active day and night
<i>spatule</i>	F	'spoonbill'	white-plumed wading bird with unique bill (long, flat, rounded at the extremity, touch-sensitive)
<i>sterne</i>	F	'tern'	migratory marine bird able to hover without beating wings, white with black 'skull-cap', forked tail

Amongst these nouns, 37 are masculine and 15 feminine. Both sets include large birds and small birds, diurnal birds and nocturnal birds, chubby birds and slender birds. Isolating any common attribute related to 'aquatic' is difficult since 'wading' birds such as 'heron' typically fish in water but closely related species are terrestrial, eg. *agami* (M) 'chestnut-billed heron', and while ducks are typically aquatic, the *canard carolin* (M) 'wood duck' rarely goes near water. Along with 'geese', aquatic birds such as swans, moorhens, and ducks, eg *colvert* (M) 'mallard', may also become terrestrial foragers.

A number of aquatic birds in Table 4.14 have synonyms with contrasting gender assignments, eg. *orfraie* (F) and *balbuzard pêcheur* (M), *goéland* (M) and *mouette* (F) 'gull', *pétrel* (M) and

*océanite* (F) 'petrel', and *erlé* (M) and *marouette* (F) 'crake', a member of the 'rail' family that has many other synonyms, including *gérardine*, *griset*, *grisette*, *grizet*, *raille*, *rôle perlé*, *reille*, *relé*, *rêve* and *rousselot* (<[www.oiseau.net](http://www.oiseau.net)>, 2007) some of which are masculine and others feminine. The 'crake' is sufficiently different from other 'rails' to warrant lexical distinction, but this does not explain different gender assignments and variations in word-final pronunciation patterns amongst its synonyms and they are examined further below, as are the different gender assignments of synonymous terms for 'petrel', 'gull' and the 'osprey'.

In the above Table 4.14 are nine nouns, masculine and feminine, that designate birds so closely related as to be considered members of a single family, 'heron', eg. *bihoreau*, *héron*, *aigrette*. The analysis of birds of prey suggests that distinctions between 'nocturnal' and 'diurnal' habit may be associated with feminine and masculine gender assignments respectively, but these attributes do not seem to be salient for herons since the 'nocturnal' *bihoreau* and *savacou huppé* are masculine while the 'diurnal' *aigrette* is feminine. Nouns denoting 'heron' are discussed below as a set.

#### 4.4.2.1 Masculine nouns - discussion

The Arctic *pingouin* and Antarctic *manchot* are 'feathered' creatures with forelimbs adapted as flippers to help them move in water, but they cannot fly. The *pygargue (à queue blanche)*, which preys on fish, may drown if it becomes submerged by swells or waves since its feathers are not waterproofed and when it reaches the stage that it can no longer lift its heavy body out of the water, it drowns. The *cormoran* is a migratory diving bird with webbed feet and a long slender form that can dive into and swim under water for extended periods but it, too, is disadvantaged by having feathers that are not waterproofed – which only limits feeding time but makes it vulnerable on resurfacing since it cannot fly until its feathers have dried out.

The pink *flamant* forms enormous flocks that feed together head-down. Its body is extraordinarily well adapted for its specific feeding requirements in its splayed feet, long legs, and a bill that is turned upside down so that when the head is immersed it can move along the bottom. It separates food from the mud and silt using hairy structures that line the jaw and

tongue. The diet of flamingos is extremely limiting since the 'lesser flamingo' feeds on cyanobacteria and is restricted to lakes where these organisms flourish, while the 'greater flamingo' is feeds only on shrimps. Both of these species suffer extensive mortality rates when conditions alter the balance required to produce their food. Their pink colouration, while wonderful and rare, is not unique since other birds also have pink plumage, eg. *roselin* (M) 'rose finch', *cacatoès rosalbin* (M) 'galah', and the wading bird *spatule roseate* (F) 'roseate spoonbill'.

The *guillemot* is specially adapted for diving and swimming under water, using its wings for propulsion and its feet for steering. At breeding time, *guillemots* gathers in colonies on cliffs or rocky ledges where females lay a single egg directly onto the rocky surface. The egg is pear-shaped, specially adapted so that, if disturbed, it rolls in a circle rather than off the ledge. However, young *guillemots* must leave before flight feathers have fully grown. They leap off the ledges at night to avoid predators such as gulls, and plummet down, whirring their tiny undeveloped wings – a feat that makes survival at this early stage very uncertain (<[www.ypte.org.uk/docs/factsheets/animal\\_facts/guillemot.html](http://www.ypte.org.uk/docs/factsheets/animal_facts/guillemot.html)>, 2007). However, for birds such as the *guillemots* and *pingouin* this breeding takes place in the Arctic during a few weeks in summer, and the information outlined above would have been known to very few until relatively recently. In this context one would expect a more general habit to be associated with masculine gender assignment of these diving birds – indeed, perhaps this very habit might be considered endangering.

The *grèbe* denotes stocky diving birds with pointed beaks that vary considerably in size (23 cm. to 74 cm.). These birds are superbly adapted for an aquatic life in that feet are placed well to the back and are lobed to allow them to act as hydrofoil blades of a propeller. Feathers are dense and waterproofed and attached in a way that allows them to adjust for buoyancy. These adaptations are helpful in an aquatic existence, but some species have become reluctant to fly (<[en.wikipedia.org](http://en.wikipedia.org)>) and respond to danger by diving rather than by flying away – a manoeuvre that is not only dangerous in itself but leaves birds at risk when they must eventually emerge. They are not particularly wary, and some species have become extinct. Some are highly vocal



while others are nearly silent. They prefer nesting sites that are completely surrounded by water, which puts the young at risk in harsh weather conditions.

One source (LRPT, 1994:534) provides masculine and feminine alternative gender assignments for *grèbe*, but they are not found in any other dictionaries (COFED, 1985:258, <atilf.atilf.fr>), or *Dictionnaires d'autrefois* (at <colet.unichicago.edu>, 2005). However, while uncommon, the use of feminine gender occurs in both mainland France and Canada, particularly alongside photographs, eg. *une grèbe à cou noir* (<fr.fotofolia.com>), *une grèbe huppé* (<mg2i.typepad.com>) and *une grèbe à bec bigarré* (oiseauxquebec.forumactif.com>) suggesting that in certain instances, perhaps one that stands out from others, feminine gender assignment is appropriate. It is important to account for these examples, either anomalies in usage or variations between speakers, and these examples will continue to be of interest.

As its name suggests in both English and French, the *plongeon* (M) 'diver/loon' dives head-first into the water, itself a fairly risky undertaking. However, it is an excellent swimmer since its legs are located at the back of the body and its feet have lobed toes that can propel it through water, but this placement at the back of the body makes it difficult for the *plongeon* to get airborne. Like the 'grebes', these birds prefer nesting sites completely surrounded by water, but it puts the young at risk from harsh weather conditions (although adults are able to re-nest, sometimes in the same site, if eggs are lost).

The 'male' *râle des genets* (M) 'corncrake' is a nocturnal wading bird that is instinctively secretive, and has extensive camouflage colouration that offers it considerable additional protection. During the breeding season, however, it makes a guttural double call throughout the night that carries across considerable distances and destroys the advantages offered by its other (nocturnal/secretive/camouflaged) adaptations. The *râle d'eau* (M) 'water rail' lives and breeds amongst reedbeds and wetlands probing around in mud and shallow waters where it is rarely seen and even more rarely heard since it is equally secretive. However, the male also has a habitual cry that continues throughout the night, one that sounds like a squealing piglet being strangled (<www.oiseau.net>, 2007, and other sources), and the female in springtime utters a

metallic repetitious *tic tic tic* call that reveals her presence even in dense vegetation. The most celebrated of all 'nocturnal' songbirds, *rossignol* (M) 'nightingale', is not truly nocturnal but sings late into the evening, a habit that also alerts nocturnal predators (larger owls and other creatures) to its presence and location and, like both *râles*, it is masculine.

The noun *cygne* (M) 'swan' is first documented (as *cisne*) in 1170 to designate the largest of the European waterfowl which is typically white. Some six hundred years later the term *cygne* came to apply to the Australian swan on its discovery, the *cygne noir* 'black swan' (which first appears to be acknowledged in 1872-1877 by Littré in his *Dictionnaire de la langue française*, <atilf.atilf.fr>, 2004), as well as to the South American *cygne à col noir* 'black-necked swan'. These differences in colouration did not incur any change – in either the form of the noun or in its gender assignment. However, similarities between European swans and the white *oie des neiges* (F) 'snow goose' might have suggested that denoting nouns would share the same feminine gender assignment, but they do not. The noun *cygne* is examined further below in a set with other waterfowl.

The three species of *fou* known as 'gannet' are extraordinarily adapted for diving, having no external nostrils, while air sacks in their necks and chest absorb the impact of hitting the water at speeds up to 100 km/h. They nest in colonies, and although they sound cries of alarm when disturbed or when the colony is threatened, they do not fly off *en masse*. They show no fear of humans, readily accepting our presence. Diving birds such as *macareux* (M) 'puffin' respond to threat by diving, but must eventually come to the surface when they can be picked off by predators waiting above. They live in colonies on land, but do not take to the air in response to threat even though their webbed feet make speedy movement difficult. These birds also readily accept human presence.

Amongst these birds, then, some have lost the instinct for fear, some the instinct for flying, while other habits – plummeting downwards at high speed directly into solid matter, an extraordinarily restricted diet, continuous nocturnal calling – are dangerous or endangering and put their lives at risk, while other habits place their young at risk. The possibility of some association between

such attributes and masculine gender assignment should be considered.

#### 4.4.2.2 Feminine nouns – discussion

The *échasse* (F) 'stilt' is a migratory marsh bird. Its extremely long legs allow it to forage in the deeper regions of both saltwater and freshwater shoreline habitats, and it swims only when forced. It has developed remarkable night vision to the extent that it can feed on windy moonless nights. To reach its prey of worms, larvae and crustaceans on the muddy bottom, it immerses its bill, head and shoulders completely and uses its articulated knee joints to rock its body and stir up mud with its toes to disturb and loosen prey that would otherwise remain covered. Descriptions of this bird indicate that both parents take part in incubating the eggs and feeding and raising the young. Both parents perform broken wing display to draw intruders away from the nest, a habit that confuses predators and offers greater protection – for both of the adults and their young.

Birds denoted by *poule d'eau* (F) 'moorhen' feed constantly both on land and water, and have an extensive variety of foods in their diet. Wild birds are extremely shy and hide at the slightest disturbance, which habit offers considerable protection.

The web-footed *avocette* (F) 'avocet' is noted for its extraordinarily long tapering upturned bill which sweeps from side to side searching for food; it is touch-sensitive and snaps shut the moment it comes across any prey. These birds live together in colonies, and when under threat all members, including the new-born chicks, act together to defend against threat with their noisy calls.

Two other feminine exceptions, *mouette* (F) 'seagull' and *terne* (F) 'tern', also form colonies and when under threat use an aggressive tactical response as unusual as that of the *oie* (F) 'goose' to defend the collective whole, 'the entire colony taking off while calling out with loud cries of alarm, falling suddenly silent and then swooping back down to the ground (<[animaldiversity.ummz.umich.edu/site/accounts/information/Aves.html](http://animaldiversity.ummz.umich.edu/site/accounts/information/Aves.html)>, 2004). This behaviour is sufficiently threatening and aggressive to drive off potential predators, and when a nest is threatened parents

use the same collective approach to attack any intruder. There is a consistency between this collective approach and feminine gender assignment for nouns denoting birds with this similar habit, such as *buse*, which suggests that they may be associated.

The black-plumed *foulque* (F) 'coot' is rarely seen on land since it is nocturnal in its feeding and voyages only at night, which offers some protection from the more numerous 'diurnal' predators over land and sea. More importantly, though, these birds have been observed acting together to drive away likely predators, seagulls or birds of prey, by hitting the water in a way that drives up a splash, forming a kind of smoke-screen that makes it difficult to pick out an one individual.

The term *frégate superbe* applies to a single genus of extraordinary, large, diurnal oceanic birds. These birds do not land on water, nor do they walk on the ground, but they are extremely agile in the air where they forage singly, or in small groups, for prey on or near the water surface as feathers are not waterproofed (<animaldiversity.ummz.umich.edu>, 2004). These birds form large colonies in remote oceanic locations to roost and breed and while colonies are noisy, these birds are quiet in flight. These attributes are more closely associated with masculine gender assignment. However, while they look much like any other bird of prey in flight, these birds have an amazing bright orange membranous chest pouch that is unique to the *frégate superbe* – to the extent that its relationship with other pelagic birds remains unclear even today. In its isolation and uniqueness, the *frégate superbe* is not unlike the isolation and uniqueness of the British *grouse*, and both nouns are feminine.

The *spatule* is also unique amongst birds in relation to its extraordinary bill shape in the form of a spatula-like instrument. The association between 'unique' and feminine gender assignment is consistent with other birds considered unique, including the *crécerelle* (F) 'kestrel'.

The term *oie* applies to a range of 'goose-like' creatures that have longish necks, webbed feet and a terrestrial grazing habit, eg. the brownish (*oie*) *bernache* (F) 'barnacle goose/Brent goose'. However, some ducks are more goose-like, eg. 'goosanders' such as the common *harle* (M) 'merganser' and *tadorne* (M) 'shelduck', and some geese are more swan-like, eg. *oie cygnoïde*

(F) 'swan goose'. Divisions between these three waterfowl and differences in their gender assignments are examined below.

Amongst birds in this feminine set there is a certain consistency in the presence of habits that enhance opportunities for survival and longevity that do not appear in descriptions of birds denoted by masculine nouns. It is possible that the association between 'unique' and feminine gender assignment is also related to their ability to survive against all odds.

#### 4.4.2.3 Synonyms

Synonyms in the above set that have different gender assignments are of particular interest.

Synonyms *balbuzard pêcheur* (M) and *orfraie* (F) 'osprey'

The bird commonly known as 'osprey' has English synonyms 'fishhawk', 'seahawk', 'sea eagle', even 'bald buzzard' amongst the many English colloquial names denoting *Pandion haliaetus*, but there are two French synonyms – the feminine vowel-final *orfraie*, and the masculine consonant-final *balbuzard* (*pêcheur*).

This feminine term *orfraie* is a very old noun but is not much used today. Instead we find the masculine term *balbuzard*. This bird of prey shares the same diet as other fish-eating birds of prey; however, most must take their prey from the water's surface since feathers are not waterproofed. If they become wet, these birds cannot lift themselves out of the water and they drown. Feathers of the *orfraie* are waterproofed, and it is thus able to dive in and can lift itself back out of the water – along with its prey – to become airborne (<www.oiseau.net>, 2004). The ability to move safely between these two environments offers the *orfraie* an increased likelihood of success in obtaining food and consequently increases its chances of surviving for longer under circumstances where other similar birds would drown. In this context, the feminine noun *orfraie* is consistent with others. However, in its application to a 'diurnal' bird of prey, *orfraie* seems to be gradually losing ground to *balbuzard*, possibly in face of the drive to maintain the more crucial polarity between 'diurnal' and 'nocturnal' for birds of prey, and because its waterproofed feathers and ability to survive a dunking into water are today less well appreciated

in the broader community. It will be interesting to observe the usage of these synonymous nouns in the years ahead.

#### Synonyms *pétrel* (M) and *océanite* (F) 'petrel'

French has two terms, *pétrel* (M) and *océanite* (F) denoting 'petrel', an oceanic bird, as in (8).

(8)	<i>pétrel</i>	M	'petrel'	oceanic bird with hooked bill, tubular nostrils
	<i>océanite culblanc</i> syn. <i>pétrel culblanc</i>	F	'Leach's storm petrel'	small, oceanic, with hooked bill, forked tail
	<i>océanite tempête</i>	F	'European storm petrel'	small, oceanic, nocturnal

These seabirds with tubular nostrils and *doigts palmés* 'webbed feet' vary in size, eg. *pétrel géant* 'Southern giant petrel', and the much smaller *pétrel de Bulwer* 'Bulwer's petrel'. Petrels are more common in Southern oceans than elsewhere and are typically pelagic, that is, they return to shore only to breed, although *pétrel gongon* 'Cape Verde petrel' and *pétrel diabolin* 'Black-capped petrel' are visible year round in close proximity to nests (<mitglied.lycos.de>, 2005).

The *pétrel géant* of the Southern hemisphere is a solitary 'diurnal' bird with a kind of neighing call. It is typically silent at sea, but makes a low repetitive chuffing call on land and colonies are noisy, while males bray when intruders approach their nests. It can kill other seabirds but also moves easily over ground, feeding on carcasses of marine mammals and dead birds found on the shoreline and attacking nests of other birds, particularly penguins and gulls. The diurnal *pétrel de Bulwer* ignores fishing vessels that might offer easier pickings.

Amongst birds denoted by the term *océanite* are *océanite tempête* (F) 'European storm petrel', the smallest European marine bird that forms huge colonies. These birds are active 'nocturnally'. Thus, the distinction between 'diurnal' and 'nocturnal' that is crucial for other birds of prey also seems to be crucial in distinguishing between these related sea-going birds of prey. They can account not only for lexical differences but contrasts in their gender assignments.

The *océanite culblanc* (F) 'Leach's storm petrel' is more often found on coastal shores and in

large numbers, particularly after storms. It is migratory, and it is possible that this distinction between 'migratory' petrels and those that are sedentary in their region, eg. *pétrel géant*, offers a potential explanation for their different gender assignments. These contrasting attributes and their association with different gender assignments will continue to be of interest.

#### Synonyms *erlé* (M) and *marouette ponctuée* (F) 'spotted crane'

Two nouns, *erlé* and *marouette* both apply to a specific corn crane, the 'spotted crane', a migratory wading bird so solitary that even at breeding time it does not form pairs. These 'diurnal' birds feed from sunup to sundown in boggy wetlands and prefer to run or swim rather than fly, except when making the long migratory flights to Africa. They are secretive birds, a habit that is assisted by a camouflage colouration that further reduces their visibility. However, during the summer months they make a monotonous call that resonates across its wetland environment, alerting other creatures to a presence that would otherwise be concealed. This same monotonous call is made by nocturnal 'rails' and 'crakes' to which it is closely related, *râle d'eau* (M) 'water rail' and *râle des genets* (M) 'corn crane', for which masculine gender assignment is suggested to relate to a similar endangering habit of continuous calling throughout the night. While it may be equally crucial for the masculine term *erlé*, accounting for the feminine synonym *marouette* is more difficult.

Buffon notes a similarity in response to threat between the solitary *erlé/marouette ponctuée* (F) 'spotted crane' and the colonising *oie* (F) 'goose' in that when one bird cries out in alarm, that cry is taken up by all the others in the surrounding areas, a habit that would certainly confuse any predator. This co-operative approach to security of the group also reflects the behaviour of the *grue* (F) 'crane', the wider family in which its scientific name places it. In that these three nouns are all feminine but have different word-final pronunciation patterns, this shared habit is more likely associated with feminine gender assignment.

These different habits are not, however, mutually exclusive and, among speakers, the different masculine and feminine synonyms *erlé* and *marouette* can be argued to reflect different salencies of attributes associated with contrasting masculine and feminine classifications. This

area will continue to be of interest.

The variation in word-final pronunciation for these synonyms also requires explanation. The 'spotted crane' has two other distinctive characteristics – a slender form, and an agility that enables it to move around easily through boggy wetlands, a terrain that otherwise makes movement very difficult. It is possible these two attributes may be associated with different word-final pronunciations. There is some suggestion of an association between 'slender' and vowel-final pronunciation for *faucon* (M) 'falcon' and *cormoran* (M) 'cormorant' that might also account for the vowel-final *erlé*. This association would leave 'agile' potentially associated with consonant-final pronunciation of *marouette*. This attribute has been mentioned previously for other birds, eg. *crécérille* (F) 'kestrel', *frégate superbe* (F) 'frigatebird', and *ninox* (F) 'barking owl', which nouns also have consonant-final pronunciation although the basis for this connection is not readily apparent. These notions and their potential associations with specific word-final pronunciation patterns will continue to be explored.

#### 4.4.2.4 Waterfowl

The term 'waterfowl' encompasses three kinds of birds identified by terms *cygne* (M) 'swan', *oie* (F) 'goose' and *canard* (M) 'duck' which share certain attributes – in particular, small heads, largish bodies, and webbed feet that suggest a more aquatic habit and distinguishes them from true terrestrial fowl.

The typical *cygne* (M) 'swan' has a long neck, large-sized body and webbed feet. It has white plumage in the Northern Hemisphere and black, or black and white, in the Southern Hemisphere.

The typical goose is the grey and white *oie cendrée* (F) 'grey goose', and the small variations amongst geese are typically handled via compound nouns, eg. the white *oie cygnoïde* (F) 'swan goose', dusky brown and white *oie naine* (F) 'lesser white-fronted goose', *oie rieuse* (F) 'greater white-fronted goose', and *oie des neiges* (F) 'snow goose' (aka 'white goose', 'blue goose', possibly since this bird is also known in Canadian French as '*oie blanche*') with its seasonal



alternations between white and a dusky colour (<www.oiseau.net>, 2004). However, 'albinism' is not uncommon for the *oie cendrée*, and 'white' is unreliable in distinguishing between them. The English term 'white goose' is also used to distinguish sub-Arctic white geese such as the 'greater snow goose', 'lesser snow goose', 'Ross's goose' from the grey-coloured geese typical of the genus *Anser* (<en.wikipedia.org>, <fr.wikipedia.org>, <www.birds.cornell.edu/AllAboutBirds/BirdGuide/Rosss\_Goose.html>, <www.oiseau.net>, 2009). French ornithologists do not appear to make this same distinction (<www.oiseau.net>, 2009). Geese are similar to swans in overall shape but their bodies are smaller and necks are shorter.

There is no typical *canard*. Attributes are thus drawn from the range of those displayed in a across these smaller web-footed birds, particularly the common dabbling ducks such as the 'mallard', since they share a number of similar physical characteristics – a short neck, broadly curving chest, webbed feet, and a propensity to obtain their diet from aquatic habitats. Ducks are typically brown but may also be black and white. Overall, while sizes change between the three waterfowl, outline and build remain consistent.

The swan obtains its food by virtue of the same tail-up, tilt-and-paddle action as the dabbling duck, while differences in the length of their necks gives them access to plants in the same freshwater environment but at different levels. However, swans and many ducks, eg. *colvert* (M) 'mallard', *canard carolin* (M) 'wood duck', also graze on land in the same way as the *oie* (F) 'goose', while other ducks dive for food, eg. (*fuligule*) *morillon* (M) 'tufted duck', *eider* (M) 'eider duck'. Swans and geese have a similar honking call –although swans are quiet and geese are very noisy. But a honking call distinguishes both from the 'quacking' ducks – although it is recalled that only some species of duck quack, and then it is only the female.

The *oie* has other constant and outstanding attributes noted by Buffon (Tome 9:61 <www.oiseau.net>, 2004) which include setting sentries that guard over the flock, '*... cou tendu & tête élevée* 'neck stiff and head held up'. It honks in alarm at the slightest hint of danger, which response is taken up in unison by the flock. Geese honk during the day to keep the family in contact, even amongst flocks of thousands; they honk when grazing head-down and

are unable to see other geese, allowing them to keep in touch and space out the flock during feeding (<www.wildfowling.co.uk>, 2007). Their honk is loud enough for members of the flock to hear during their migratory flights, particularly the snow goose, emperor goose, Canada goose, etc. (noted in <www.ducks.org/Conservation/ WaterfowlBiology/2112>, 2004). This collaborative approach to the security of the whole flock, from feeding to roosting to migration, is thus maintained through constant communication via the same loud call from 'male' and 'female'. It contrasts with 'waterfowl' *cygne* and *canard*, and also with 'fowl' where the loud cries of the 'male' or constant clucking of 'females' appear to be associated with hierarchy or dominance over others, of the 'male' over the flock or, for 'females', maintaining social order (<elibrary.unm.edu/sora/ Auk/v111n04/ p0863-p0872.pdf>, 2004).

Buffon also notes that regardless of all other aspects of these three closely related web-footed 'fowl', differences in ... *la figure, le port et toutes les proportions des formes* 'shape, bearing, and all the proportions of form' allow us to distribute such birds into these three broad categories without much difficulty – even though *oie cygnoïde* (F) 'swan goose' is a swan-like goose, and some 'perching ducks' (which roost in trees at night) are called 'geese', while 'goosanders' are goose-like 'ducks'. We make these lexical distinctions through differences in length (of neck) and size (of body) to form a paradigm, as set out in (9).

(9)	<i>cygne</i>	M	'swan'	long neck	biggest of the three
	<i>oie</i>	F	'goose'	medium-length neck	medium-sized
	<i>canard</i>	M	'duck'	short neck	smallest of the three

We find that the one in the middle is feminine while the two on either side are masculine, one larger, the other smaller. However, such distinctions are notoriously difficult to operate, suggesting that different behaviours and calls are more reliable. Certainly, amongst these waterfowl a distinction can be made between those that respond to threat by acting together and also make loud and continuous calls during feeding, during flight, etc., identified as *oie* (F) 'goose', which attributes are not found in waterfowl identified as *cygne* (M) 'swan' or *canard* (M) 'duck'. The potential relationship between these behaviours and feminine gender, and the principle on which this association is based, will continue to be explored.

Differences in word-final pronunciation patterns among these three nouns are not yet accounted for, and they are considered further below.

Something of 'swan' and 'goose' – *oie cygnoïde* (F) 'swan goose'

It is interesting to examine the compound form *oie cygnoïde* (F) 'swan goose' which applies to two species:

- the 'swan goose' or 'white Chinese goose', a migratory species native to Mongolia
- a heavier breed, also known as *oie de Guinée* (F) 'African goose'.

Descriptions of these *oie cygnoïde* (<en.wikipedia.org>, <www.oiseau.net>, 2004) show sooty-coloured or white, large-sized birds with a long swan-like neck and a graceful swan-like physical form. While they can be found far from water grazing on sedge, they enjoy aquatic feeding in the same way as swans. These swan-like characteristics, however, are not sufficient for them to be identified as a 'swan', in English or in French.

These birds also have the same 'cackle' as geese and communicate constantly particularly during migratory flying, and this habit of communicating constantly is shared with other geese but not with swans. They are wary of strangers to the extent they are considered good 'watchdogs' (<www.bird-friends.com>, 2004) because of their vocal and aggressive response to threat – a habit that is typical of geese but not of swans. Although 'swan geese' are nocturnal and commence foraging at nightfall, other swans, eg. *cygne de Bewick* (M) 'tundra swan', are also nocturnal; their different gender assignments suggest that 'nocturnal' is unlikely to be salient for one but not the other. 'Swan geese' are also able to lay continuously during the February-to-June breeding season, which has led to their widespread domestication. Thus, while the physical appearance resembles the 'swan', its habits (nocturnal feeding, constant loud communication in flight and on land, a wariness of strangers and combined response to threat that alerts the flock) are 'goose-like' and may account for the use of a feminine noun as the designating term.

#### 4.4.2.5 Ducks - potential counter-examples with feminine gender assignment

It is noted that while most nouns denoting a kind of 'duck' are masculine, some species of duck

are also designated by feminine nouns. They include *sarcelle*, a feminine term that designates various very small ducks that are 'nocturnal' in their foraging, eg. *sarcelle d'hiver* 'common teal', *sarcelle cannelle* 'cinnamon teal', *sarcelle de Nouvelle -Zélande* 'brown teal'.

Birds denoted by *sarcelle* are gregarious and are always found in flocks, some in the thousands, that fly in tight formation and are able to twist and turn in perfect unison (Todd, 1996:401 at <[www.bird-friends.com](http://www.bird-friends.com)>, 2004). This skill enables them to better defend individuals against predators in the same way as occurs for shoals of fish. However, one species of duck identified in English as 'teal' is not nocturnal and it is denoted in French by the masculine noun *canard à bec rouge* (M) 'red-billed teal'. Another feminine noun, *érismature rousse* (F) 'ruddy duck', denotes a stiff-tailed duck that is also 'nocturnal'.

These examples suggest a correlation between 'nocturnal' and feminine gender assignment for ducks denoted by feminine nouns *sarcelle* and *érismature rousse* while other similar kinds of duck that are 'diurnal' have masculine gender assignment, eg. *canard à bec rouge*, *colvert* (M) 'mallard', etc.

However, some 'diurnal' ducks are denoted by feminine nouns, eg. *macreuse* (F) 'common scoter'. This sea duck has developed 'synchronous surfacing' (<[www.virtualbirder.com/vbirder/ibis/SUSC/SUSC401.html](http://www.virtualbirder.com/vbirder/ibis/SUSC/SUSC401.html)>, 2004) which offers a potentially safer outcome and greater return for effort than individual surfacing since gulls are often able to force surfacing ducks to relinquish their prey. One 'diurnal' diving duck, *nette rousse* (F) 'red-crested pochard', is physically duck-like but behaves in a goose-like manner in that the 'male' and 'female' are noisy – in flight and on the ground – almost year-round. However, at breeding time the 'female' is able to control this habit and becomes silent, which is crucial in creating a safe environment for the young since she has sole responsibility for guarding the nest and her young. This bird can be contrasted with *râle* (M) and *engoulevent* (M), nocturnal birds, where males are unable to recognise that their loud calls throughout the night place their lives in danger.

The term *cérépse cendrée* (F) denotes the Australian 'Cape Barren goose', a large, pale grey,

bulky goose with pink to deep red legs and black feet. It lives on small windswept generally uninhabited offshore islands off the southern coast of Australia, and grazes on tussock grass and spear grass along the shores, rarely swimming. The *céréopse cendrée* is not only one of the world's rarest geese (<[www.australianfauna.com](http://www.australianfauna.com)>, 2004), but is unique in two ways: a bright greenish-yellow knot that extends across its stubby triangular but otherwise black bill, and the ability to drink salt or brackish water that allows these birds to remain year-round (<[www.parks.tas.gov.au](http://www.parks.tas.gov.au)>, 2005). In its isolation from others of its kind, it is possible that the attributes that make the *céréopse cendrée* 'unique' may be associated with feminine gender assignment in the same way as for *frégate* (F) 'magnificent frigatebird', and *grouse* (F) 'grouse', discussed earlier.

#### 4.4.2.6 Word-final pronunciation

Nouns denoting aquatic birds display similar variations to aerial birds above in their vowel-final and consonant-final pronunciation patterns. However, many of the round-chested or heavy-bodied birds have consonant-final pronunciation, eg. *albatros* (M) 'albatross', *butor* (M) 'bittern', *canard* (M) 'duck', *cygne* (M) 'swan', *foulque* (F) 'common coot', *grèbe* (M) 'grebe', *macreuse* (F) 'scoter', *mouette* (F) 'gull', *poule d'eau* (F) 'moorhen', *sarcelle* (F) 'teal'. The *guignard* (M) 'dotterel' is renowned for its *corps trapu* 'thickset body' but it is equally renowned for *la saveur exquise de sa chair* 'the exquisite flavour of its flesh', as are ducks *canard*, *malard*, and birds covered by the term *volatile* (M) 'farmyard bird'. There may be a logical link between a plump form, flesh that is good to eat, and consonant-final pronunciation. However, any association between 'plump/thickset' and consonant-final pronunciation would leave *macareux* (M) 'puffin', a chubby bird that has vowel-final pronunciation, still to be accounted for.

Other birds have a more slender shape but are also denoted by consonant-final nouns, including petrels denoted by *pétrel* (M) and *océanite* (F), and the *frégate superbe* (F). These birds have extraordinary aerial skills, as do other birds of prey many of which have consonant-final pronunciation, eg. *aigle* (M) 'eagle', *autour* (M) 'goshawk', *busard* (M) 'harrier', *condor* (M) 'condor, etc. (see Table 4.12 above). The consistency of consonant-final pronunciation between

these examples suggests that there may be some association with agility in the air. Other birds noted for their agility on the ground also have consonant-final pronunciation, eg. *marouette* (F) 'spotted crane', *avocette* (F) 'avocet', *échasse* (F) 'stilt', etc. The potential association between consonant-final pronunciation and 'agile' will continue to be explored, particularly the precise nature of that relationship which is not clear.

Many birds with a slender form, eg. *cormoran* (M) 'cormorant', *guillemot* (M) 'common guillemot', *plongeon* (M) 'diver/loon', have vowel-final pronunciation. The association between 'slender' form and vowel-final pronunciation can be directly contrasted with 'thickset', 'rotund' or 'solid' builds associated with consonant-final pronunciation. The consistency between these contrasting attributes and specific but different word-final pronunciation patterns makes them regular, even predictable.

It is also possible that vowel-final pronunciation may be associated with feathered plumage of other birds as is suggested for *oiseau*, and the heavily and softly feathered *pigeon* and *oie*, particularly the latter since the down produced at moulting has been so useful to humans for warmth over centuries. While the *orfraie* (F) 'osprey' has a solid build shared by many other large birds of prey, it has vowel-final pronunciation. However, in its case oiled feathers allow it to dive into and emerge from water unscathed, unlike other fish-eating birds of prey that drown if their feathers become waterlogged. Other heavily built seabirds such as *fou* (M) 'gannet', *macareux* (M) 'puffin', *pingouin* (M) 'penguin', and *pélican* (M) 'pelican' also have oiled feathers that allow them to remain immersed in water for as long as required without becoming sodden, and these nouns also have vowel-final pronunciation. Each of these birds, however, moves around clumsily on land. Both of these attributes, a 'waterproofing' that allows them to exist in their preferred environment, or their 'clumsy' movement on land, offer potential means of accounting for vowel-final pronunciation. The semantic opposition between 'clumsy' and 'agile' finds an equivalent association with contrasting word-final pronunciation patterns.

The various notions raised in the analysis of word-final pronunciation patterns for birds will continue to be of interest, particularly 'clumsy' or 'agile' in movement, some quality of their

feathering, and particularly noticeable 'solid' or 'slender' build or shape.

#### 4.4.3 Plumage colour

While plumage colour for fowl is not helpful in distinguishing relatedness and is not the most helpful diagnostic in distinguishing between waterfowl, descriptions of birds commence with colours. Many have a plumage colouration that is striking, but equally significant are 'black' or 'dark' plumage particularly since it is often iridescent. Colourful plumage is more commonly associated with 'male' in this lexical field, although not always, and its potential association with masculine gender assignment in particular should be evaluated.

##### 4.4.3.1 Brightly coloured plumage

The following nouns in the corpus denote birds with brightly coloured plumage.

Table 4.15: Birds with brightly coloured plumage

#### Masculine vowel-final nouns

<i>canari</i>	M	'canary'	bright yellow feathers
<i>serin</i>	M	'European serin'	bright yellow feathers
<i>flamant</i>	M	'flamingo'	pink feathers
<i>roselin</i>	M	'rose finch'	bright pink colouring
<i>ara</i>	M	'macaw'	brilliant plumage
<i>chardonneret</i>	M	'goldfinch'	brightly coloured feathers
<i>colibri</i>	M	'humming-bird'	brilliant colouring
<i>faisan</i>	M	'pheasant'	brilliant colouration
<i>jabiru</i>	M	'jabiru'	brilliant colouring
<i>lori</i>	M	'lory'	brightly-coloured parrot
<i>loriot</i>	M	'oriole'	brightly coloured
<i>maribout d'Afrique</i>	M	'marabou stork'	brightly coloured
<i>oiseau-mouches</i>	M	'colibri' (humming-bird)	brilliant feathers
<i>paon</i>	M	'peafowl'	brilliantly coloured plumage, tail feathers and crest
<i>paradisier</i>	M	'bird of Paradise'	brilliantly coloured plumage
<i>perroquet</i>	M	'parrot'	brightly coloured plumage
<i>tarin</i>	M	'siskin' (finch)	bright yellow-and-green plumage
<i>toucan</i>	M	'toucan'	brilliant colouring

#### Masculine consonant-final nouns

<i>bouvreuil</i>	M	'bullfinch'	beautiful colouring, bright red throat, black crown, wings and tail
<i>cardinal</i>	M	'cardinal'	red feathers
<i>oriole</i>	M	'oriole'	yellow and black plumage
<i>rouge-gorge</i>	M	'robin'	multicoloured, with bright red breast
<i>rupicole</i> syn. <i>coq de roche</i>	M	'cock-of-the-rock'	orange feathers
<i>trochile</i>	M	'hummingbird'	brilliant iridescent plumage
<i>troupiale</i>	M	'troupial'	orange and black songbird

#### Feminine consonant-final noun

<i>linotte</i>	F	'linnet'; 'twite'	small songbird; 'linnet' develops, bright red head and chest
<i>perruche</i>	F	'budgerigar'	small, brightly coloured bird

The extent of masculine gender for such birds and the rarity of feminine nouns, only two amongst 27, provide support for some association between 'colourful' plumage and masculine gender, possibly in its association with 'male'. While bright colouration might be considered potentially endangering since it stands out, brightly-coloured plumages tend to match and even camouflage birds in specific habitats in which they live. However, for some of these nouns discussed in earlier sets gender assignments are suggested to be associated with other attributes, eg. *rupicole*, *paon*, *flamant*, *faisan*.

#### 4.4.3.2 Potential counter-examples – feminine birds that are brightly coloured

There are two feminine counter-examples, *perruche* and *linotte*. The term *perruche* more commonly denotes 'budgerigar', but it can also apply to a number of other brightly coloured birds including certain 'parrots' as well as 'parakeet', 'rosella', etc. These different applications suggest the presence of some attribute/s strongly associated with feminine gender assignment that would set them apart from similar 'parrots' otherwise denoted by *perroquet*, a masculine term. Birds denoted by the term *perruche* congregate in large flocks and since they quickly eat out a food site they must move on, forcing them to be highly nomadic rather than migratory. However, the flock is able to maintain cohesion by constant calling among its members in the same way as noted above for 'budgerigars' in the wild. It is a habit that provides greater safety



for these small colourful birds that are particularly vulnerable to larger birds of prey. It may be that this feminine noun applies to brightly coloured flocking birds that constantly call to each other, regardless of the variety of terms in Australian English.

Two species of parrot whose green and black plumage provides significant camouflage in their grassland habitats are 'nocturnal', *perruche nocturne* 'nocturnal parrot' and *perruche terrestre* (F) 'ground parrot', and their feminine gender is consistent with 'nocturnal' birds of prey such as *chouette* (F) 'owl' in their contrast with diurnal 'birds of prey'. *Perruche* also applies to *perruche à collier* (F) 'rose-ringed parakeet' and *perruche calopsitte* (which is also called simply *calopsitte*) (F) 'cockatiel', small parrot-like birds that are opportunistic and can adapt to any conditions. The *perruche splendide* (F) 'scarlet-chested parrot' is found far from water but is able to obtain water by drinking dew or chewing water-storing plants that grow in mulga country, while the *perruche à collier* is able to alter its breeding pattern to coincide with rainfall and the coming availability of a food supply. It seems that the term *perroquet* applies to 'diurnal' parrots, while *perruche* applies to 'nocturnal' parrots, or to 'diurnal' parrot-like birds whose noisy call maintains the cohesion and security of the flock, or those that have learnt to survive in difficult terrains by adapting to take advantage of local conditions in the regard to food and water supply.

Not included in the above set is the noun *cacatoès* (M) 'cockatoo'. Its French definition (LRPT, 1994:142) includes 'brightly coloured' parrots with horned erectile crests while its English translation as 'cockatoo' (COFED, 1985:75) instead denotes light-coloured, crested parrot-like birds (of genus *Kakatoe*) found in Australia and New Guinea, such as the 'sulphur-crested cockatoo' (COD, 1986:304). This bird has the form of a parrot but is white with a yellow crest and further yellow on the underside of its wings. Even so, it could not be described as 'brightly-coloured'. *Cacatoès* also applies to the 'galah', an Australian parrot with a rose-pink head, neck and underparts but is otherwise largely grey. However, like the 'sulphur-crested cockatoo', both 'male' and 'female' have a 'crest', one that is light pink (see images at <en.wikipedia.org>, 2005). As different attributes associated with 'male' in the world of birds, both 'crested' and 'brightly coloured' offer a means of accounting for masculine gender assignment, but these two *cacatoès*

are rather less than 'brightly coloured', and 'crested' seems to provide a more valid basis for motivating masculine gender assignment.

The term *linotte* applies to two species of finch, *linotte mélodieuse* (F) 'linnet' and *linotte à bec jaune* (F) 'twite'. The *linotte mélodieuse* is noted for the bright red breeding plumage that males develop on head and chest, but this colouration does not occur for the *linotte à bec jaune*. Their shared name *linotte* in French suggests that they share an attribute in common that might be associated with their shared feminine gender assignments but is yet to be identified. These two nouns are discussed below, along with other members of the finch family.

#### 4.4.3.3 Black plumage

The following nouns in the database denote black birds although, as for *merle*, the female is not necessarily also black, eg.

Table 4.16: Birds with black plumage

##### Masculine vowel-final nouns

<i>arbalétrier</i>	M	'black swift'	black feathered aerial bird
<i>corbeau</i>	M	'raven'	black iridescent plumage
<i>cormoran</i>	M	'cormorant', 'shag'	diving bird with black plumage
<i>freux</i>	M	'rook'	black feathered aerial bird
<i>hocco</i>	M	'curassow'	black feathered running bird, somewhat similar in form to <i>dindon</i> (M) 'turkey'

##### Masculine consonant-final nouns

<i>charognard</i>	M	'vulture'	bird of prey with black plumage
<i>chocard</i>	M	'alpine chough'	all-black member of crow family
<i>crave</i>	M	'chough'	large all-black perching bird with red bill
<i>condor</i>	M	'condor'	large black North American bird
<i>merle</i>	M	'blackbird'	common European thrush, all-black (female is brown)
<i>quiscale</i>	M	'grackle'	American songbird, male with black iridescent plumage (female dark)
<i>vauture</i>	M	'vulture'	bird of prey with all-black plumage

##### Masculine noun with alternative word-final pronunciations

<i>tétras</i>	M	'black grouse'	terrestrial bird found in coniferous forests
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<i>corneille</i>	F	'carrion crow'	brilliant shiny black plumage
<i>foulque</i>	F	'common coot'	aquatic, black plumage
<i>frégate</i>	F	'magnificent frigatebird'	oceanic bird with black plumage and bright orange pouch
<i>macreuse</i>	F	'scoter'	sea duck, male entirely brilliant black, female smoky brown

Most of the 17 nouns denoting birds with black plumage have masculine gender. The extent of masculine gender assignment for this set suggests that there may be some association between 'dark'/'black' and masculine gender assignment. However, the four counter-examples, feminine nouns denoting 'black' birds, must be accounted for.

Three of the four feminine 'counter-examples', *macreuse* (F) 'common scoter', *foulque* (F) 'common coot', and *frégate* (F) 'magnificent frigatebird' are discussed above (§4.4.2.5), and feminine gender assignment for *foulque* and *macreuse* is suggested to be associated with a habit that is potentially life-saving, while for *frégate* it is associated with a 'unique' attribute. The remaining counter-example, *corneille* (F) 'crow', is examined in a wider analysis of members of the 'crow' family, below.

#### 4.4.3.4 Word-final pronunciation

Among birds with brightly coloured plumage, most have vowel-final pronunciation, eg. *canari* (M) 'canary', *flamant* (M) 'flamingo', *pinson* (M) 'finch', etc., consistent with the previous suggestion of some association between some quality of a bird's plumage or feathering and vowel-final pronunciation. However, some brightly-coloured birds have consonant-final pronunciation, eg. *bouvreuil* (M) 'bullfinch', *rouge-gorge* (M) 'robin red-breast' and *rupicole* (M) 'cock-of-the-rock', and each of these birds is solidly-built, regardless of differences in their size. These associations are consistent with paler birds such as *cacatoès* (M) 'cockatoo, galah' that are solidly built, and also with examples previously identified. Certain of these consonant-final birds also have most unusual bills, eg. *trochile* where each species has a long slender bill that is perfectly adapted to obtaining nectar from its preferred source, but these tiny birds also have a rounded form. They are also noted for their agility.

For birds with 'black' plumage, vowel-final pronunciation appears to be associated with:

- 'slender' form, eg. *arbalétrier* (M) 'swift', *cormoran* (M) 'cormorant'
- 'comparative size, eg. (*grand*) *corbeau* (M) 'raven', *freux* (M) 'rook'
- distinctive feathering, eg. *hocco* (M) 'curassow', *pie* (M) 'magpie', *tétras* (M) 'black grouse'

Consonant-final pronunciation appears to be associated with:

- 'plump' or 'thick-set' build, eg. *charognard* (M) 'vulture', *corneille* (F) 'crow', *frégate* (F) 'magnificent frigate bird', *macreuse* (F) 'scoter', *merle* (M) 'blackbird', *tétras* (M) 'black grouse'
- 'agile' movement, in flight, eg. *condor*, *chough*, *vauture*, etc., in water, eg. *foulque* (F) 'common coot'.

These various notions will continue to be explored in their association with different word-final pronunciation patterns.

#### 4.4.4 'Flightless' birds

While birds are typically associated with flight, not all birds can fly. The database contains a number of nouns denoting such birds and they are listed in Table 4.17 below.

Table 4.17: Flightless birds

##### Masculine nouns

<i>casuar</i> ( <i>à casque</i> )	M	'cassowary'	large flightless bird able to run and swim but not fly
<i>dronte</i>	M	'dodo'	flightless bird with short stout legs, now extinct (now known as <i>dodo</i> )
<i>émeu</i>	M	'emu'	tall flightless Australian bird
<i>grand pingouin</i>	M	'giant auk'	flightless black and white Arctic marine bird now extinct
<i>manchot</i>	M	'penguin'	any of the various flightless pelagic Antarctic birds
<i>takahé</i> syn. <i>talève takahé</i> (F)	M	'takahe'	rare New Zealand 'rail', stocky, flightless purple-blue in colour (<en.wikipedia.org>, 2009)

##### Feminine noun

<i>autruche</i>	F	'ostrich'	flightless running bird, largest of all living birds
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*talève takahé*  
syn *takahé*

F 'takahe'

New Zealand forest bird, flightless; has no fear of humans but immediately hides from raptors; able to vary its diet

Flightless birds share the same adaptations as flighted birds – small heads, winged forelimbs, large bodies, light frames and a thick but lightweight covering of feathers, etc., but they have adapted so well to their various terrestrial environments that they are no longer able to take advantage of their potential for flight. All these nouns denoting 'flightless' birds are masculine, with two exceptions – *talève takahé*, the feminine synonym for *takahé*, and the feminine *autruche* (F) 'ostrich'. The existence of the *autruche* has been recognised in ancient texts (see Buffon, Appendix VI) and its 'superlative' size distinguishes it from every other bird, making it 'unique'.

Where 'flighted' appears to be associated with feminine gender assignment for *aigle* (F) 'eagle', the examples in Table 4.17 suggest that the oppositional attribute 'flightless' is associated with contrasting masculine gender assignment – except in the case of the one bird that is superlative in its size. There appears to be some connection between 'superlative' and 'unique', and evidence shows that they are consistently associated with feminine gender assignment but also with consonant-final pronunciation, eg. *frégate superbe* (F), *grouse* (F), *céréopse cendrée* (F) 'Cape Barren goose'. The association between 'flightless' and masculine gender leaves the feminine synonym *talève takahé* still to be accounted for since it applies to a 'flightless' bird. It is discussed further below (see §4.6.5).

The *dronte* is described as 'flightless', but it is also extinct, and masculine gender for this noun is consistent with an earlier masculine example, *trilobites* (M) 'trilobite' (an extinct marine arthropod) identified in Ch. 3 in the discussion related to word-final segment /it/. There is some possibility that 'extinct' may also be associated with masculine gender assignment.

Notions raised here will continue to be explored in the analysis below and in other lexical fields.

It is noted that *casuar* (M) 'cassowary', a loan word that is vowel-final in its Malay origins as *kěsuari*, has become consonant-final in French. However, the rounded body of this tall bird is

so iconic that the same rounded image is used on road signs to warn motorists of their presence in raintree forest roads around Cape Tribulation, northern Australia (<[www.daintreeforest.com.au](http://www.daintreeforest.com.au)>, 2007). Elision of the word-final vowel in its indigenous form brings about a match between the noun in its word-final pronunciation and the attribute that typifies it – its rounded shape.

The noun *émeu* identifies a solidly-built bird and previous evidence suggests that this attribute is associated with consonant-final pronunciation, yet *émeu* is clearly vowel-final. It also has very long legs and a very long neck. Although it is not the 'tallest' of living birds, its height distinguishes this bird from others around it, and it is possible that this 'comparative' difference in size may be associated with vowel-final pronunciation, particularly in that 'superlative' size appears to be associated with contrasting consonant-final pronunciation.

#### 4.4.5 Differences in comparative age, size

The above analysis of superordinate terms *oisillon* (M) 'chick', the young of any kind, and *oiseau* (M) 'bird' suggests that *oisillon* in a 'diminutive' sense can apply to entities in that are both immature and younger/smaller in age than an adult. Further, the discussion of flightless birds identifies a bird that is comparatively taller than others in its environment, *émeu* (M) 'emu'. There are other examples of nouns whose semantics contain similar notions.

##### 4.4.5.1 Diminutive in age – 'young' of a specific kind

Nouns denoting the 'young' of a specific kind of birds are set out in Table 4.18 below.

Table 4.18: Young of various species

<i>autruchon</i>	M	'ostrich chick' formed from <i>autruche</i> (F) 'ostrich'
<i>bécasseau</i>	M	'young of <i>bécasse</i> (F) 'woodcock'
<i>caneton</i>	M	'duckling', from <i>cane</i> (F) 'duck'
<i>cigogneau</i>	M	'young stork', from <i>cigogne</i> (F) 'stork'
<i>dindonneau</i>	M	'young turkey', from <i>dindon</i> (M) 'turkey'
<i>griset</i>	M	'young sparrow', young of <i>grive</i> (F) 'thrush'
<i>oison</i>	M	'young goose', from <i>oie</i> (F) 'goose'
<i>outardeau</i>	M	'young bustard', from <i>outarde</i> (F) 'bustard'
<i>perdron</i>	M	'young partridge', from <i>perdrix</i> (F) 'partridge'

<i>pigeonneau</i>	M	'young pigeon', from <i>pigeon</i> (M) 'pigeon'
<i>pintadeau</i>	M	'little guinea-fowl', from <i>pintade</i> (F) 'guinea-fowl'
<i>poussin</i>	M	'chick' (of domestic fowl) newly emerged from egg
<i>ramereau</i>	M	'young wood pigeon', from <i>ramier</i> (M) 'wood-pigeon'

In their application to 'new-born', each of these 13 nouns denotes the immature form of their species. Many of the above nouns are coined from a stem provided by the adult term, in some cases that of the masculine term, eg. *dindon*, *pigeon*, and in others the feminine term, eg. *cane*, *pintade*, while each of the 13 nouns above are masculine, demonstrating that the gender assigned to the immature form does not necessarily follow that of the generic term. These stems are suffixed, and all suffixes are vowel-final, eg. *-eau*, *-on*, *-et*, *-in*, etc. Two of these suffixes, *-et* and *-in*, are identified as 'dimin.' in the *Dictionnaire des Suffixes* (LRPT, 1994:1231, 1232), suggesting that suffixes not only have some semantic attribute beyond the grammatical that contributes to the meaning of nouns, but that it seems to relate to some diminutive comparison with the adult bird.

These findings regarding 'young' birds foreshadow similar treatments for the 'young' of other animals, particularly in the use of the suffix *-eau*, eg. *éléphanteau* (M) 'baby elephant', *lionceau* (M) 'lion cub', *renardeau* (M) 'cub, 'young fox' (see §6.5.4.1).

#### 4.4.5.2 Diminutive in size

While the above nouns apply to birds that are very young, they are also very much smaller than mature or adult birds of the same kind. It is not implausible that 'diminutive' may also apply to smallness in size, particularly since it was raised above in the discussion regarding the masculine vowel-final *étourneau* (M) 'starling'.

Nouns in the corpus denoting diminutive-sized birds are set out in Table 4.19 below.

Table 4.19: Birds 'diminutive' in stature

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<i>bécasseau</i>	M	'small wading bird' such as 'dunlin', 'stint'
<i>blongios nain</i>	M	'little bittern'
<i>bruant</i>	M	'bunting'
<i>canari</i>	M	'canary'

<i>chardonneret</i>	M	'goldfinch'
<i>colibri</i>	M	'hummingbird'
<i>émerillon</i>	M	'merlin', a small falcon
<i>étourneau</i>	M	'starling', syn. <i>sansonnet</i> (M)
<i>grimpereau</i>	M	'tree-creeper'
<i>hochequeue</i>	M	'wagtail', syn. <i>bergeronette</i> (F), <i>lavandière</i> (F)
<i>moineau</i>	M	'sparrow', syn. <i>piaf</i> (M)
<i>ortolan</i>	M	'ortolan' (a bunting)
<i>pinson</i>	M	'finch'
<i>pouillot</i>	M	'willow warbler'
<i>roselin</i>	M	'rosefinch'
<i>roitelet</i>	M	'wren'
<i>serin</i>	M	'serin'
<i>tarin</i>	M	'siskin' (Eurasian finch)
<i>traquet</i>	M	'wheatcar'

Many of the tiniest of these birds are terrestrial songbirds, including the *ortolan* which despite its tiny size is highly prized for its flesh. These nouns are all masculine and are formed with vowel-final suffixes *-eau*, *-et*, *-in*, *-on*, *-ot*, in the same way as nouns denoting the 'young' of their species. The regularity between these different meanings of 'diminutive' and both masculine gender assignment and vowel-final pronunciation suggests that there may be some association – although precisely how is not yet clear. However, the noun *canari* has a long history as a 'domesticated' bird kept in captivity for the enjoyment of its singing as well as its bright colouration. Its masculine gender assignment is consistent with the 'domesticated' *volatile* (M) 'farmyard bird', which would leave 'diminutive' to an association with vowel-final pronunciation. It is possible that other attributes may be salient for these masculine nouns, and they will continue to be explored.

The database also includes feminine nouns denoting tiny birds, such as *cama* (F) 'wren tit', *fauvette* (F) 'warbler', *mésange* (F) 'titmouse', *perruche* (F) 'budgerigar/lorikeet', and two feminine synonyms – *bergeronette* and *lavandière* – for the masculine vowel-final *hochequeue* 'wagtail' listed in Table 4.19 above. Members of the 'finch' family, *pinson* (M) 'finch', are all small but classifications vary amongst them – in gender, eg. *bouvreuil* (M) 'bullfinch', *linotte* (F) 'linnet/twite', and in word-final pronunciation patterns, eg. the vowel-final *pinson* (M) 'finch' and



*roselin* (M) 'rosefinch', and the consonant-final *bouvreuil* (M) 'bullfinch' and *grosbec* (M) 'hawfinch'.

One noun, *bécasseau*, can apply to the new-born 'immature' form in one sense, and 'tiny size' in another since it has two different applications, as shown in examples (10) and (11).

(10) *bécasseau* M 'young' of the *bécasse* (F) 'woodcock'

(11) *bécasseau* M 'any small wading bird ('dunlin', 'stint', etc.) in the sandpiper family'.

Here the same lexeme *bécasseau* is able to signal entirely different birds – the meaning in (10) designating 'young of a specific kind', the meaning in (11) designating any 'small-sized' wading bird. The 'woodcock' spends its life away from water, except when it is breeding, and it is not possible that one could mistake newborn 'woodcock' chicks for small-sized wading birds. By the time any confusion might arise, the 'woodcock' would have returned to its forest habitat, removing any possibility of confusion with wading birds. Perhaps *bécasseau* can apply in these different cases because the different meanings cannot be confused, at the same time implying that while its referents live in different habitats, they are nonetheless related.

However, examples such as *perdron* (M) 'newborn partridge chick' and *perdreau* (M) 'small partridge' show that where confusion might arise between 'diminutive age' and 'diminutive size', it is avoided through a change in word-final suffix. Since this change suffix is associated with a change in meaning, it provides further support for an association between 'comparative' and vowel-final pronunciation rather than masculine gender assignment. In turn, this link would suggest that gender assignment may possibly relate to the 'immature' form of the young, although the principle on which that distribution is based is not yet clear. Certainly, that attribute would not account for masculine gender assignments of the mature birds in Table 4.19.

Some birds differ from others in their comparatively larger size, eg. *émeu* (M) 'emu', defined as *un grand oiseau* 'large-sized bird', and *héron* (M) 'heron', *un grand oiseau échassier* 'a large-sized wading bird' (LRPT, 1994:556). These two examples have the same masculine gender assignments and vowel-final pronunciation patterns as nouns denoting 'comparatively smaller'

birds even though the bulky frame of the *émeu* is more closely associated with consonant-final pronunciation. The notion 'augmentative' forms part of the comparative paradigm and while the 'augmentative' may be regarded as oppositional to 'diminutive' as gradable oppositions, another approach is the combining of 'larger-sized/'augmentative' and 'smaller-sized/diminutive' to form a single semantic attribute 'comparative' – which could then account for their shared association with vowel-final pronunciation although there does not seem to be any direct or overt connection that would underpin such a relationship.

### Counter-examples

The noun *alouette* denotes several small ground foraging birds such as *linotte des champs* (F) 'skylark', birds whose streaked and mottled colouration is perfectly suited for the open country, marshes and meadows that they inhabit. Their song on the ground is quiet and short, but when disturbed, or when the nest comes under threat, the *alouette* flies some 50 metres or so up into the sky, singing loudly with whistles at various pitches as well as trills and tremolos repeated at different speeds, pitch, length and timbre (<[www.oiseau.net](http://www.oiseau.net)>, 2007). This response directs attention away from the nest without presenting any danger to itself. Thus, while it leaves the young on their own, this ascending movement, perhaps in combination with loud singing, seems to be associated with feminine gender in some way – certainly it is a response that causes considerable confusion for any predator that might otherwise threaten it or its young, and gives it every chance of living to the end of its natural life. It is also possible that there is some aspect about a bird that rises up into the air, perhaps associated with safety or freedom, perhaps in its contrast with birds that plummet towards earth or into water. The possibility of some association between these notions and contrasting feminine and masculine gender assignments will be continue to be examined.

Warblers known as *fauvette* 'garden warbler', eg. *fauvette orphée* 'Western orphean warbler' and *fauvette pitchou* 'Dartford warbler', are able to change their diet from fruit and berries in autumn to insects, caterpillars, etc. during the rest of the year. Old World warblers denoted by the feminine noun *rousserolle* (*rousserolle verderolle* (F) 'marsh warbler' and *rousserolle effarvette* (F) 'Eurasian reed warbler'). The 'reed warbler' is also able to hunt in a variety of

ways, feeding on insects, spiders and snails, in tree canopies, shrubs and on the ground, and can take insects on the wing. These insectivores are thus able to adapt their diet to consume a range of other items, including berries. They are also 'strongly migratory', and these attributes seem to be more salient than their singing.

These descriptions suggest feminine gender assignment may be related to extraordinary efforts displayed by these birds in protecting their young without endangering their own lives, or to their capacity to vary their diet and the means by which they obtain food, or to a migratory habit that, which attributes appear to be associated with feminine gender assignment. These feminine nouns all have consonant-final pronunciation. It could, however, be argued that the comparatively small size for some is recognised in their compound forms *orphée*, *pitchou*, etc., which are vowel-final.

Another potential counter-example is the 'flightless' *autruche* (F) 'ostrich', a bird whose French definition includes the same '*de grande taille* 'large-sized' (LRPT, 1994:79) as *émeu* (M) 'emu' yet, while *émeu* is masculine and vowel-final, *autruche* is both feminine and consonant-final. These classifications are even more surprising given the apparent association between 'flightless' and masculine gender assignment identified in §4.4.4 above. However, its English definition indicates that the 'ostrich' differs from other birds not only as a running bird but also as the 'largest' of all living birds, making it 'unique' in its size (CED, 1986, 1089) – a 'superlative' rather than 'comparative' distinction. It is interesting that this important information is missing from the French definition. The analysis of other sets above finds evidence of an association between 'unique' and feminine gender, and *autruche* is consistent with those examples. Given the potential association between 'comparative' and vowel-final pronunciation, it is plausible to suggest that 'superlative' – while not typically considered as oppositional to 'comparative' – might form a different kind of contrast that can account for consonant-final pronunciation of *autruche*.

#### 4.4.6 Nouns in corpus remaining to be analysed

A number of nouns in the database are not captured in these various categories, synonyms for

terms discussed above such as *troglodyte* (M) 'wren' and *piaf* (M) 'sparrow', 'thrushes' such as *mauvais* (M) 'redwing', *litorne* (F) 'fieldfare', *grive* (F) 'song thrush' and *draine* (F) 'mistle thrush', and the many shorebirds some of which are masculine, eg. *chevalier* (M) 'sandpiper', while others are feminine, eg. *bartramie* (F) 'upland sandpiper'.

While these nouns await detailed discussion, descriptions suggests that gender assignments are associated with attributes revealed throughout the analysis above, eg. *litorne* (F) 'fieldfare' whose loose colonies are vigorous in their defence against predators since they have been reported to ram magpies and jays in flight while guards 'escort' predators away from the colony (<www.bto.org>, 2007). The *draine* (F) 'mistle thrush' displays in winter a behaviour known as 'resource guarding' (<www.bto.org>, 2007) where one or two mistle thrushes defend a food source such as a holly or yew against any other birds to ensure that the food resource is kept for itself through the winter months. Resource-guarding birds have been shown to have bigger and earlier clutches than birds that do not have this habit, effectively increasing their opportunity for survival.

#### 4.4.7 Summary – count nouns in the corpus

While the analysis of nouns according to various habitats and colourations shows that they do not, of themselves, provide a clear explanation for different gender assignments, there is some evidence that certain attributes seem to be related to specific and different gender assignments.

Attributes that appear to be associated with masculine gender assignment include:

- sedentary in their region where relatives are 'migratory', eg. *pétrel géant* (M) 'Southern giant petrel'
- domesticated/kept in captivity, eg. *canari* (M) 'canary'
- colourful plumage, eg. *colibri* (M) 'hummingbird'
- black plumage, eg. *corbeau* (M) 'raven', *crave* (M) 'chough', etc.
- attribute that disadvantage or potentially endanger, eg. *engoulevent* (M) 'nightjar' (continuous nocturnal calling), *pygargue à queue blanche* (M) 'sea eagle' (feathers not waterproofed)

- adapted too far, eg. *martinet* (M) 'martin' (withered feet)
- readily accept presence of humans/easily tamed, eg. *serin* (M) 'serin', *loriquet* (M) 'lorikeet', *fou* (M) 'gannet', *macareux* (M) 'puffin'
- specific and restrictive requirements for food, water, or roosting, eg. *crave* (M) 'chough', *freux* (M) 'rook', *flamant* (M) 'flamingo'
- 'diurnal' in contrast with closely related nocturnal birds, eg. *condor* (M) 'condor', *aigle* (M) 'eagle', *faucon* (M) 'falcon', *balbuzard* (M) 'bald eagle', *canard à bec rouge* (M) 'red-billed teal', *pétrel géant* (M) 'Southern giant petrel'
- attribute associated with 'male' such as 'horned', eg. *duc* (M) 'horned owl', or crested, eg. *cacatoès* (M) 'cockatoo'/'galah'
- 'flightless', eg. *dronte* (M) 'dodo', *manchot* (M) 'Antarctic penguin', *émeu* (M) 'emu'
- habits that put young at risk, eg. *guillemot* (M) 'guillemot', *grèbe* (M) 'grebe', *plongeon* (M) 'diver'/'loon'
- habits/instincts that endanger their own lives, eg. *canard* (M) 'duck', *cygne* (M) 'swan', *erlé* (M) 'spotted crane', *râle d'eau* (M) 'water rail', *râle des genets* (M) 'corn crane'.

Attributes that appear to be associated with feminine gender assignment include:

- immediately fleeing in response to threat or alarm, eg. *bondrée* (F) 'honey buzzard', *poule d'eau* (F) 'moorhen'
- protecting their young without endangering their own lives, eg. *alouette* (F) 'lark', *échasse* (F) 'stilt', *bondrée* (F) 'honey buzzard'
- collaborating to protect the flock, eg. *grue* (F) 'crane', *oie cygnoïde* (F) 'swan goose', *macreuse* (F) 'common scoter', *avocette* (F) 'avocet', *sarcelle* (F) 'teal'
- maintains instinct for freedom, eg. *caille* (F) 'quail', *hirondelle* (F) 'swallow'
- sharing the same loud voices/in constant communication, eg. *buse* (F) 'common buzzard', *perruche* (F) 'budgerigar', *hirondelle* (F) 'swallow', *pie* (F) 'magpie', *oie cygnoïde* (F) 'swan goose'
- able to eke out food supply, eg. *crécerelle aux yeux blancs* (F) 'greater kestrel'
- 'unique' in some way, eg. *crécerelle* (F) 'kestrel' (able to hover), *frégate* (F) 'frigatebird' (orange pouch), *autruche* (F) 'ostrich' (largest of any bird)

- adapted to 'nocturnal' hunting where related birds are 'diurnal', eg. *chouette* (F) 'owl', *chevêche* (F) 'little owl', *oie cygnoïde* (F) 'swan goose', *sarcelle d'hiver* (F) 'common teal', *érismaïe rousse* (F) 'ruddy duck', *échasse* (F) 'stilt', *océanite tempête* (F) 'storm petrel', *perruche nocturne* (F) 'nocturnal parrot', *perruche terrestre* (F) 'ground parrot'
- able to harness its instincts to create safer nesting, eg. *nette rousse* (F) 'red-crested pochard'
- 'migratory', unlike close relatives that are sedentary, eg. *océanite culblanc* (F) 'Leach's storm petrel', *oie cygnoïde* (F) 'swan goose', *marouette* (F) 'spotted crane', *caille* (F) 'quail'
- extraordinary fertility, eg. *oie cygnoïde* (F) 'swan goose'

Significant amongst these examples are the different nouns denoting 'petrel' whose various attributes can be seen as forming two different sets of antonymous oppositions – 'diurnal' and 'nocturnal' on the one hand, and 'sedentary' and 'migratory' on the other. In their association with different and contrasting classifications, these attributes suggest that gender assignment of each of these nouns is regular and predictable, providing further evidence of a semantically motivated system of gender assignment. There is also some possibility of a contrast between 'rising up', associated with feminine gender for *alouette* (F) 'skylark', *aigle* (F) 'eagle', and the oppositional attribute 'plummeting/diving down' associated with *plongeon* (M) 'diver/loon', *faucon* (M) 'falcon', which nouns are masculine.

Another possible opposition is suggested between birds noted for their 'agility' – in the air, eg. *condor* (M) 'condor', *crécerelle* (F) 'kestrel', or in their footwork, eg. *aigrette* (F) 'egret', *marouette* (F) 'water-rail', which have consonant-final pronunciation where those regarded as 'clumsy', eg. *macareux* (M) 'puffin', *perdrix* (F) 'partridge' have vowel-final pronunciation rather than consonant-final pronunciation relation to their rotund body shapes.

Counter-examples to certain of these associations – that is, where a gender assignment does not fit that associated with a specific attribute – appear to relate to the presence of another attribute that competes for gender assignment and is more crucial, eg. 'horned', an attribute associated with 'male' that is more crucial than 'nocturnal' for 'horned' owls such as *duc* (M) 'horned owl'.

Such attributes offer a certain predictability in terms of the different gender assignments of synonyms, as laid out in the (12) below.

(12) Common term (masc., fem.)	Synonym (masc., fem.)
<i>erlé</i> (M) 'spotted crane' (loud night call)	<i>marouette ponctuée</i> (F) 'spotted crane' (migratory)
<i>hulotte</i> (F) 'tawny owl' (nocturnal')	<i>chat-huant</i> (M) 'tawny owl' (loud night call)
<i>océanite culblanc</i> (F) 'Leach's storm petrel' (migratory)	<i>pétrel culblanc</i> (M) 'Leach's storm petrel' (diurnal bird of prey)
<i>orfraie</i> (F) 'osprey' (waterproofed wings)	<i>balbuzard pêcheur</i> (M) 'osprey' (diurnal bird of prey)

The different outcomes in terms of gender assignment suggest that the common term relates to the attribute best known, or most salient, for speakers in terms of the specific environment in which they observe these birds.

Various attributes also appear to be associated with the different vowel- and consonant-final pronunciation patterns of nouns. Moreover, they appear to be different from those attributes suggested to be associated with gender assignment.

Vowel-final pronunciation appears to be associated with birds whose outer covering is notable in some way, such as waterproofed feathers, scaled feet/bill), eg. *bondrée* (F) 'honey buzzard', *orfraie* (F) 'osprey', *fou* (M) 'gannet', or its distinctive colouration, eg. *flamant* (M) 'flamingo', *serin* (M) 'serin', *canari* (M) 'canary', *perroquet* (M) 'parrot', *toucan* (M) 'toucan', or a slender form, eg. *cormoran* (M) 'cormorant' or 'shag', *héron* (M) 'heron', or birds particularly clumsy in their movement, eg. *macareux* (M) 'puffin', *perdrix* (F) 'partridge'.

Consonant-final pronunciation appears to be associated with birds with the agility to capture or feed on the wing, particularly birds of prey. It also appears to be associated with a plump, round-chested or heavily-built body (*corps trapu*), eg. *aigle* (M) 'eagle', *merle* (M) 'blackbird', *canard* (M) 'duck', *cygne* (M) 'swan', *condor* (M) 'condor', *balbuzard* (M) 'bald eagle', *bouvreuril* (M) 'bullfinch', *cacatoès* (M) 'cockatoo', *casuar à casque* (M) 'cassowary'.

As shown in § 4.4.5, nouns denoting the 'young' of any kind have vowel-final pronunciation, as do birds noted for their 'diminutive' size, or 'augmentative' size, in comparison with others – particularly amongst those around it, eg. *héron* (M) 'heron', taller than other wading birds. The potential counter-example, *autruche* (F) 'ostrich' has final consonant-final pronunciation, but as the 'largest' of all living birds it is distinguished in its 'superlative' size, not its 'comparative' size. These examples suggest that 'diminutive' and 'augmentative' do not provide gradable oppositions in French but combine in the attribute 'comparative', and that 'comparative' and 'superlative' form ungradable oppositions in their associations with contrasting vowel- and consonant-final pronunciation. There are examples where two attributes associated with different word-final pronunciations compete, as for *pinson* (M) 'finch', a rotund little bird, and *émeu* (M) 'emu' a tall bird with a bulky body, the 'comparative' aspect of their appearance appears to be more crucial since these nouns are vowel-final where their body shapes are elsewhere associated with consonant-final pronunciation.

Certain nouns in the database are not captured in the various sets in this section and remain to be analysed, but descriptions suggest that attributes identified above may be associated in a similar way with gender assignment of these nouns.

#### 4.5 Birds in related sets

The analysis above in many cases identifies nouns denoting closely related birds but they differ in their gender assignments. The discussion below covers four such sets, those nouns that identify members of the pigeon/dove, finch, heron/egret and crow/raven families.

##### 4.5.1 Nouns denoting 'pigeons' and 'doves'

This analysis concerns various species of greyish, stout-bodied birds with a tiny head, short neck, legs and bill, and a characteristic lame walk. Pigeons have strong wings shaped for fast flying, and they are capable of covering enormous distances in foraging for local or temporary sources of food and water. The typical call is a throaty *roucoulement* (M) 'cooing', plaintive and repetitious.



English terms 'pigeon' and 'dove' are said to be interchangeable, but there are further terms that also denote 'dove-like' birds. The same situation exists in French, where the generic term today is *pigeon* (M), having gradually replaced *colombe* (F) as the term used in the north of France, while *palombe* (F) continues to be used in southern France. Further common and less common nouns, eg. *tourterelle* (F) 'turtledove', *gallicombe* (F) 'bleeding-heart dove' can also be found in various sources (<[www.pigeons-france.com](http://www.pigeons-france.com)>, <[fr.wikipedia.com](http://fr.wikipedia.com)>, <[www.birdlife.org](http://www.birdlife.org)>, <[www.mangoverde.com](http://www.mangoverde.com)>, 2005) and while the different terms are suggested to relate to differences in size and diet (seed-eaters vs fruit eaters, for example), these relationships do not provide any regularity, in English or in French.

More particularly, similarities in appearance and habits amongst 'dove-like' birds would have suggested similar gender assignments, yet some nouns are masculine and others are feminine. The different gender assignments must be accounted for, and the historical change from the feminine *colombe* to the masculine *pigeon* as the generic term requires an explanation.

#### 4.5.1.1 Historical background and earliest nouns

The instinct for pigeons to return to their point of departure has been recognised and utilised across many different ancient civilisations, Egyptians, Persians, Chinese and Greeks, over thousands of years. However, the presence of dovecotes was unknown in France before the Roman invasion. Until the seventeenth century, only five species of 'dove-like' birds were living in France, four in the wild plus a Persian breed that had come to be kept in captivity for use as a messenger pigeon. The various European 'pigeons' were well recognised since their day-long ground-feeding habit placed them in close proximity to humans, in some cases competing for the same food, and they were widely hunted for their delicious flesh.

The earliest documentation (ca 1050) of a noun denoting a 'dove-like' bird is the feminine *turtrele*, later (ca 1200) *turterele* (<[atilf.atilf.fr](http://atilf.atilf.fr)>, 2004). This noun appears to have applied to the pinkish-grey migratory *tourterelle des bois* (F) 'European turtledove' (*Streptopelia turtur*), that arrived to breed in the European summers, lurking silent and hidden in leafy wooded habitats (<[oiseaudeurope.free.fr](http://oiseaudeurope.free.fr)>, 2004). Buffon (<[www.oiseau.net](http://www.oiseau.net)>, 2004) reports that birds

identified as *tourterelle* arrive, leave and travel together, without a single exception. Today the *tourterelle des bois* is still hunted as game in France (<[www.chasseursdesavoie.com.fr](http://www.chasseursdesavoie.com.fr)>, 2007).

Another early feminine noun, *colombe*, denoted a 'pigeon' or 'dove'. It was first recorded as *columbe* in the early twelfth century (<[atilf.atilf.fr](http://atilf.atilf.fr), 2004), from ninth century Old French forms *colomb*, *coulon* (gender unknown, cf. the Latin *columba* (F) 'pigeon or dove', ELD, 1966: 141). In northern France, this term would have applied to three species of round-bodied birds with a repetitive cooing call that are today considered distinct, set out in (13):

- (13)
- the dark greyish-brown *ramier* (M) 'wood pigeon'/'ring dove' (*Columba palumbus*)
  - the greyish-blue *biset* (M) 'rock dove' (*Columba livia*) from which domestic and feral pigeons are descended
  - the greyish-pink *colombin* (M) 'stock pigeon' (*Columba oenas*), smaller than the others.

During this early period and alongside the feminine *colombe*, another (plural, masculine) form appears, *colons remiers* (M) 'wild doves' (1225), meaning 'branch (*remier*) of the dove (*colon*) family'. Over the next two hundred years the compound form was reduced to *ramier* (1415), denoting the largest of the migratory doves to visit Europe, the Eurasian 'wood dove'/'wood pigeon'. While the orthography of *colon* differs from *colombe*, its pronunciation suggests that it may be derived from *colombe* through elision of the word-final consonantal phone /b/. These migratory 'pigeons' once arrived and departed *en masse* in enormous groups of a hundred thousand or more, although today in some regions they have become sedentary. This noun (*colons*) *ramier* could not only provide a lexical differentiation from the migratory *tourterelle* found in similar wooded habitats, but could address its role as the largest of the European doves, a comparative difference in size that would have been well-known due to their popularity as birds widely hunted for their delicious flesh.

In the sixteenth century (1552), literary records identify a further noun, the masculine *bizet*, later *biset*, derived from the adjective *bis/bise* 'greyish-brown', to denote 'rock dove'/'rock pigeon' – the only truly sedentary dove-like bird native to certain regions of France. This species had succeeded in colonising and spreading along otherwise inhospitable and wild coastal regions of

Normandy and rocky shoreline cliffs of Brittany and Picardy, as well as rocky cliffs of the *massifs méditerranéens* 'Mediterranean plateaus' and other local areas in the southern Alps (<www.oiseau.net>, 2007). However, as each new generation succeeded in colonising these regions, a sedentary instinct became more crucial and over time any tendency to continue spreading outwards disappeared.

The term *colombin* (M) 'stock pigeon' was originally an adjective *colombin,-ine*, used in the fifteenth century to describe textiles with the same metallic change in colour as birds designated *colombe*. At some later stage the masculine form of this adjective became the substantive *colombin* (M) 'stock pigeon' since it is found in the *Dictionnaire universel d'histoire naturelle* (Dessalines d'Orbigny, 1845, <books.google.com>, 2007). Both the compound form *pigeon colombin* and simple form *colombin* are used today. Until recently the *colombin* was also a migratory visitor to Europe and today those in Western Europe are largely sedentary. Like *biset*, the instinct to migrate has been lost. The *colombin* is half the size and weight of the *tourterelle* and is the smallest of any of the European dove-like birds, which is of some significance given the place of birds – particularly migratory birds – in diets at the time. Thus this 'migratory' bird would have been regarded as different from other 'migratory' cooing birds in its 'comparative' (diminutive) size. The coining of this masculine term *colombin* suggests a relatedness to *colombe* as a migratory dove but one that is different. This example adds weight to the previous suggestion that 'different' may be associated with masculine gender assignment. The basis of that difference, its diminutive size, appears to be reflected in the diminutive suffix *-in*, particularly and it is shared by another 'diminutive' bird, *poussin* (M) 'chick'. Thus, in the construction of this noun and in its gender assignment, the two most crucial semantic features that distinguish it from other European migratory doves appear to be recognised.

The regional term *palombe* (F) was used in the southern part of France. It is first recorded in 1474 although it comes from a much older Old Gascon regional name *palomba* (cf. the Latin *palumbēs* (M/F) 'wood-pigeon/'ring dove', ELD, 1966:579) and is a term that applies to the migratory *ramier* as it did in Latin. Feminine gender assignment for the migratory *palombe* may be argued to relate to a bird 'free to come and go', as for the feminine *colombe*.

Thus, evidence suggests that for much of their history, speakers in the north used *colombe* (F) to denote any 'migratory' or 'spreading' dove-like birds, while speakers in the south used *palombe* (F). The semantic relationship between attributes 'free' and 'spreading' not only find a contrast with 'fixed'/'constrained', but the association between notions 'free'/'spreading' and feminine gender elsewhere, as for *aigle* (F) 'eagle' in the context the bird as 'free' or 'unrestrained', finds a contrast with the masculine *volatile* (M) 'farmyard bird', kept in captivity.

For individual species, these different lexical terms would have recognised differences in relation to each other, *ramier* different from *tourterelle* as larger and *colombin* as smaller than other European 'dove-like' birds. The notion 'different' may be salient for both in terms of their gender assignment, while their vowel-final pronunciations are consistent with other nouns distinguished by their 'comparative' size against some standard.

#### 4.5.1.2 Change in generic term from *colombe* (F) to *pigeon* (M)

The increasingly sedentary instinct of *biset* 'rock dove' eventually led it to accept a more captive state since it adapted easily to dovecote living and breeding. This domestication gave way to large-scale breeding – for their flesh and for their commercialisation or sport as 'homing' or 'messenger pigeons'. The application of the same feminine noun *colombe* to both 'migratory' species and birds constrained by their own nature or held in captivity would have been incompatible and in this context one might anticipate the coining of a masculine term offering some potential to apply to both, and the precise nature of the specific attribute underpinning that gender assignment requires identification.

There is evidence of an early thirteenth century onomatopoeic *pijon* (M) 'newly hatched bird' for the peeping cry made by any kind of young bird (<atlf.atlf.fr>, 2004). By the end of the thirteenth century *pijon* appears in the context of various members of the 'dove' family and by the sixteenth century (1530) had become *pigeon*, to incorporate any of several different kinds of small-sized, plump-chested, tiny-headed, 'dove-like' birds with a cooing call. Given the association between 'mixed' or 'diverse' for unlike elements and masculine gender assignment for collective terms, it may be that the newly coined, masculine, term *pijon* could then apply to

any bird with the same intermittent *recoulement* without regard to changes that may occur in their migratory or sedentary habit or differences in their colourations. One can consider that as the use of *pigeon* became more widespread, the use of *colombe* would have waned in the north. This change would not have been required for *palombe* in the south, which region continued to experience migrations of pigeons leaving the cold of more northerly climates.

The limited application of *colombe* today to the 'white dove' bred in captivity for the purpose of being 'unleashed' or 'set free' as a symbol of peace continues the sense argued to relate to its original feminine classification. However, other restricted applications of *colombe* also occur, eg. *La Colombe d'Or*, the famous restaurant, perhaps as a symbol of some 'unique' quality.

#### 4.5.1.3 Other masculine and feminine nouns denoting 'pigeon', 'dove'

There are five sub-families of 'pigeon' and around three hundred sub-species. Pigeons have a similar world-wide distribution to the 'goose', being found in almost all terrestrial habitats except extreme northern and southern latitudes. Any explanation must fit with this complexity and the different terms in the lexicon (<[www.pigeons-france.com](http://www.pigeons-france.com)>, <[fr.wikipedia.com](http://fr.wikipedia.com)>, <[www.birdlife.org](http://www.birdlife.org)>, <[www.mangoverde.com](http://www.mangoverde.com)>, 2005) not yet discussed that are set out in Table 4.20 below.

Table 4.20: Nouns denoting pigeons and doves

##### Masculine nouns

<i>carpophage</i>	M	'imperial-pigeon'	inhabit areas of the Solomon Islands, living in tiny groups in a specific location
<i>colombar</i>	M	'pigeon'	green and yellow, found in specific locations
<i>diduncule</i>	M	'tooth-billed pigeon'	Samoa pigeon that inhabits a specific tree that is the sole source of its food
<i>founingo</i>	M	'Madagascar blue pigeon'	blue pigeons specific to Madagascar
<i>goura</i>	M	'crowned pigeon'	the largest members of the pigeon family, found in lowland and swamp forests of Papua New Guinea, easily tamed
<i>pigeon domestique</i>	M	'domestic pigeon'	tame enough to exist in urban environments
<i>p. cendré</i>	M	'ashy wood pigeon'	Subcontinental pigeon restricted to hills between 1100 and 3200 m., solitary or paired
<i>p. des lauriers</i>	M	'laurel pigeon'	timid, but attack intruders by flapping wings loudly; restricted habitat

<i>p. migrateur</i>	M	'passenger pigeon'	American pigeon now extinct (see <i>tourtre</i> below)
<i>p. voyageur</i>	M	'homing pigeon'	bred to return to captivity
Feminine nouns			
<i>colombine</i>	F	'partridge pigeon', 'bronzewing'	iridescent multicoloured plumage, watermarked
<i>gallicombe</i>	F	'bleeding-heart pigeon'	white chest marked with 'blood'; sedentary
<i>tourterelle</i>	F	'laughing dove'; 'collared or mourning dove'	'various Old World doves, brown wings, pink chest, watermarking on wings, speckled collar; migratory
<i>tourtre</i>	F	'passenger pigeon'	migratory American pigeon, now extinct

The different gender assignments in this set require explanation.

The feminine noun *tourterelle* is used in extension to denote a number of species of pigeons beyond the Eurasian 'turtledove'. The *tourterelle tigrine* (F) 'spotted dove' does not typically flock but forages singly, in pairs, or in small groups if the site has sufficient food. It is typically sedentary but when a certain size is reached, younger birds must leave the flock and forge out on their own to find new feeding sites and establish a new colony. The success of this species in constantly finding, colonising and adapting to new sites that has led to their ever-increasing spread across the landscape is well documented. This ability to continue to spread out from one family setting and take root nearby and form a new, independent family group mirrors that of the human family, *famille* (F), fish such as *carpe* (F) 'carp', animals such as *souris* (F) 'mouse', and many plants, such as *bruyère* (F) 'heath' and *callune* (F) 'heather', etc. The association between this attribute and feminine gender assignment shared by these living things will continue to be explored in the following chapters.

The brownish-grey *tourterelle turque* (F) 'Eurasian collared dove' was not seen in Europe before the 1900s but is now extraordinarily common, having successfully spread at an astounding rate from its native India and Sri Lanka through Europe and beyond the Arctic circle. It is noted that '... no collared doves bred in Britain before 1955' (<[www.garden-birds.co.uk](http://www.garden-birds.co.uk)>, 2007). From its introduction in the Bahamas in the mid-1970s, its spread through

the United States west to California and north towards Canada '... is still an evolving story' (<[www.birds.cornell.edu](http://www.birds.cornell.edu)>, 2007). It is a sedentary bird that leads a paired existence, but it is able to spread because the young are sufficiently adaptable that they can disperse and establish their own colonies regardless of conditions they meet. As a sedentary pigeon one might have anticipated masculine gender, as for *biset* (M) 'rock dove', but it would appear that it is this ability to spread out in a continuous way that is crucial.

Ornithologists also apply *tourterelle* to other species in the family *Columbidae* such as *tourterelle à ailes blanches* (F) 'white-winged dove', a mostly migratory bird that breeds in southern parts of USA and winters in Mexico and Central America which has expanded into parts of South America and the Caribbean. Where most pigeons eat either seed or fruit, this bird has adapted to enjoy both – particularly cactus fruits and seeds. Its adaptability has allowed it to survive and flourish across a wide range of habitats, woodlands, scrub, semi-desert and cultivated areas as well as urban environments, from sea level to 1500 metres, and today it can be found as far north as Alaska, and from Ontario to Newfoundland (<[www.birds.cornell.edu](http://www.birds.cornell.edu)>, 2004).

The *tourterelle triste* (F) '(American) mourning dove' is not only migratory but is a prolific breeder since females may have up to six broods in a single season (<[en.wikipedia.org](http://en.wikipedia.org)>, 2007). While still hunted as game, it has increased its range due to its ability to cope successfully with conditions altered by humans, such as cutting of forests and burning off of grass, and its adaptability in diet and water intake in altered landscapes has allowed it to spread and colonise continuously. It now ranges from Central America to southern Canada (<[www.enature.com](http://www.enature.com)>, 2007).

The noun *gallicolombe* (F) 'bleeding heart pigeon' denotes species of 'dove-like' birds of the Philippines that live in a habitat equally as restricted as pigeons denoted by masculine nouns *carpophage*, *diduncule* and *goura*. However, the colouration of birds known as *gallicombe* is unique. Their white chests have blood-red feathers in the centre as if from a shot through the heart, while a sub-species has paler pink feathers surrounding the 'wound' giving the appearance

of seeping blood. Since these pigeons are constrained to equally restrictive habitats as other 'pigeons' that are masculine, it is possible that the feminine gender assignment for these pigeons relates to their 'unique' colouration, one that distinguishes the *gallicombe* from all other dove-like birds. If so, it suggests that uniqueness outranks 'constrained'.

The migratory *tourtre* (F) 'passenger pigeon' (*Ectopistes migratorius*), a native of eastern USA, was '... possibly one of the most numerous birds on earth'. It once flourished in flocks in the millions, so dense that they are said to have 'darkened the sky for days as they passed overhead' (<en.wikipedia.org>, 2004). Its feminine gender assignment is consistent with the 'migratory' *tourterelle*, *colombe* and *palombe* in designating birds 'free to come and go'. However, during the period following the introduction of railways in the nineteenth century, pigeon meat became commercialised as cheap food and these birds came to provide an endless source of meat, feathers and fat. They were hunted on a massive scale, wherever they landed and over a very short time numbers were decimated. Unable to find a safe habitat in which to breed in the wild, and unable to adapt to breeding in captivity, the *tourtre* became extinct early in the twentieth century (<www.borealforest.org>, 2007). Since then this bird has undergone both a change in name and change in gender assignment in French since the former feminine *tourtre* is now identified as *pigeon migrateur* (<en.wikipedia.org>, 2007), a masculine term. The association here between masculine gender assignment and 'extinct' is consistent with other cases raised earlier, eg. *dodo/dronte* (M) 'dodo', in Ch. 3.

Some of the more esoteric birds are denoted by masculine nouns, including *carpophage*, which term applies to the *carpophage des Bismark* (M) 'yellow-tinted imperial-pigeon' and *carpophage à cire rouge* 'red-knobbed imperial-pigeon' that live in tiny groups in very restricted environments of the Solomon Islands where they feed on fruit in tops of trees clumped together, but not where a fruit tree grows in a isolation from others (<www.oiseau.net>, 2007). The masculine *diduncule strigirostre* (M) 'tooth-billed pigeon' is a Samoan bird so restricted in its habitat that it is found only where there is a specific tree (*Dysoxylum*) that appears to be the sole source of its food (<www.oiseau.net>, 2007). The term *goura* applies to three 'crowned' species of cooing birds, the largest member of the pigeon family, found in



forests of lowland and swampland in Papua New Guinea. In its 'restricted' habitat, its 'crested' head, a feature stereotypically associated with 'male' fowl', and in its dimension as the largest member of the pigeon family, masculine gender is consistent with other examples where these individual characteristics are found.

All pigeons have extraordinary abilities in relation to strong flight, an innate ability to return to a location, a tolerance of difficult conditions, but they exploit them differently. Nouns denoting species that are able to exploit their potential in ways that allow them to flourish and spread across the landscape, eg. *tourterelle turque*, *tourterelle triste*, *columbine*, etc., appear to be feminine. Masculine nouns denote species that have become extinct since they are unable to adapt quickly enough to changes, eg. the 'passenger pigeon' originally denoted as *tourtre* (F) and now *pigeon migrateur* (M). It occurs for species that are sedentary since the instinct for migration that led them to explore and flourish has been lost, eg. the masculine *carpophage*, *diduncule* – except where such birds are unique in some way, in which case they are feminine, eg. the feminine *gallicombe* 'bleeding heart' pigeons. It is also possible that the presence of an attribute associated with 'male' may be associated with masculine gender for *goura* (M), the term that applies to 'crested pigeons' of Papua New Guinea that has been able to spread to surrounding islands. These 'crested pigeons' are so accepting of humans that they are easily tamed, an attribute that also appears to be associated with masculine gender.

#### Application of attributes to other lexical fields

In some cases these attributes can be identified as significant in other lexical fields beyond living creatures. For instance, the semantic link between notions such as 'restricted', 'constrained' and 'captive' and their association with masculine gender assignment appears to be crucial, eg. *lac* (M) 'lake', a body of water that is entirely 'enclosed'. This masculine noun can be contrasted with the feminine *lagune* (F) 'lagoon', a stretch of sea between a coastal reef and the shore that is not cut off from open water (LRPT, 1994:649), and *baie* (F) 'bay', a semi-circular opening in the shoreline, feminine nouns that apply to bodies of water that are 'not enclosed'. Contrasting meanings of *lac* and *lagune* can be compared with others – the masculine *trou* (M) 'hole', which has no opening at the furthest extent, while *trouée* (F) 'breach/pass' provides an

opening through which people may pass; the masculine *huis* (M) 'door' which closes off an opening to give privacy, while *porte* (F) 'doorway/gateway', provides an opening through which people and objects may pass. Further, the association between the notion 'open' and feminine gender assignment was mooted in Chapter 3 in relation to *orbite* (F) 'eye socket', an opening in the cheekbone in which the eye sits. This notion – an opening through which something can pass – may account for contrasting feminine gender assignments in a considerable number of categories, eg. *fenêtre* (F) 'window', *trappe* (F) 'trapdoor' (practical opening in floor or ceiling), *perce* (F) 'hole' (in flute, etc.), *brèche* (F) 'gap, breach' and *fente* (F) 'slit' – openings in otherwise solid matter or material, as well as *bague* (F) '(finger) ring', *bouche* (F) 'mouth', even *plume* (F) 'pen', through which ink can flow. The notion 'closed' may be associated with *étang* (M) 'pond, billabong', *jardin* (M) 'garden' (an area closed off from wandering animals), and *parc* (M) 'park', *entièrement clos* 'entirely closed off' (LRPT, 1994:811). These examples from a range of lexical fields suggest that where attributes 'closed off/constrained' or 'open/free' become salient, 'closed' is associated with masculine and 'open' with feminine in a regular and consistent way.

#### 4.5.1.4 Word-final pronunciation

The different word-final pronunciation patterns amongst nouns denoting 'pigeon' are not yet fully accounted for. A physical characteristic of all pigeons is their curved, plump chest to the extent that it is used in the phrase 'pigeon-chested' that describes a malformed convex chest in humans. Earlier analysis suggests that other birds similarly described as curved, rounded or plump-chested also have consonant-final pronunciation, eg. *cygne* (M) 'swan', *canard* (M) 'duck'. The same 'plump-chested' shape may also be associated with consonant-final pronunciation of nouns denoting various 'pigeons' regardless of gender assignment, eg. *carpophage*, *colombe*, *columbar*, *columbine*, *diduncule*, *gallicombe*, *palombe*, *tourterelle*, *tourtre*. In the early history of birds identified as *colombe*, *palombe* and *tourterelle*, such terms identified not only a plump-chested appearance but their arrival in spring was greatly anticipated for the flavour and succulence of their delicious flesh, an attribute that is also associated with consonant-final pronunciation.

Vowel-final pronunciation for *ramier* and *colombin* is argued to relate to a comparative

difference in size with other European doves – 'augmentative' for *ramier*, 'diminutive' for *colombin*, and it may also be salient for *goura*, a pigeon that is larger than all others. For the generic term *pigeon*, we know that feathers make up more than half of the total body weight of any pigeon, and vowel-final pronunciation is consistent with *oie* (F) 'goose', equally densely covered. This attribute may also account for vowel-final pronunciation of other terms denoting pigeons, such as *biset* and *founingo*.

#### 4.5.2 Members of the 'finch' family

Finches are small to medium-sized seed-eating songbirds for which there are various terms in French, as set out in Table 4.21 below.

Table 4.21: Nouns denoting members of the 'finch' family

Masculine nouns			
<i>bouvreuil</i>	M	'bullfinch'	sedentary, resident in France
<i>canari</i>	M	'canary'	endemic to Canary Islands, captive state in France
<i>chardonneret</i>	M	'goldfinch'	sedentary, resident in France
<i>grosbec</i>	M	'hawfinch'	sedentary, resident in France
<i>pinson</i>	M	'chaffinch'	sedentary, resident in France
<i>roselin</i>	M	'rosefinch'	sedentary, found in Alsace Lorraine
<i>serin</i>	M	'serin'	sedentary, resident in Provence
<i>tarin</i>	M	'siskin'	partially migratory, sedentary in France
<i>verdier</i>	M	'greenfinch'	partially migratory, sedentary in France
Feminine nouns			
<i>linotte mélodieuse</i>	F	'linnet'	migratory visitor to France
<i>linotte à bec jaune</i>	F	'twite'	migratory visitor to France

These birds are typically small in size, and while this feature could be expected to relate to a comparison between smaller and larger birds, it seems unlikely that it would account for the breadth of masculine terms in this set. Buffon notes that efforts to keep the docile and pretty *linotte mélodieuse* in captivity for the pleasure of its colouration failed since the bright red head and chest colours that last for some time in the wild quickly fade in captivity (Tome 4:60, <www.oiseau.net>, 2006), unlike the bright colouration of the *canari* (syn. *serin des Canaries*) (M) 'canary', first bred in captivity in the 1600s.

However, different habits can be observed in Table 4.21 in that, regardless of whether they are migratory elsewhere, species that are sedentary in France have masculine gender assignment while 'migratory' species that visit France have feminine gender assignment. These oppositional attributes are consistent in their association with contrasting gender assignments observed previously – for petrels, eg. the sedentary *pétrel géant* (M) 'Southern giant petrel' and migratory *océanite cul blanc* (F) 'Leach's storm petrel', and for European pigeons, the 'sedentary' *biset* (M) 'rock pigeon' and the migratory *tourterelle* (F) 'turtledove' and *tourtre* (F) 'passenger pigeon' (until its extinction) – and offer a potential explanation for these contrasting classifications.

#### 4.5.2.1 Potential counter-example

These explanations cannot account for masculine gender assignment of *sizerin* (M) 'common redpoll'. However, Buffon (Tome 4:219 at <www.oiseau.net>, 2005) notes that one can approach close by these birds *sans les effaroucher* 'without alarming them'. It is possible that this lack of wariness may be associated with its masculine gender assignment and while the basis of that association is unclear, it does appear that the contrast between a strong instinct for self-preservation that results in flying away at the first sense of danger and the lack of that instinct are associated with and may account for different gender assignments – the former associated with feminine gender assignment and the latter with masculine gender assignment.

#### 4.5.2.2 Word-final pronunciation

Variations in word-final pronunciation patterns amongst the various nouns denoting 'finch' also require explanation. While consonant-final pronunciation for *bouvreuil*, *grosbec* and *linotte* may relate to a stout build typical of finches, the attribute that might account for vowel-final pronunciation remains unclear. However, the coining of names for various species directs our attention to the significance and colour of the plumage for these birds as, for instance, *roselin* which is derived from *rose* 'pink', *verdier* from *vert* 'green', even *chardonneret* whose speckled plumage reflects seeds of the *chardon* (M) 'thistle'. It may be that plumage that is significant in some way (density, colour, etc.) is recognised through vowel-final pronunciation. Variations in word-final pronunciation among the individual names may be related to alternations between round-chested build and colourful plumage typical of colourful stoutly-built finches.

### 4.5.3 Heron-like wading birds

Two nouns, the masculine *héron* and feminine *aigrette*, both apply to very similar long-legged wading or shore birds with a slender stork-like form. These birds typically form colonies of considerable size. Other nouns also denote 'heron-like' birds, eg. *ibis* (M) 'ibis', *savacou* (M) 'boat-billed heron'. In both English and French all egrets are herons, but not all herons are egrets. Usage of French terms *héron* ('heron') and *aigrette* ('egret') is also confusing since some birds that are *héron* in French are 'egret' in English while those that are *aigrette* in French can be 'heron' in English. Differences in appearance cannot account for differences in usage since *grande aigrette* (F) 'great egret' is similar in height to birds designated as *héron*, and the common species *aigrette garzette* (F) 'little egret' (*Egretta garzetta*) has a masculine synonym, *héron blanc* (M). Some members of the 'heron' family are much smaller than any *aigrette*, eg. *crabier* (M) 'squacco heron', *blongios nain* (M) 'little bittern'. Differences in the gender assignments of these nouns require an explanation, as they do for synonyms.

The French term *aigrette* applies to a number of species of heron-like birds, as follows.

Table 4.22: Birds identified as *aigrette* (F) 'egret'

<i>aigrette garzette</i> syn. <i>héron blanc</i>	F	'little egret'	Old World white heron; develops remarkable head and shoulder plumes at breeding time
<i>aigrette neigeuse</i>	F	'snowy egret'	white heron that develops long silken plumes on its head and chest
<i>aigrette ardoisée</i>	F	'black heron'	black heron, ruffled crest of black plumes
<i>aigrette des récifs</i>	F	'Western reef heron'	seasonal change from completely white light phase to dark phase of black with white throat
<i>aigrette roussâtre</i>	F	'reddish egret'	seasonal change from reddish dark phase to completely white light phase
<i>aigrette tricolore</i>	F	'tricoloured heron'	dark plumage with white stripe down its neck and white belly

Since the most common *aigrette* is the *aigrette garzette*, one might presume that any white, or white-phased medium-sized slender heron-like wading bird would be denoted by the feminine noun *aigrette*, while similar grey-coloured birds would be called by the masculine *héron*.

However, that account would not explain the use of *aigrette* in its application to those with other

colours, eg. *aigrette tricolore* (F) 'tricoloured heron', nor the use of *héron* for *héron blanc*, the masculine synonym for the white *aigrette garzette*.

Colonies are typically noisy, eg. *héron cendré* (M) 'grey heron', *aigrette garzette*, but some species are silent – except when defending the nest, eg. *aigrette ardoisée*, *héron pourpre* (M) 'purple heron', and the use of different terms and gender assignments here suggest that none of these characteristics is significant in relation to gender assignments of 'herons'.

Some 'herons' are 'nocturnal', eg. *savacou huppé* (M) 'boat-billed heron', *héron strié* (M) 'green-backed heron', and *héron pourpre* (M) 'purple heron' (<www.oiseau.net>, 2005). While 'nocturnal' is associated with feminine gender assignment for birds of prey, it becomes salient only because it finds a contrast with 'diurnal' birds of prey. Since these 'nocturnal' herons are masculine, it suggests that 'nocturnal' is not salient in distributions of gender assignment for herons and egrets.

Descriptions show that members of the 'heron' family have different ways of obtaining food (fish, amphibians, aquatic insects). Some 'heron-like' birds fish in a style known as *pêche à l'affût* 'fishing by waiting', keeping a look-out for passing prey – by remaining motionless sometimes for hours, or stalking slowly through shallow waters. At the moment they locate their prey, they freeze into a motionless state and then suddenly launch their typically long tapering bills directly at the prey. Other herons are more creative and use more pro-active complex techniques to locate and draw prey towards them. Examples of both types are set out in the following Table 4.23 .

Table 4.23: Heron family according to techniques for obtaining food

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Masculine nouns

<i>bihoreau</i>	M	'night-heron'	fishes à l'affût
<i>blongios nain</i>	M	'little bittern'	fishes à l'affût
<i>butor (étoilé)</i>	M	'Eurasian bittern'	fishes à l'affût
		syn. 'booming bittern'	
<i>crabier</i>	M	'squacco heron'	fishes à l'affût
<i>héron cendré</i>	M	'grey heron'	fishes à l'affût
<i>héron pourpre</i>	M	'purple heron'	fishes à l'affût

<i>héron à tête blanche</i>	M	'Pacific heron'	fishes à l'affût
<i>savacou huppé</i>	M	'boat-billed heron'	fishes à l'affût

#### Feminine nouns

<i>aigrette ardoisée</i>	F	'black heron'	complex techniques
<i>aigrette bleue</i>	F	'blue egret'	complex techniques
<i>aigrette garzette</i>	F	'little egret'	complex techniques
<i>grande aigrette</i>	F	'great egret'	complex techniques

Complex techniques include creating conditions more likely to find prey, or to draw prey towards them. The *aigrette garzette* crouches over and deploys its wings to reduce sunlight, and the *aigrette ardoisée* holds its wings spread out umbrella-like in front of and often above its head with wing tips just grazing the water, to better observe the floor beneath. The *aigrette ardoisée*, *aigrette bleue* and *grande aigrette* use their long toes to stir up the bottom and dislodge prey, the *aigrette garzette* can stand on one foot while stirring the bottom with its other to dislodge prey, and make waves with the same foot on the surface of the water to draw prey closer to its bill, while the *grande aigrette* (F) 'great egret' can also be observed stealing food from other smaller herons, even from members of its own family circle. In each case these techniques uncover or obtain prey that the birds would not otherwise find.

This analysis suggests that different gender assignments for herons can be accounted for by a contrast between the development of creative fishing techniques that are likely to increase the food supply, an attribute associated with feminine gender, and a technique that involves a wait-and-see approach, and one that is potentially endangering, associated with masculine gender.

While the *blongios nain* also fishes à l'affût, this bird is easily recognised as the smallest of all heron-like birds, an attribute identified in both French and English compound forms, *nain*/'dwarf' and 'little bittern'. Thus, masculine gender for this heron is consistent with other 'herons' that fish à l'affût, as it is in regard to a relative difference in size from other herons.

#### 4.5.3.1 Potential counter-examples

Not included in the above list are potential counter-examples *héron garde-bœufs* (M) 'cattle egret', *héron strié* (M) 'green-backed heron' and *héron vert* (M) 'green heron'. The *héron*

*garde-bœufs* is a smallish heron that lives a more collective existence than others, both at night and in feeding. It feeds in aquatic habitats and also in dry grassy habitats as a companion to cattle where it can obtain insects from their backs as well as under and between their legs as they disturb the ground. This habit increases their likelihood of obtaining food but at the same time places them at risk of harm in being trampled underfoot or swatted by tails. This 'endangering' attribute may be associated with its designation as *héron* rather than *aigrette*. As a 'smallish' heron, its vowel-final pronunciation is consistent with other examples displaying the same 'comparative' difference in relative size, as is vowel-final pronunciation for *blongios nain* 'little bittern' whose small size is overtly identified in terms that form the compound noun in both French (*nain* 'dwarf') and English ('little').

The nocturnal *héron strié* is another possible counter-example. Its extensive range of fishing techniques include hunting amongst marshland, fishing by day in urban zones or from a jetty or boat, or perfectly camouflaged on tree branches overhanging water. Further, it can jump, swim, plunge after its prey, and can also stir and sweep water to draw prey closer and has been observed to use bread as a lure to bring prey to the surface, a range of techniques associated with feminine gender assignment for other herons. However, the *héron strié* nests in isolation from others of its kind, leaving it without the protection offered by larger colonies in which herons typically nest. When a predator approaches a nest, adults do not defend their young. Rather, the young must protect themselves by leaving the nest to perch in branches. This response may make it more difficult for predators to capture them all, but it also exposes the young to danger from falling to death before they have learnt to fly. The association between masculine gender assignment and a habit that exposes the young to danger from falling is similar to that of other birds, eg. *guillemot* (M) 'guillemot'.

The diurnal crested *héron vert* also has complex techniques for obtaining food, including swimming after its prey. But when under threat, or disturbed, it lifts up its crest, stretches its neck and wags its short tail. For a bird that does not tolerate disturbance such responses are economical but they are not particularly menacing, and are potentially endangering. While the *héron tricolore* also uses its feet to stir prey loose and can change its foraging and feeding



strategies to obtain its preferred diet of fish, it builds its nest on mudflats after water has receded. Nests 'can be greatly compromised by cold weather, predation' and abrupt changes in water levels that can occur (<www.oiseau.net>, 2005), putting them at extraordinary risk. Attributes that expose a bird and/or its young to danger are consistently associated with masculine gender assignment.

Another potential counter-example is feminine gender assignment for *spatule* (F) 'spoonbill', which wades through water sweeping its long, touch-sensitive, spoon-shaped bill from side to side, a fishing technique closely associated with masculine birds. However, these extraordinary bills make the *spatule* unique, and the association between 'unique' and feminine gender assignment is consistent with other birds that are considered 'unique' in some way, eg. *frégate* (F) 'frigatebird', *grouse* (F) 'red grouse', *céréopse cendrée* (F), etc. Consonant-final pronunciation for *spatule* may possibly relate to its more solid build than other herons.

While the fishing technique of the *butor* (M) 'Eurasian bittern' matches that of other masculine birds, this heron is noted above all for its booming, far-carrying, resonating bull-like call, repeated at dawn and dusk. For a bird whose instincts make it wary by nature, an adaptation such as this booming repetitious call is particularly unhelpful in keeping its presence hidden, particularly from those that would do it harm. This adaptation places its life at risk, and may be associated with its masculine gender assignment the same way as other nocturnal birds whose calls expose them to danger, such as *engoulevent* (M) 'nightjar', and *râle* (M) 'rail', even *rossignol* (M) 'nightingale'.

The various nouns and descriptions of birds they denote suggest that manœuvres or habits that may be harmful or may disadvantage some herons over others, or do not exploit gifts to the full potential enjoyed by others, may be associated with masculine nouns, while those that have adapted habits to their fullest advantage, or advantage them over others, particularly in enhancing survival to the fullest extent, appear to be associated with feminine nouns.

#### 4.5.3.2 Use of *héron* as the generic term

Since *héron* 'heron' and *aigrette* 'egret' apply interchangeably in some cases, the question as to why *héron* is used as the generic term rather than *aigrette* requires an explanation. In applying to long-legged wading birds that can be distinguished from other wading birds through their comparatively taller size, the masculine vowel-final term *héron* is consistent with other nouns that identify birds in relation to a difference in comparative size in a way that the feminine noun *aigrette* is not.

#### 4.5.3.3 Word-final pronunciation

While some word-final pronunciations amongst nouns denoting 'heron', 'egret', etc. are accounted for, others remain unexplained. Heron-like birds typically have a slender body shape, and this shape may be associated vowel-final pronunciation not only for *héron* but for other 'heron-like' birds, such as *savacou huppé*, *bihoreau*, *crabier*, etc.

It is more difficult to account for consonant-final pronunciation of *aigrette*. Although birds designated by this term are also identifiable through their long tapering bills, the same bill shape is shared by many herons. What appears to be more crucial, however, is the agility some herons have and others do not that enables them to develop more extensive techniques that can food otherwise beyond their reach. The possible saliency of 'agile' in relation to birds is discussed in relation to movement through the air, eg. *aigle* (M) 'eagle' *crécerelle* (F) 'kestrel', *condor* (M) 'condor', etc., and on the ground, eg. *marouette* (F) 'spotted crane', and these nouns also have consonant-final pronunciation. This example provide evidence of an association between 'agile' and consonant-final pronunciation that will continue to be explored in the analysis of other living creatures.

#### 4.5.4 Crow family, incl. *corbeau* (M) 'raven' and *corneille* (F) 'crow'

Earlier findings suggest that 'black' may be associated with masculine gender assignment, leaving feminine gender assignment of *corneille* (F) 'crow' unaccounted for. However, given other associations between plumage and vowel-final pronunciation for finches and pigeons, gender assignments require further examination.

The feminine noun *corneille* applies to an all-black member of the crow family (*Corvus*), one of three large corvine birds. It is one of three large black European members of the corvine family along with (*grand*) *corbeau* (M) 'raven', and (*corbeau*) *freux* (M) 'rook', that share the same iridescent black plumage, enjoyment of heights, large size and other aspects of appearance. These similarities mean that when they are found in similar domains, particularly open fields or more urban environments, distinctions between them are difficult to make. Indeed, in the wider community English speakers refer to this family of birds as 'crows' while French speakers use the term *corbeau*. Images show robust-shaped birds with bills sharply *effilé* 'narrowing to a point', that enable each of these birds to pick up and crush hard seeds; at the same time they allow the *corbeau* and *corneille* to become carrion eaters since tips can tear into flesh.

Differences between these three black European 'crows' can be observed by comparisons along various dimensions such as wingspan, length and weight, as shown in Table 4.24 below.

Table 4.24: Three black birds – *corbeau* (M) 'raven', *corneille* (F) 'crow', *freux* (M) 'rook'

			Wingspan (cm.)	Length (cm)	Max weight (g.)
( <i>grand</i> ) <i>corbeau</i>	M	'raven'	118	69	1600
<i>corneille</i>	F	'crow'	100	47	600
( <i>corbeau</i> ) <i>freux</i>	M	'rook'	94	47	500

In reality, these differences are extremely difficult to gauge. Even close up we cannot tell, and a smaller bird may simply be an immature *corbeau*. For birds that love great heights, either perching or on the wing, such distinctions become even more difficult to assess and the aerial abilities and love of planing amongst these birds means that sightings regularly identify them as birds of prey. Rooks are generally gregarious while crows are typically solitary. Amongst these three cawing birds are distinctive differences in their cawing (<en.wikipedia.org>, 2005). The 'raven' is best known for its harsh «pruk-pruk-pruk» call although it also has a very wide and complex vocabulary including a high, knocking «toc-toc-toc», a dry, grating call, a low guttural rattle and some calls that are almost musical. 'Rooks' – always found in a group – produce a higher pitched «kaaa» that together can be overwhelming. 'Crows' are best-known for their distinctive but intermittent «aark-aark» cawing that is often echoed back and forth between birds. However, while the European ravens and rooks are generally more silent,

particularly in flight, crows have many calls depending on the function or the moment, arrival or departure of other crows, in flight or marking territory, to indicate hunger, or respond to calls of other species which calls can vary regionally (<[www.oiseau.net](http://www.oiseau.net)>, 2005). For a bird better recognised for its constant calling than other attributes, it would not be unexpected to find feminine gender assignment.

#### 4.5.4.1 Other members of the 'crow' family

The smallest member of this family is the *geai* (M) 'jay'. While its colouration makes it 'unlike' any of the others – a pinkish-brown body, blue-and-black wings, and a black-and-white crest – it has a cawing alarm call (<[www.garden-birds.co.uk](http://www.garden-birds.co.uk)>, 2005). This description offers certain notions, 'unlike', and 'crested', an attribute associated with 'male', as well as its relative difference in size each in comparison with other cawing birds, for which there is considerable evidence of its association with masculine gender assignment. The possible association between masculine gender assignment and other various notions mentioned here will continue to be explored.

Another member of the crow/raven family is the *pie bavarde* (F) 'magpie'. Although the term 'magpie' is generally identified with black and white, this bird's black wings and tail are 'a beautiful glossy, iridescent blue, green and purple' (<[www.garden-birds.co.uk](http://www.garden-birds.co.uk)>, 2005), an iridescence shared with the crow and the raven. They are very vocal birds whose harsh, high-pitched, repeated chattering "chacker chacker" call has made *pie* the quintessential exemplar for 'chatterer' – the standard against which other birds (and humans) can be compared, in French and in English, and in spring, large numbers of magpies can be observed to gather together to resolve territorial conflicts and social standing (<[www.garden-birds.co.uk](http://www.garden-birds.co.uk)>, 2005). Given the colouration of the *geai*, it seems less likely that feminine gender assignment would be associated with a plumage that is 'different', while its comparison with the *corneille* and its constant communication makes feminine gender consistent and regular alongside other examples of birds that communicate constantly. It may be that its distinctive plumage colouration is taken account of in its vowel-final pronunciation.

The various other members of the crow family are found in very specific environments, *chocard*

(M) 'alpine chough', limited or constrained to alpine habitats, *crave* (M) 'chough' which lives and breeds in pairs along coastal cliffs in much the same way as *biset* (M) 'rock dove', and *choucass des tours* (M) 'jackdaw', restricted, as its French name suggests, to constructions that offer an elevated position over surrounding terrain.

#### 4.5.4.2 Use of *corbeau* as the generic term

The use of *corbeau* as the generic term also requires explanation. There are two crucial attributes among members of the corvine family. One crucial attribute is a similar colouration shared by almost all members of the family – *noir* – a term that means both 'black' and 'dark' (COFED, 1985:375) and would thus encompass the *choucass des tours* (M) 'jackdaw', whose colouration is described in English as 'black and dark grey' (CED, 1986:812) as well as the American 'crows'. However, any association between 'dark' colouration and masculine gender would exclude both *geai* (M) 'jay' or *pie* (F) 'magpie', suggesting that some other attribute may be more salient.

The other crucial attribute is the loud cawing, intermittent for some and constant for others. This sound is suggested by *cor-* in the nominal stems of both *corbeau* and *corneille*, possibly through their common derivation from the Latin stem for 'call' (observed in Latin terms *cornix* (F) 'crow' and *corvus* (M) 'raven') (ELD, 1966:938). There is clear evidence of an association between feminine gender and birds those that make continuous calls, but a feminine generic term might suggest that all members of this family share this attribute, and they do not. It seems likely that for a set of birds whose hoarse cawing cry is continuous for some and intermittent for others, that vary in size and in colour since most are black but some are not, some of which hunt in open skies while others hunt from a perch, the notion 'diverse' and its association with masculine gender best fits with the masculine term *corbeau* as the generic term, particularly given a similar context in the use of *pigeon* (M) 'pigeon' over *colombe* (F) 'dove'.

#### 4.5.4.3 Use of *corbeau* and *corneille* elsewhere

Nouns *corbeau* and *corneille* are also found in compound constructions denoting other corvine birds, eg. *corbeau familier* (M) 'house crow' and *corneille mantelée* (F) 'hooded crow', both of

which have black and grey plumage. These examples show that an all-black plumage is not a necessary condition for *corbeau* and *corneille* to apply.

For these New World crows, any corvine bird with a 'raven-like' «kronk-kronk» call is identified as *corbeau*, eg. *corbeau familier* (M) 'house crow', *corbeau à queue courte* (M) 'fan-tailed raven', while those with the crow-like «aark-aark» are identified as *corneille*, eg. *corneille d'Amérique* (M) 'American crow', *corneille mantelée* (F) 'hooded crow'.

However, the five Australian members of this cawing family are all designated as *corbeau* in French (<[www.oiseau.net](http://www.oiseau.net)>, 2005), although all five have a crow-like nasal two-note «aark-aark» or three-note call – «aarr-aarr-aarrrrrrrr» – one that few Australians cannot imitate. In the wider community all of these birds are identified as 'crow', which suggests that we understand them to be 'crow-like' – although it is noted that ornithologists use other distinctions since they designate three as 'ravens' ('little raven', 'Australian raven', 'forest raven') and two as 'crows' ('Torresian crow', 'little crow') – even though they, too, have difficulty telling them apart, and consider their behaviour more crow-like than raven-like (<[www.birdsinbackyards.net](http://www.birdsinbackyards.net)>, <[en.wikipedia.org](http://en.wikipedia.org)>, <[www.ozanimals.com](http://www.ozanimals.com)>, 2005). A potential explanation may lie in the contrast between those with a 'crow-like' call and are thus called 'crow', and those that are silent, or have a different call from the «aark-aark» of crows and are thus considered more raven-like.

#### 4.5.5 Summary of related sets

For the various nouns denoting 'pigeon', the analysis suggests that some attributes are associated with feminine gender assignment:

- 'free', 'unconstrained', 'continuous spreading' or 'set free', eg. *colombe*, *palombe*, *tourterelle*
- able to adapt its diet to survive in harsh terrains eg. *colombine*
- unique of its kind, eg. *gallicombe*.

Other attributes appear to be associated with masculine gender assignment:

- 'grounded' or 'constrained' to a specific terrain by its own innate instinct, eg. *biset*, *carpophage*, *diduncule*

- 'extinct', eg. *pigeon migrateur* (M) 'passenger pigeon', formerly *tourtre* (F)
- comparative difference in size, eg. either 'diminutive' for *colombin* and generic *pigeon*, or 'augmentative' for *ramier*.

Attributes suggested to be associated with gender assignment for finches found in France include:

- 'migratory', associated with feminine gender assignment, eg. *linotte*
- 'sedentary', associated with masculine gender assignment, eg. *chardonneret*, *pinson*, *bouvreuil*, *roselin*, *verdier*, etc.
- 'diminutive', eg. *pinson* (M) 'finch', any member of the family of typically brightly-coloured but small-sized songbirds, but 'augmentative' in its specific relation to the 'bullfinch'.

For the 'migratory' *sizerain*, masculine gender assignment appears to be associated with its 'docile' nature, possibly related to the absence of an instinct that would benefit its survival.

For 'heron-like' birds, gender assignments appear to various comparisons between them, in relative size, in uniqueness, and in the different ways these larger wading birds obtain food:

- 'unique', eg. *spatule* (F) 'spoonbill', associated with feminine gender
- different from others in relative size, the 'taller' *héron* (M) 'heron', and 'smaller' *blongios nain*, associated with masculine gender.
- able to develop techniques aimed at obtaining a more constant supply of food, associated with feminine gender assignment, eg. *aigrette garzette*, *aigrette bleue*, *grande aigrette* – except where another attribute endangers their lives, eg. *héron vert*, *butor*, *ibis*, *savacou*, or the lives of their young, eg. *héron strié*, in which case nouns are masculine
- seeking prey from among creatures that pass by, particularly freezing still before darting down to catch it, associated with masculine.

For crow-like birds, certain attributes appear to be associated with masculine gender assignment:

- 'constrained' to a specific habitat, eg. *choucas des tours* (M) 'jackdaw', *crave* (M) 'chough', *chocard* (M) 'alpine cough'
- larger-sized black birds, eg. *grand corbeau* (M) 'raven', *corbeau freux* (M) 'rook'
- 'different' in its smaller size, eg. *geai* (M) 'jay', the smallest of all corvine birds.
- a continuous call, eg. *pie* (F) 'magpie', in flight, at rest, taking off, etc.,
- 'unique' in its call that can distinguish it from all other black crowing birds, eg. *corneille* (F) 'crow'.

It seems that generic terms for family sets, although potentially associated with a relative difference, 'larger' or 'smaller', size, may denote birds that are 'diverse' in crucial attributes that differ in a range of ways – habit, appearance, colouration:

- *pigeon* (M) 'pigeon', for multicoloured birds (from greyish to bright red to the unique bleeding-hearts), some of which are 'migratory' and others 'sedentary' or 'spread' in a continuous way and thus share something of both, a term that can incorporate changes that occur, such as species that become extinct, and formerly migratory species that become sedentary
- *héron* (M) 'heron', while typically 'taller' than other kinds of wading birds, some fish à l'affût while others develop various techniques to increase their food supply
- *corbeau* (M) 'corvine bird', some 'comparatively larger' than other terrestrial birds but others are not, some of which have an incessant 'cawing' cry where others caw rarely, and some are black where others are not
- *pinson* (M) 'finch', birds that are 'smaller' than other songbirds and can thus incorporate 'finches' that are 'sedentary' and 'finches' that are 'migratory'.

It may be that size is hard-won and is thus less easily shed, where habits can change. These judgments suggest a knowledge of members of the family and the ways that various species maintain their attributes from generation to generation. While the sets analysed in the section above pertain to very different species, regularities in these findings are formed where similar attributes are associated with the same gender assignments. This regularity provides further support for a semantically motivated system of gender assignment.



Regularity also occurs in word-final pronunciation across the different sets in this section. In some instances it appears to be associated with a specific attribute, regardless of gender assignment. Those associated with vowel-final pronunciation include:

- light frame or slender build, eg. *héron* (M) 'heron', *bihoreau* (M) 'night heron', etc.
- feathers, either in their density, eg. *pigeon* (M) 'pigeon', or in their colouration/sheen, *pie* (F) 'magpie', *pinson* (M) 'finch', *corbeau* (M) 'raven'
- comparative distinctions in size, 'augmentative' in relation to *ramier* (M) 'wood pigeon' 'diminutive' in relation to *colombin* (M) 'stock dove', *blongios nain* (M) 'little bittern'.

Those associated with consonant-final pronunciation include:

- solid build or round-chested form, eg. *colombe* (F) 'white dove', *bouvreuil* (M) 'bullfinch', *corneille* (F) 'crow', *crave* (M) 'chough', *spatule* (F) 'spoonbill', *aigle* (M) 'eagle'
- agile in movement – through water, eg. *aigrette* (F) 'egret', across terrain, eg. *butor* (M) 'Eurasian bittern'.

#### 4.6 Other issues raised in the analysis

A number of issues emerge during the course of the analysis of nouns applying to birds.

##### 4.6.1 Generic term *oiseau* (M) 'bird'

While documentary information for *oiseau* dates from the early twelfth century, with two forms – the singular *oysel*, and plural *oiseaus*, modern dictionaries (LRPT, 1994:786, <atilf.atilf.fr>, 2004) suggest that *oysel* is derived from *avicellus*, the diminutive of the Latin word *avis* (F) 'bird'.

However, regardless of any historical background, today the classification of *oiseau* must be understood in its most general application to any of the various two-legged, upright, feathered, winged and lightweight members of the animal world – some of which can fly, some of which prefer not to, and others that cannot fly at all. While these various attributes may potentially be associated with the classification process it is not possible to identify that which is salient, and the basis of any specific association with masculine gender assignment or with vowel-final

pronunciation for *oiseau* remains unclear and will continue to be explored.

#### 4.6.2 Historical changes in other generic terms - *canard* (M) 'duck'

The generic term for 'duck' is denoted in English by the 'female' term while in French the term that now denotes 'duck' is the masculine term *canard* rather than the feminine term *cane*. The oldest (thirteenth century) designation of a 'male' duck is *malard*, formed with the suffix *-ard* 'kind'. This noun seems to have coexisted in the fourteenth century with feminine forms *quennes* and *quanes* which gave way in the 15th century to *cane*, possibly derived from a fusion between *caner* 'to quack' and an earlier Old French feminine noun *ane*, the same stem as the Latin *anas*, *-atis* (F) 'wild duck' (<atilf.atilf.fr>, 2004). This noun is found in expressions *cane sauvage*, *cane privée*, *cane d'Inde*, 'wild duck', 'tame' duck, 'Indian duck' (<atilf.atilf.fr>, 2004).

There is some suggestion that *cane* is a back-formation from *canard*. However, this derivational process would not necessarily produce the feminine form *cane* since the alternative form for *-ard* is *-arde*, producing the ungrammatical *\*canarde*. Moreover, there is consistent historical evidence of the use of *cane* as the unmarked case. In yielding to the masculine form as the generic term we are provided with the opportunity to observe changes being exerted by the semantic system. However, examples such as *cane sauvage* and *cane privée* are incompatible since 'wild' and 'tame' are mutually exclusive (although 'domesticated' and 'tame' are not). This incompatibility may well have commenced a process that led eventually to the masculine noun as the unmarked case. It is an area that warrants further examination.

The replacement of *cane* by *canard* for these waterfowl reflects a similar replacement of *colombe* (F) by *pigeon* (M) to apply as the generic term for 'pigeon'/'dove'.

#### 4.6.3 Woodpeckers – an adaptation too far

Although the feminine *épeiche* (F) 'great spotted woodpecker' is the most common woodpecker in Europe, the generic noun for 'woodpecker' is the masculine term *pic*. Literary sources show that the first two terms are very old, *épeiche* (1252) from the form *espèche* (Germanic in

derivation), while *pic* is a twelfth century regional (Ancient Provençal) word (<atlf.atlf.fr>, 2004). Other European woodpeckers are the *pivert* (M) 'green woodpecker', and *torcol* (M) 'wryneck'. Each denotes an arboreal bird with hooked claws that enables it to grip onto vertical surfaces. Supported by their strong tail feathers, these birds constantly drill to draw sap and the insects attracted to that sap, and to excavate holes for their nests. The anatomy of the *pic* is unique in its construction since it must withstand the extreme force required for a bill to attack wood, and it has an extraordinarily long tongue that can reach into crevices and draw out larvae and insects. Woodpeckers are rarely seen but announce their presence with a variety of calls. The *épeiche* also makes a mechanical vibrating rattle or drumming produced by rapidly repeated blows of its bill on a dead branch, which sound resonates across a considerable distance and is often used as a mating call.

It is possible that masculine gender related to *pic* may be motivated by adaptations that are too extreme in that its restrictive diet requires it to drill without end, day-in, day-out, to obtain the food that will give it sufficient energy to drill. It is a habit that offers rest only in death.

However, the *épeiche* can vary its diet since it has developed a unique habit of wedging pine cones or nuts between the bark and the trunk to hold it in place in a vice-like grip so that it can get to the seeds – a behaviour that is not only possible to observe but also leaves evidence.

Feminine gender for *épeiche* may be linked not only to the unique way in which it can increase its nourishment, but to being able to obtain nourishment from a very different source, and masculine to an adaptation that has extended too far.

#### 4.6.4 'Flightless' and the feminine noun *talève takahé* (F) 'takahe'

The earlier discussion regarding 'flightless' birds in §4.4.4 above provides some evidence to suggest an association between 'flightless' and masculine gender assignment, which would then leave unaccounted *talève takahé*, a feminine noun denoting the 'flightless' New Zealand 'takahe'. An explanation is required for this apparent counter-example.

The feminine noun *talève* is more commonly used to denote several marsh or wading birds, members of the genus *Porphyrio* that forms part of the 'rail' family. The best-known and most

common of these is the *talève sultane* (F) 'purple swamphen', which extends from Europe to Africa, Asia and the Pacific. While European 'purple swamphens' are overall purple-blue, African and south Asian birds have a green back, and the Australasian (*Porphyrio melanotus*) and Indonesian birds have black backs and heads (<www.austmus.gov.au/factsheets/purple\_swamphen.htm>, 2009). The New Zealand sub-species of the 'purple swamphen' is known as 'pukeko'. The various sub-members in the species *talève sultane* (*Porphyrio porphyrio*) are all flighted wading birds. Their habitat and means of catching food reflect that of rails, but in looks, and cry, the 'corpulent' *talève sultane* is more hen-like:

*Elle possède un répertoire riche et varié constitué de forts caquètements et gloussements, "tchouk ! tchouk !" doux.*

It has a rich and varied repertoire consisting of loud chattering and clucking, gentle "chook! chook!"

(<fr.wikipedia.org>, 2009, trans. M. à Beckett)

The corpulent *talève sultane* is also noisy when it takes flight, emitting a loud cry that resembles the sound produced by a small trumpet (<fr.wikipedia.org>, 2009), not unlike geese. It is noted that the English term 'purple swamphen' was once designated as 'purple gallinule' although this latter name is now used exclusively to denote the American *talève violacée* (F) 'purple gallinule', which bird discussed below. While 'purple swamphen' adults are sedentary, the immature in each generation spread out:

*les immatures sont erratiques ce qui permet à l'espèce de coloniser de nouveaux territoires et un brassage génétique*

'the immature birds are erratic, which enables the species to colonise new territories and obtain a genetic mixture'

(<fr.wikipedia.org>, 2009, trans. M. à Beckett)

It is also noted that names amongst the various members of the genus *Porphyrio* vary, in that some of these 'rails' are denoted by *talève* and some are not, while *talève* may in some cases translate as 'swamphen' and in other cases as 'gallinule'. For instance, the African *talève d'Allen* is known as 'Allen's gallinule' rather than 'swamphen', as is the American *talève violacée* (F) 'purple gallinule' (*Porphyrio martinica*). This American bird is migratory; though not considered to be a very good flyer, it is nonetheless capable of extended flight:

*un grand oiseau migrateur qui n'hésite pas ... aller hiverner ... en Amérique du Sud*

'... a large migratory bird that leaves every year to winter in the gulf of Mexico

(<www.mcq.org>, 2009, trans M. à Beckett)

The American 'purple gallinule' also shares a similar spreading habit of the *talève sultane* (F) 'purple swamphen' (*P. porphyrio*) since its territory today extends across South Carolina, Georgia, Florida, Arkansas, Louisiana, Mississippi, Alabama, Texas, and Oklahoma, to Central and South America and the West Indies.

The tiny *talève d'Allen* (F) 'Allen's gallinule' (aka 'lesser gallinule') is a shy marsh bird with the same spreading habit since it has come to occupy much of Africa wherever marshlands occur, as well as islands including Madagascar, the Comoro Islands and Mauritius (<[www.kenyabirds.com](http://www.kenyabirds.com)>, 2009), and it may even be found in Europe (<[fr.wikipedia.org](http://fr.wikipedia.org)>, 2009). Thus, in these cases the English terms 'gallinule' and 'swamphen' and French term *talève* appear to apply to common marsh birds that share a migratory and/or spreading habit.

The application of this feminine noun *talève* to the 'takahe', a 'flightless', rare, forest bird of New Zealand that lives in pairs and feeds in tussock alpine grassland is of considerable interest and requires an explanation, particularly since it was for some years thought to have become extinct. Between its discovery in 1800 and the year 1900, there were only 4 official sightings of this bird in the South Island, each associated with the capture of a single member (<[www.kcc.org.nz/birds/takahe.asp](http://www.kcc.org.nz/birds/takahe.asp)>, <[www.nzbirds.com/birds/takahe.html](http://www.nzbirds.com/birds/takahe.html)>, 2009). The absence of any sighting over the 40 following years suggested that the 'takahe' had become extinct but in 1948 it was rediscovered in an isolated alpine area of the Fiordland in the South Island of New Zealand.

While *talève* is identified as a feminine noun, in several cases we find masculine gender, or masculine agreement:

- *le talève de Lord Howe*, 'Lord Howe swamphen' (<[fr.wikipedia.org](http://fr.wikipedia.org)>, 2009) (an extinct species)
- *les talèves ... ne sont pas configurés* (<[www.mediterranees.net/sasl/articles/3oiseaux.html](http://www.mediterranees.net/sasl/articles/3oiseaux.html)>, 2009)
- *le talève à dos noir* (*Dictionnaire des sciences naturelles*, by Georges Frédéric Cuvier @ <[www.books.google.com.au](http://www.books.google.com.au)>, 2009)
- *Le talève ...* (<[www.quizz.biz/quizz-51403.html](http://www.quizz.biz/quizz-51403.html)>, 2009)
- *Le Talève takahé* (<[www.maxpedia.org](http://www.maxpedia.org)>, 2009).

We find contrasting gender assignments also for the masculine noun *takahé*, even in a single

site, eg. *Le takahé ... la takahé* (<[www.over-blog.com/profil/blogueur-843611.html](http://www.over-blog.com/profil/blogueur-843611.html)>, 2009).

Given the potential explanations offered in the above analysis of French nouns denoting birds, a possible explanation for the confusion amongst these two nouns may lie in the potential conflict between some attribute/s associated with masculine gender, and some attribute/s strongly associated with feminine gender in relation to the 'takahe'. For instance, the extent of masculine terms for 'flightless' birds in Table 4.17 suggests that 'flightless' may possibly be associated with masculine gender, which could account for masculine gender in relation to the term *takahé*. The application of the masculine *le talève* to the Lord Howe swamphen' might relate to some association with 'extinct' an association suggested not only in relation to *dodo/dronte* (M) 'dodo', but observed in the change in name from *tourtrelle* (F) to *pigeon migrateur* 'passenger pigeon' once that species became extinct.

However, attributes such as 'flighted', 'spreading', and 'migratory' that elsewhere appear to be associated with feminine gender and might account for feminine gender of *talève* in relation to 'swamphens' are not found in the case of the 'takahe'.

Despite the rare sightings in the period when its French name came to apply, it may be presumed that descriptions of its colouration, size and shape possibly suggested a similarity between the 'takahe' and the *talève sultane* (F) 'purple swamphen', particularly the difficulty in discerning differences between an 'unwillingness' to fly on the part of the 'purple swamphen' and an 'inability' to fly on the part of the 'takahe'. One might argue that, both in the past and today, the application of a feminine noun such as *talève* to the 'takahe' can be associated with the use of the feminine noun *grouse* (F) 'red grouse' to denote a 'unique' bird, one that has developed in isolation from other related species. Further, the use of a feminine noun for a species that remains 'extant' is consistent with earlier evidence regarding the use of a masculine noun in relation to the oppositional attribute 'extinct'.

In relation to the 'extinct' Lord Howe swamphen', however, the French language does not offer any lexical alternative as occurs in relation to *pigeon/tourterelle/tourtrelle* 'pigeon/dove'; here the use of *talève* at least maintains the ornithological connection with other 'swamphens'.

#### 4.6.5 Compound and simple forms – alternative gender assignments

As previously mentioned, ornithological discussions may employ a compound form or a simple form for the same bird and in many instances they have the same gender assignment, eg. *corbeau freux/freux* (M) 'rook'. In cases cited above, compound and simple forms may have alternative gender assignments, eg. *la fauvette pitchou* (F) 'Dartford warbler', a 'garden warbler' where the compound form is feminine but *le pitchou*, the simple form, is masculine. These same alternations occur for *pic épeiche* (M) 'giant spotted woodpecker', the term used by ornithologists to denote this most common of European woodpeckers, while in general usage the simple noun *épeiche* (F) is favoured, which is feminine. The analysis of synonyms with different gender assignments suggests that these alternations are associated with different attributes that are not mutually exclusive.

It is interesting to note contexts in which these alternations can occur. In the discussion of the 'Dartford warbler', *fauvette pitchou*, the feminine compound form, is used for much of the time but it switches to the masculine *le pitchou* when describing its song and then reverts to the feminine compound form when describing the number of clutches laid in a season (<[www.oiseau.net](http://www.oiseau.net)>, 2004). These changes in nominal form and gender assignment occur in response to changes in the context in which the noun sits. This change in gender assignment according to a change in context is consistent with *aigle* (M/F) 'eagle', where the gender assignment changes according to different contexts in which the bird is found.

The different characteristics or contexts can be observed to influence both the classification and the specific term employed. Such alternations appear to relate to a subconscious awareness of an association between a characteristic or context more closely associated with 'male' and thus having masculine gender assignment, where another characteristic or context is more closely associated with 'female' and thus has feminine gender assignment.

#### 4.7 Summary of findings

The above material includes an analysis of phonology, derivational morphology and semantics of lexical items denoting birds.

An initial phonological analysis with regard to word-final pronunciation for over 200 nouns suggested a possible relationship between phonology and gender assignment in that vowel-final pronunciation is statistically more closely associated with masculine gender and consonant-final pronunciation is statistically more closely associated with feminine gender. However, the presence of vowel-final nouns that are feminine and consonant-final nouns that are masculine suggests that some other explanation, either morphological or semantic, is required.

Analysis of synonyms, nouns derived from other nouns, compound and simple forms in relation to word-final patterns, with and without suffixation, reveals no regular pattern between word-final pronunciation and gender assignment.

An initial semantic analysis of superordinate nouns in the corpus and nouns entailing 'male' and 'female' birds suggests that, for some of these nouns, gender assignment is fully predictable and regular according to the semantics of a noun, in particular, for 'male', which correlates with masculine gender assignment, and 'female', which correlates with feminine gender assignment. For other nouns certain attributes of birds are suggested to be associated with specific gender assignments, eg. 'free to fly' and feminine gender assignment for *aigle* (F) 'eagle', 'captive' and masculine gender assignment for *volatile* (M) 'farmyard bird'. Among the various crucial attributes identified with general term *oiseau* (M) 'bird', including 'two-legged', 'upright', 'feathered', 'winged', 'light-framed', some of which can fly but others cannot, there may be one possibly associated with masculine gender assignment and one possibly associated with vowel-final pronunciation. In this regard, it seems that where feathers are salient, it is consistently associated with vowel-final pronunciation although the basis of that association is unclear. Clarification of these different explanations may come through the analysis of nouns in other lexical fields.

Classification of collective nouns appears to be based on certain properties intrinsic to their nature, and particular attributes appear to be significant in their classification, eg. 'quantity', or 'unknown kind' associated with masculine gender assignment for *vol* (M) as birds 'indefinite' in



their kind. 'Same' appears to apply in various ways – in 'kind' for *volaille*, *niché*, or 'species' for *volée* and *couvée* – and in each case is associated with feminine gender assignment. These notions will continue to be explored in the analysis of collective nouns in other lexical fields.

Analysis of remaining masculine and feminine nouns in the corpus according in various categories relating to physical, behavioural and habitat differences raises the possibility of further attributes, and they appear to be associated with specific gender assignments in a regular and consistent way.

For birds, those attributes that appear to be associated with masculine gender assignment include:

- male; attributes associated with 'male' (additional feathering around head, neck, chest; tail feathers; loud voice when not silent, etc., discussed for fowl)
- upright stance
- 'constrained' in some way (domesticated, fenced in, migratory tendency lost)
- unable to fly
- extinct
- associated with death
- diurnal where it distinguishes between other similar birds that are 'nocturnal'
- 'immature/indefinite' form of young of any kind
- a habit that endangers a bird, or its young

It is also possible that black plumage may be associated with masculine gender it is often difficult to determine the precise colour. While the association between 'colourful' plumage and masculine gender assignment can be understood in its more typical application to the 'male' of various species in the bird world (although not always), the association between 'black' and masculine gender assignment for corvine birds, or more generally, is less transparent. It will continue to be investigated.

Those attributes that appear to be associated with feminine gender assignment for birds include:

- 'female'

- a range of attributes associated with female (egg-laying, nesting, nurturing the young)
- 'unique' in comparison with other birds of the same kind, or with all birds
- 'nocturnal' where other similar/related birds are diurnal
- responding to threat by flying away
- free to migrate, or extend their territory, etc.
- able to adapt by varying diet/water intake/period of feeding
- able to adapt by varying techniques for obtaining food
- maintaining constant communication, even across distances
- the 'one in the middle'.

In terms of ranking among attributes associated with contrasting masculine and feminine gender assignments compete, the outcome depends on relative saliencies. For instance, the *milan royal* (M) 'red kite' is both 'diurnal' and 'migratory', attributes that are associated with different gender assignments and, for this example, 'diurnal' appears to be more crucial in differentiating one set from another for birds of prey, those that are 'nocturnal'. However, these contrasting and competing attributes are limited in their application since they only appear to become salient for birds of prey – but not in every case. For instance, *crécerelle* (F) 'kestrel' is a 'diurnal' bird of prey but this attribute appears to be less crucial than its hovering ability which is 'unique'. While 'female' might be expected to rank as highly, the term *sacre* (M) 'saker' designates a 'female' bird of prey. Here, masculine gender suggests that for a bird kept in captivity, 'domesticated' is more crucial than 'female'. The *aigle* 'eagle' has attributes associated with 'female'/feminine gender assignment that compete with the broader attribute 'diurnal', an attribute associated with masculine gender, but gender assignment is determined by the context which itself is ultimately determined by the speaker. Where an attribute such as an endangering habit competes with another attribute associated with feminine gender, it seems that an 'endangering' habit is more crucial than other habits associated with 'female'. While this outcome might suggest that an 'endangering' habit ranks higher than any other attribute, perhaps it is more crucial since it counteracts other salient attributes. Together, these various examples suggest that where crucial saliencies are associated with different gender assignments, the outcome depends on the context, generality of an attribute, and finer distinctions.

Equally interesting are findings relating to word-final pronunciation. Among 'male' and 'female' pairs that are related, 'male' and 'female' of both the 'turkey', *dindon* and *dinde*, and 'pheasant', *faisan/-ane*, have contrasting word-final pronunciation patterns. The 'male' turkey is renowned not only for its posturing, gobbling, and other attributes associated with 'male', but also for the extraordinary colouration and additional feathering it develops – and it, too, has delicious flesh. The 'male' pheasant also comes to display extraordinarily rich plumage that distinguishes it from the female. Thus, for the 'male' we find two features, 'flavoursome', and 'distinctive feathers' which, evidence suggests are associated with contrasting word-final pronunciations. However, why these attributes result in vowel-final pronunciation is not yet clear. This area requires further investigation – in relation to both gender assignment and word-final pronunciation.

Evidence suggests that the attribute 'comparative' is not always salient. It appears to become salient in two contexts, firstly in a very general comparison among birds in the same terrain, distinguishing the taller 'herons' from others. Secondly, it appears to become salient in very specific comparisons between birds that are related, particularly against a standard as for members of the 'pigeon' family, or to set inner and outer limits in relative size where a family encompasses a wide range of sizes, as for members of the 'raven/dove' family.

Finally, while there is significant evidence to support some of the associations identified above, in other cases evidence is limited, eg. 'black' plumage', the 'middle' part. These and other notions raised above will continue to be explored in the chapters that follow.

#### 4.8 Conclusions

There may well have been a time in which the ability to fly was associated with feminine gender assignment, perhaps in its association with escape from danger or the ability to seek out resources that might otherwise have been out of reach. However, awareness of certain differences amongst these creatures, not least that some birds cannot fly, would have undermined that strong connection.

The analysis of today's lexicon suggests that certain attributes, some of which are mutually exclusive, appear to be associated with and can account for contrasting masculine and feminine classifications in relation to gender assignment, to a large extent based on contrasts between attributes in some cases directly associated with, and in others stereotypically associated with, 'male' and or with 'female' and have respective masculine and feminine gender assignments. Other attributes that also appear to be mutually exclusive appear to be associated with, and can account for, contrasting word-final pronunciation patterns. Salient attributes appear to relate to differences in shape, texture, dimension, and movement – some of which are associated with vowel-final pronunciation, eg. 'slender', 'feathered', and 'comparative' differences in age and size (younger/smaller/larger) except in relation to 'superlative', while other attributes, some oppositional, appear to be associated with consonant-final pronunciation, eg. 'rounded' chest or 'stout' build, 'agile' movement – through the air, over terrain, and through water – and 'superlative' size.

Some attributes are in binary opposition and these antonymous relationships appear to be reflected in their association with contrasting gender assignments and contrasting vowel- and consonant-final pronunciation patterns – although, beyond 'male' and 'female' the basis on which such distributions occur requires to be made transparent within any fully predictable classification system. Principles underpinning the association between certain shapes and specific word-final pronunciation patterns, such as 'rounded', 'slender', etc., are not fully transparent at this stage. While there may be some stereotypical association between 'rounded' and 'female', there is no such connection between 'slender' and 'male'. Although the precise nature of word-final pronunciation is not well understood at this stage, attributes with which they appear to be associated do not suggest that they be treated as different kinds of 'masculine' and 'feminine'.

The regularities and principles identified above suggest a considerable knowledge of birds that might seem quite extraordinary. However, it is perhaps not unexpected in view of the long history of contact between humans and birds – as a source of food, as models of certain qualities, as augurs of the future, their use by humans in pursuit of leisure activities, and the

pleasure of their company. Some of the behaviours noted above can be observed to form more global parameters – the opposition between an enhanced or diminished opportunity in some cases to survive for the term of their natural life, and an enhanced or diminished potential in other cases to continue multiplying from one generation to the next. These are very different parameters, but both are fundamentally associated with presence or loss of instincts for survival, and the continuance of life *nature* (F) 'life' as a system of existence through regeneration.

The examples of greatest interest in this analysis are:

- *aigle* (M/F) 'eagle', where alternative gender assignments appear to related to 'diurnal', and 'on high'/'at the nest' associated with contrasting masculine and feminine gender
- *sacre* 'saker falcon', which is feminine in its application to 'female', particularly when paired with *sacret* (M) 'male saker', but is masculine as the generic term
- *autruche* (F) 'ostrich', 'unique' as the largest of all birds and feminine, while other 'flightless' birds are masculine
- *perdron* (M) 'newborn partridge chick' and *perdreau* (M) 'small partridge', whose changes in meaning are associated with different vowel-final suffixes.

The different gender assignments for *vol* (M) 'flock' and *volée* (F) 'flock' appear to reflect a potential opposition between attributes 'indefinite/unknown' and 'specific/definite/same' for their referents.

The various notions raised in this analysis will continue to be explored in the analysis of other living entities in the chapters ahead.

While not every bird denoted by a noun in the current database has been exposed to the same level of analysis, the regularity demonstrated between certain attributes and their association with specific gender assignments for nouns in the corpus suggests that gender assignment is semantically motivated and that it relates to a small number of attributes associated with different classifications.

It is noted that various attributes suggested to be associated with different gender assignments

of collective nouns are based on very few exemplars. They require additional evidence from collective nouns in other lexical fields to support the presence of such attributes as well as suggested associations. However, even where there is extensive evidence in relation to certain attributes, confirmation would be equally anticipated to come from their salience in other lexical fields.

While knowledge of the gender assignment of any one bird does not enable us to identify the precise attribute on which that gender assignment is based, this analysis suggests that our awareness of the appearance or certain habits of a bird can provide a level of predictability for both gender assignment and vowel- or consonant-final pronunciation that is not available through other means. The explanation offered above can also account for synonyms since different gender assignments are argued to relate to changes in saliency between different crucial attributes associated with contrasting and thus competing gender assignments, but these attributes are not mutually exclusive. Where they compete for gender assignment, the result appears to depend on some external factor – perhaps in relation to others around them, as is the case for *autruche* (F) 'ostrich', in relation to all others of its kind and *duc* (M) 'horned owl', which has attributes associated with 'male' where other nocturnal owls do not. In these cases, and potentially in others, the attributes that motivate gender assignment are linked to their word-final pronunciations, which may provide some explanation for distributions between word-final pronunciation and gender assignment. In some cases meanings of nouns suggest mutually exclusive attributes in combination, such as 'flighted' and 'flightless' for *oiseau* – and while the basis for its masculine gender is not yet clear, it might be anticipated to relate to some more general attribute shared by all birds – perhaps its singular or distinguishable status from others.

In conclusion, findings in this chapter covering the lexical field 'birds' will be considered in relation to a different but often closely-related set of living creatures – fish – in the next chapter.

**Chapter 5    Fish – Gender Assignment and Word-final Pronunciation**

**5.0    Introduction**

This chapter examines gender assignment in relation to the lexical field of fish, and therefore excludes mammalian sea creatures and aquatic creatures that are not 'fish', such as jellyfish, crustaceans, etc. (see Appendix VIII for nouns in this lexical field). The term 'fish' applies to creatures that spend their lives within an aquatic environment. They are typically cold-blooded and vertebrate, have a hard outer scaly or leather layer that covers the soft flesh beneath, and fins to provide thrust and stability as they propel their bodies through water. Although fish have lungs and breathe air, if caught out of the water they soon die – unlike birds or mammals that are aquatic, such as the penguin, walrus, seal and platypus, etc. While fish can live in both freshwater and saltwater habitats, most live in one or the other and any change in salinity can cause death.

The analysis in this chapter follows the sequence established in Chapter 4 of an initial phonological exploration that investigates any regularities in the distribution of vowel- and consonant-final pronunciation in relation to gender assignment. It is followed by an analysis of superordinate terms, collective nouns, and nouns derived from various linguistic processes, and then by a semantic analysis of nouns at the species level according to habits and other categories suggested to be significant to fish and their identification. As mentioned earlier, terms vowel-final and consonant-final relate specifically to word-final pronunciation and not to orthography.

**5.1    Predictability – frequency based on word-final phonology and gender assignment**

The corpus contains 194 nouns denoting fish, and distributions are set out in Table 5.1 below according to gender assignment and word-final pronunciation.

Table 5.1: Distributions of nouns according to gender assignment and word-final pronunciation

	Vowel-final	Consonant-final	Total
Masculine	83	46	129 (66%)
Feminine	9	56	65 (33%)
Total	92	102	194

These figures suggest that a fish is twice as likely to be masculine as feminine. The table also reveals that masculine and feminine nouns show the same statistical preference established by Tucker et al (1977) regarding distributions relating to word-final pronunciation in that masculine nouns show a preference for vowel-final pronunciation, eg. *maquereau* (M) 'Atlantic mackerel', and feminine nouns show an even stronger preference for consonant-final pronunciation, eg. *perche* (F) 'perch'. Again, these results are unhelpful in providing any deeper understanding of gender assignment principles for fish since neither of these preferences enables us to predict gender assignment or word-final phonological structure in any specific case. However, there are two groups of irregular nouns – the large group of masculine nouns with consonant-final pronunciation, eg. *muge* (M) 'mullet', *sar* (M) 'white bream', and just nine feminine nouns with vowel-final pronunciation, eg. *morue* (F) 'Atlantic cod', *orphie* (F) 'garfish'.

## 5.2 General information relating to the lexical field 'fish'

While observation of birds provides its own set of difficulties particularly with regard to distance and fleeting views, our ability to observe fish provides an even greater challenge and could be expected to have an impact on the classification process. Particular difficulties are encountered in the identification process.

### 5.2.1 General characteristics of fish

Specific characteristics of fish can be categorised in the following ways:

- fish 'morphology', the technical term for differences in body shape and form
- habitat, particularly different tolerances for salt, different depths and preferred terrain
- defence strategies for protecting themselves against predators.

In addition, the analysis of birds in Chapter 4 suggests that adaptations that increase the opportunities for obtaining food, or protect from harm also appear to be crucial to the classification process. It is possible that gender assignments relating to fish may be associated with these various areas.

The typical fish body shape contains four types:

- streamlined, eg. *thon* (M) 'tuna', *requin* (M) 'shark'



- laterally compressed, eg. *brème* (F) 'bream', *saint-pierre* (M) 'Atlantic John Dory' *daurade* (M) 'sea bream/s(ch)napper'
- elongated (eel-like, filiform), eg. *anguille* (F) 'eel', *sabre* (M) 'silver scabbard fish'
- vertically compressed (flat), eg. *sole* (F) 'Dover sole', *raie* (F) 'stingray'.

Each of these forms offers some advantage. A fusiform streamlined body lowers frictional resistance in the water and enables a fish to swim at high speeds much of the time and is also capable of producing great bursts of speed. A tall, thin laterally compressed shape is associated with more leisurely swimming but is efficient enough to give bursts of speed. A broad flat shape provides an effortless buoyancy and is associated with bottom-dwelling fish that require slow or little movement. An elongated eel-like form assists maneuvering around tight spaces, such as coral reefs and rocky terrains. Individual forms can offer other advantages, for instance, the extreme degree of lateral flattening means that a fish cannot be viewed head-on and allows it to stalk prey from in front as well as behind (<[www.marlin.ac.uk](http://www.marlin.ac.uk)>, 2005). While considered 'limbless', fins can also be used for crawling, eg. 'blenny', or gliding, eg. 'flying fish', or somewhat in between, eg. 'mudskippers'.

Defensive strategies vary, particularly across the different habitats, deepwater or reef-dwelling fish, for example. Some fish rely on speed, others on concealment, and defensive strategies are built around reducing visibility through various camouflage colourations of scales, cryptic, countershading, and disruptive patterns that are habitat-specific and extremely efficient. More extreme forms of camouflage include luminescent organs (for nocturnal fish), transparency, and the ability to change colouration as they move through different habitats. Most fish have scales but some have scutes, a horny outer layer, and others have no outer covering and are known as 'naked' fish, while most fish are covered in a layer of slime that enables them to slip more easily through water.

Although the prototypical form of a fish is instantly recognisable, forms of fish vary, nonetheless anatomical differences, and differences in their behaviour and habitat allow us to distinguish between them. As for most birds, there is little difference between male and female among fish, but in certain species differences become apparent in some cases relating to a

difference in size, eg. *anoli* (M) 'brushtooth lizardfish' where the female is less than half the size of mature and immature males, or for *flétan* (M) 'halibut' where the female is typically heavier than the male. In other species male and female may vary in the disposition of fins, eg. *nonnat* (M) 'transparent goby', or thorns, eg. *raie* (F) 'ray', while colourations may vary in a similar way to the *canard* (M) 'duck' in that 'males' have one colouration and females and immature males have another, eg. *girelle* (F) 'rainbow wrasse' where the single male in the harem is called *girelle royale* and the females *girelle commune*. The extent to which any or all of these notions influence gender assignment, in particular, but also word-final pronunciation, will be investigated.

### 5.2.2 Difficulties in accurate identification of fish

Analysis of gender assignment according to semantic attributes requires accurate identification for each noun in the corpus. The difficulties involved in such an undertaking are well recognised in both the general population and the scientific community. Problems and confusion can emerge from use of different vernacular terms (synonyms) to denote the same fish, use of the same vernacular term to denote different fish, inaccurate cross-referencing in translations, differences in meaning produced by upper and lower case lettering, inaccuracies in gender assignments.

A single fish may have multiple synonyms. For instance, *ablette* (F), which denotes 'bleak' (*A. alburnus alburnus*), a European river fish, has 24 French synonyms:

*abiette, abliable, ablé, abliaise, abliau, abiot, nablé, auble, argenté, ravanesco, aubiat, blanchet bleue, blison, mirandelle, sardine, pesquit, douzain, garlesco, laube, lauge, rondion, ocelle, abliette.*

(<www.pechez.com>, 2005)

Another fish, *marbré* (M) 'striped sea bream' (*Lithognathus mormyrus*, syn. *Pagellus mormyrus*), is a contraction of *dorade marbré* (F), and has eight synonyms:

*marbré, tinoé, mormyre, morme, mourme, mourmouro, tenché, mourmena, rayé*

(<www.pecheweb.com> 2005)

Gender assignment for synonyms in many cases is unable to be established.

The same lexeme may denote different fish, eg. *pageau/pageot*, which can apply to:

- 'striped sea bream', syn. *dorade marbré* (F), with scientific synonyms *Lithognathus mormyrus* and *Pagellus mormyrus*, while the vernacular form may be contracted to *marbré* (which itself also has other synonyms)
- 'red pandora', *pageot à tâche rouge* (M) (*Pagellus bellottii bellottii*), also known as *dorade rouge* (F)
- 'common pandora', *pageot commun* (M) (*Pagellus erythrinus*) syn. *pagel*.

Differences in orthography noted for *pageot/pageau* are not uncommon, eg. *daurade/dorade* (F) 'sea-bream', *aiglefin/églefin* (M) 'haddock', but are not of themselves confusing in the same way as upper and lower case English translations 'BLACK SEA SPRAT' and 'black sea sprat', both of which could be read as a 'black' kind of 'sea sprat' rather than a sprat 'found in the Black Sea'.

Difficulties occur in cross-referencing. For instance, *daurade/dorade* (F) 'black sea bream' (*Spondylusoma cantharus*) has two masculine-gender synonyms, *charbonnier* and *griset*. However, a corpus search of *charbonnier* (in <www.FishBase.com>, 2005) produces four different common names with four different genus names, none of which is 'black sea bream'.

Further cross-referencing problems come from inaccuracies in published data. The French noun *coq* (M) 'cardinal fish' (*Apogon imberbis*) has two synonyms, *apogon* (M), and *castagnole* (F), the latter of which is often incorrectly named *castagnole rouge* (F) 'damselfish' (*Chromis chromis*). While most sources (eg. <www.FishBase.com>, 2005) identify these two different fish correctly, others (eg. <www.aquaticdictionary.com>, 2005) have them the wrong way round and use *castagnole* (F) to denote 'damselfish' (*Chromis chromis*) and *castagnole rouge* (F) to denote 'cardinalfish' (*Apogon imberbis*).

Differences in gender assignment found in agreements (articles, adjectives, participles, etc.) also occur. For the most part *bogue* (F) 'bogue', 'porgy' (*Boop boops*) is identified as feminine (<www.pechez.com>, <www.lssmi.com>, and <www.atilf.fr>, 2005) but some attribute masculine in agreement (<www.ofimer.fr>, <www.surfcasting.free.fr>, and <www.jcpoiret.com>.

2005). Gender assignment for *môle* (F) 'sunfish' is most often feminine (<www.foreignword.com>, <www.atilf.fr>, <www.pecheweb.com/lexique/>, 2005) but discussions occasionally use masculine (<www.ac-corse.fr>, <www.francesurf.net>, 2005) which, may be triggered by the confusion between the referent as *môle* (F) and the referent as *poisson* (M) 'fish'. Where gender assignment cannot be established, the noun is not included in the analysis below.

Even where there is no confusion in identity, there are certain problems for a semantic analysis that relies on appearance. Some species change their morphology, or colour, even sex (from male to female for the *sar* (M) 'white sea bream' (<www.couchot.grosliere.com>, 2005), or from female to male for the *merle* (M) 'brown wrasse' (<www.perso.wanadoo.fr>, 2005). Changes in 'morphology' (body shape) of individual fish can occur for some species, particularly during phases of mating and reproduction, eg. parrotfish, wrasses, where both phases correspond with such a change. For the analysis to be meaningful, it is dependent on accurate identification and attribution of characteristics and features of a specific fish in relation to its gender assignment and word-final pronunciation.

Differences in agreement principles for compound nouns also contribute confusion in establishing gender assignment of lexical items in the corpus. For instance, while (*grande*) *vieille* (F) 'Ballan wrasse' and *plie (commune)* (F) 'European plaice' show agreement between adjective and gender assigned to the noun, others are difficult to establish, eg. *cavillone lisse* (?) 'spiny gurnard', or *cavillone commun*, which has masculine agreement (<www.FishBase.com>, 2005), which is also given as *cavillone commune* (F) (<www.aquaticdictionary.com/dictionary>, 2005) 'large-scaled gurnard'. No agreement occurs between noun and adjective for *dorade royal* (F) 'gilthead sea bream', *dorade marbré* (F) 'striped sea bream' or *truite fario* (F) 'brown trout'. It is noted that, as for birds, compound forms are rarely used in the vernacular, but neither is there any regularity as to which of the two grammatical elements becomes the substantive. (As observed for birds, different outcomes affect gender assignment of the referent even though it remains the same, eg *pic épeiche* (M)/*épeiche* (F) both identify the '(great spotted) woodpecker'.)

Every effort has been made to identify the specific genus name as well as the common name. An appendix is provided, listing the 190 nouns in the corpus for this thesis (see Appendix VIII). Web sites used in the search for specific details regarding each fish are listed in the Bibliography. It is noted that very few web sites cite sources of their data in same the way as <www.martin.ac.uk> (Marine Life Information Network for Britain and Ireland), '*The species directory of the marine fauna and flora of the British Isles and surrounding seas*' (Howson & Picton, 1997).

While they do not form part of this corpus, some nouns denoting fish prepared for eating maintain the gender of the living creature but others do not. For instance, *colin* denotes frozen fillets of the fish *lieu noir* (M) 'pollack', and 'saithe', *haddock* (M) denotes the smoked form of *aiglefin/églefin* (M) 'haddock', and *gambas* (F) is the prepared (cooked) dish of *crevettes* (F) 'prawns'. In these cases gender assignments do not change. However, *morue* (F) 'cod', has different forms for different edible flesh, one that is feminine, *morue salée* (F) 'salted cod', and another that is masculine, *cabillaud* (M) 'uncooked fresh or frozen cod' (fillets or whole fish).

### 5.3 Initial exploration of gender assignment

The analysis above shows that a phonological explanation cannot account for gender assignment in a regular and predictable way. Nor can it explain variations in word-final pronunciation patterns, particularly changes in loan words as they enter the French lexicon. Other areas may offer some explanation. The following section includes an initial analysis of superordinate and collective nouns, loan words, and derived nouns.

#### 5.3.1 Superordinate nouns

The corpus contains two superordinate nouns. The most general is *poisson* (M) 'fish', which is masculine and vowel-final. It applies to any cold-blooded aquatic animals with fins and lungs that exists only in an aquatic environment since it cannot survive for long once out of the water. The other superordinate term is *alevin* (M), any 'young' fish destined to populate rivers and lakes, but it can also apply at the post-larval stage of marine fish.

The precise relationship between the very general attributes noted above and either masculine gender assignment or vowel-final pronunciation for *poisson* as the most general term is unclear. It could be argued that such a restrictive habitat may, as for birds, be associated with masculine gender assignment for this noun. Historically, it would once have contrasted with the now-obsolete general feminine term *volatilie* (F) 'any creature able to fly' discussed in Chapter 4, since birds and insects may also be aquatic. *Poisson* will continue to be of interest in the analysis of superordinate nouns in other lexical fields to follow.

The definition of *alevin* includes *jeune poisson* (LRPT, 1994:28), but it also suggests a 'smaller' size in comparison with the adult standard. Its vowel-final pronunciation is consistent with 'diminutive' in age and size found for birds. These different meanings reflect the 'comparative' distinctions between *perdron* (M) 'newborn partridge chick' and *perdreau* (M) 'small partridge', both nouns having the same vowel-final pronunciation as *alevin*.

### 5.3.2 Collective nouns

The corpus contains two collective nouns, *banc* (M) 'school' or 'shoal' (of fish) applied to fish gathered together in a certain number, and *fretin* (M) 'fry', the young of various species of fish. Both are masculine, and both have vowel-final pronunciation.

As a collective term, *banc* (M) 'school' is a figurative extension from *banc* (M) 'bench' or 'bank', reflecting the apparent solid mass formed by fish as they school together, LRPT, 1994:93). However, in the case of fish it is composed of a quantity of individual elements that are capable of constantly rearranging themselves in the group. There is no information as to a specific kind beyond 'fish', and in this combination of attributes the collective term is masculine. The notion 'quantity' also seems to be salient for *vol* (M) 'flock' denoting a 'quantity' of birds gathered together and also masculine. The various attributes mentioned here and their potential association with masculine gender assignment will continue to be of interest.

The collective term for 'young' of any fish is *fretin*, and at this early stage of development of a fish the most recognisable feature in any such collective is not only their 'tiny' size but one that

is very different from adult forms. At this early stage of development, any more specific identity of 'fry' cannot be known. In this sense 'unknown' or 'different' are both crucial for *fretin*, but it is not possible to say which is salient. Since both of these attributes are associated with masculine gender assignment in Chapter 4, this noun is consistent. 'Different' is equally salient for *alevin*, the count noun denoting any very 'young' fish since it differs in both form and size from any adult, and its masculine gender is consistent with the various nouns denoting the newly-hatched 'young' of various birds. It is possible that 'comparative' may in some way be salient in relation to collective nouns denoting such forms.

In terms of word-final pronunciation, *banc* has the same vowel-final pronunciation pattern as the generic term *poisson*. While *poisson* typically applies to creatures having a scaly outer covering, an attribute that is sufficiently crucial to be associated with its classification in some way, the attribute that may be associated with vowel-final pronunciation of *banc* in its extended application to 'school of fish' is more difficult. Other attributes are more germane to the nature of a collective itself, such irregularity of form since it is constantly changing shape, or an aggregate that suddenly forms and just as suddenly disappears. At this stage that which is salient cannot be identified and these various attributes will continue to be of interest in the analysis of collective nouns in other areas.

### 5.3.3 Loan words

Five examples of loan words appear in the corpus, as set out in Table 5.2 below.

Table 5.2: Loan words denoting fish

<i>barracuda</i>	M	'barracuda'	English, probably from Amer. Spanish
( <i>esturgeon</i> ) <i>beluga</i>	M	'beluga'	large white sturgeon (from Russian)
<i>coelacanth</i>	M	'coelacant'	(19th century) scientific Latin name
<i>piranha</i>	M	'piranha'	South American freshwater carnivorous river fish
<i>sprat</i>	M	'sprat'	English, a small marine edible fish related to the herring.

Some former loan words are not included here, eg. *haddock* (M) 'haddock' (smoked *églefín*), which has been processed for eating. Nor are nouns that fit French patterns, eg. *bonite*, derived

from the sixteenth century masculine vowel-final Spanish noun *bonito* (*Sarda sarda*). These changes may reflect different salencies of the various attributes of this fish for speakers of these different languages.

The absence of feminine loan words is insufficient, at this stage, to confirm that loan words are unilaterally assigned masculine gender, particularly given variations in word-final pronunciation patterns. It may be that where attributes of a loan word are unknown they may be classified according to traits relating to the most general noun *poisson*. It is noted that *sprat* is considered a 'food fish', a term that applies to fish in a similar way that 'game' applies to terrestrial/aerial animals, and its consonant-final pronunciation is consistent with *volatile* (M) 'farmyard bird'.

### 5.3.4 Nouns derived from other linguistic processes

Nouns in the database are also derived from pre-existing French forms, some coined in extension from pre-existing nouns, others derived from other grammatical classes.

#### 5.3.4.1 Pre-existing nouns used in extension

A number of names of fish in (1) are coined from pre-existing nouns used in figurative extension to apply to a specific kind of fish, eg.

- (1) masculine nouns, eg. *ange*, *baliste*, *bar*, *brochet*, *carrelet*, *chirurgien*, *coq*, *pilote*, *comète* (*coussu*, *saumon*), *lançon*, *poisson chat*, *prêtre*, *sabre*, *sangler*, *nonnat*, *vairon*  
feminine nouns, eg. *bécasse de mer*, *cithare*, *coquette*, *équille*, *feuille*, *raie*, *sole*,  
(*grande*) *vieille*

Some of these nouns maintain gender assignment of their original meaning in their new applications, masculine nouns remaining masculine and feminine nouns remaining feminine, as shown in Table 5.3.

Table 5.3: Gender assignments of pre-existing noun and figurative use in extension

Original meaning			Fish name		
<i>ange</i>	M	'angel'	<i>ange</i>	M	'angelfish'
<i>bécasse</i>	F	'woodcock'	<i>bécasse de mer</i>	F	'longspine snipefish'
<i>coffre</i>	M	'box, frame, coffer'	<i>coffre</i>	M	'cofferfish'



<i>cithare</i>	F	'zither'	<i>cithare</i>	F	'spotted flounder'
<i>coq</i>	M	'cockerel', male bird	<i>coq</i>	M	'cardinal fish'
<i>pilote</i>	M	'pilot (male navigator)	<i>pilote</i>	M	'pilot fish'
<i>raie</i>	F	'ray' (thin straight line)	<i>raie</i>	F	'ray'
<i>sabre</i>	M	'sabre, sword'	<i>sabre</i>	M	'scabbardfish'
<i>tambour</i>	M	'drum, barrel'	<i>tambour</i>	M	'seabream'
<i>targe</i>	F	'flat buckler'	<i>targie</i>	F	'topknot'

Nouns may also be derived in extension from nouns in other languages, eg. *rotengle* (M) 'rudd', in extension from *Rotauege*, *Roteugel* (Ger.) 'red eye'.

The close connection between the appearance of the entity in the original meaning, and appearance of the fish denoted in extension is unmistakable, eg. the 'angel-wing' formation for *ange*, the slender narrow form for *sabre*, and for *tambour* the same round shape of the percussion instrument as for the fish. For each of these examples, the gender assignment of the original form is maintained in its extended application. However, not all extensions follow this pattern. In the case of *baliste* (F) 'ballista' (ancient catapult), gender assignment changes from feminine in the original meaning to masculine for *baliste* (M) 'trigger fish' which has a similar mechanism on its head that locks into place.

For a number of nouns derived in extension from pre-existing nouns, variations in suffixation change word-final pronunciation profoundly, eg. *targie* (F) 'topknot'. In its extended meaning this noun has become vowel-final, although the original form *targe* has consonant-final pronunciation. Others affect both gender assignment and word-final pronunciation as *lance* (F) 'lance', a feminine consonant-final noun denoting a long pointed weapon and *lançon* (M) 'sand-eel', which is masculine and vowel-final noun.

Other examples are set out below in (2).

(2)	<i>aiguille</i>	F	'needle'	/ egɥij /	CF	original meaning
	<i>aiguillat</i>	M	'spiny dog-fish'	/ egɥija /	VF	figurative extension
	<i>broche</i>	F	'brooch'/'pin'	/ broʃ /	CF	original meaning
	<i>brochet</i>	M	'pike'	/ broʃe /	VF	figurative extension

<i>carre</i>	F	'square'	/kar/	CF	original meaning
<i>carrelet</i>	M	'plaice'	/karøle/	VF	figurative extension
<i>limon</i>	M	'lime'	/limō/	VF	original meaning
<i>limande</i>	F	'lemon sole'	/limād/	CF	figurative extension
<i>nonne</i>	F	'nun'	/nɔn/	CF	original meaning
<i>nonnat</i>	M	'transparent goby'	/nɔna/	VF	figurative extension

While examples in (2) follow the regular pattern of masculine gender/vowel-final pronunciation and feminine gender/consonant-final pronunciation, the example of *targie* demonstrates that there is no regularity in either the form or the direction of change, and these results are unpredictable. The underlying motivation for changes in gender assignment and/or word-final pronunciation patterns will continue to be explored in the analysis below.

#### 5.3.4.2 Nouns derived from other grammatical classes

Nouns may also be derived from pre-existing items in other grammatical classes, as in (3):

- (3) *maigre* (M) 'meagre' from adjective *maigre* 'thin'  
*barbue* (F) 'brill' derived from adjective *barbule* 'bearded, possessing a beard'  
*baveuse* (F) 'rusty blenny' from adjective *baveux*, *-euse* 'slimy'  
*vieille* (F) 'Ballan wrasse' from adjective *vieux*, *vieille* 'old'.

The different gender assignments of the nominal forms in (3) show that the outcome is not predictable. Nor is it possible to predict word-final pronunciation since the orthographic changes word-finally introduce no phonological change in the case of the vowel-final *barbue* while nouns *baveuse* and *vieille* offer the same vowel-final alternative form *-eux*.

In some cases nouns that may appear to be derived by extension are not, as in (4).

- (4) • *bar* (M), derived from Ancient Dutch from German base meaning 'pointed' (LRPT, 1994:95) rather than from the French *barre* (F) 'bar'  
• *muge* (F) is derived from Provençal, from Latin base *mugil* (LRPT, 1994:749) and has no relationship with *muguet* (M) 'lily-of-the-valley' or *mugueter* 'to pay court'.

Nonetheless, variations among nouns in (3) are of interest, and will continue to be explored.

### 5.3.5 Summary - superordinate nouns, collective nouns and loan words

Analysis of nouns thus far shows that at the most general level, superordinate and collective nouns denoting fish are masculine. A number of potential attributes are raised. For the collective term *banc* (M) 'shoal' or 'school', notions include a shape that changes constantly, a form that appears and disappears, a collective whose membership is unknown or indefinite, etc. Any of these may also be salient for the collective term *fretin* (M) 'fry' but so, too, may 'tiny', an attribute more closely associated with vowel-final pronunciation for count nouns, but it may also be salient for tiny fish in a mass. It is also possible that the attribute 'unknown' and/or 'indefinite' may play some role as a default mechanism, although its relationship with masculine gender assignment and/or vowel-final pronunciation is unclear.

Loan words in the corpus denoting fish are masculine, but given the example of *bonite*, derived from the Italian *bonito*, and the different word-final pronunciation patterns amongst loan words, both gender assignment and word-final pronunciation may relate to specific attributes associated with specific but different classifications. No further explanation can be offered at this stage and these notions will continue to be explored among collectives and loan words in other lexical fields.

Analysis of superordinate terms suggests some similarities with the analysis of birds. For instance, masculine gender assignment of *poisson* (M) 'fish' is possibly associated with an existence that is restricted to water, in contrast to the freedom of movement between aerial, terrestrial and aquatic environments for birds, particularly in its contrast with the historical noun *volatilie* (F) 'any flying creature'. For *alevin* (M) 'fry', masculine gender may possibly be associated with its 'tiny' size in comparison with adult size.

### 5.4 Semantic analysis of nouns in the corpus

A semantic analysis of nouns in the corpus is presented below in various sets, commencing with those nouns that are least regular in terms of associations between gender assignment and word-final pronunciations in order to gain an understanding of any significant feature/s that may be associated with their irregular classifications.

Notions suggested above to be of importance in distinguishing between various fish, particularly differences in shape, as well as notions raised in the preceding chapter, will inform this analysis.

#### 5.4.1 Irregular nouns - feminine gender and vowel-final

Only eight nouns in the database of nearly 200 have these classifications. Descriptions of these eight fish are laid out in Table 5.4 below.

Table 5.4: Feminine nouns with vowel-final pronunciation

<i>barbue</i>	F	'brill'	flatfish, able to change colour of eyed side to match habitat
<i>baudroie</i> syn. <i>lotte</i> (F)	F	'anglerfish'	vertically compressed; luminescent fishing filament on its head to lure prey; excellent camouflage, plus fringed appendages that resemble seaweed; articulated fins function as feet
<i>blennie</i>	F	'blenny'	(15 cm.) freshwater spiny-finned, fish, scaleless, covered in slime; extraordinary range of cryptic colouring, tongue-shaped (round head, tapering elongated body); mouth armed from each jaw with two powerful projecting canine teeth; nocturnal
<i>lamproie</i>	F	'lamprey'	serpent-shaped, long fish, most primitive of vertebrate fish; mouth in form of a sucker, tongue covered with teeth
<i>morue</i>	F	'Atlantic cod'	long fusiform fish, thick through; migratory; noted for abundance of schools, spawning; mimetic colouration, speckled back; voracious diet
<i>orphie</i> syn. <i>belone</i> (F)	F	'garfish'	long (80 cm) slim fish with elongated jaws armed with pointed teeth; can skip along the surface of the water
<i>plie</i> syn. <i>carrelet</i> (M)	F	'European plaice'	flatfish, rhombus-shaped, grey-brown with bright orange and red circular spots
<i>raie</i>	F	'ray'	flat triangular body; long whip-like barbed tail, back wholly prickly; can leap out of the water
<i>targie naine</i>	F	'Norwegian topknot'	flatfish, oval; cryptic camouflage colouration; fringed fins provide vacuum-like grip on rocks

Forms of fish in this short list vary considerably. Some have an elongated form, a spindle shape typically associated with fish, eg. *morue*, others are tongue-shaped, such as *baudroie* and *blennie*, while an 'elongated' form is exaggerated further by a slender body for *orphie* and *lamproie*, and *barbue*, *plie*, *raie* and *targie* denote 'flat' fish that orient themselves horizontally in the water.

Other descriptions reveal some unique adaptations among these fish. Some are directed towards obtaining prey, eg. *baudroie*, which rests on the sea floor but uses movable filaments on its dorsal fin to lure prey towards it which it then seizes in its enormous jaws. The primitive *lamproie* has suckers around its mouth to grip prey while the teeth on its tongue strip off the flesh. Other adaptations prevent predation, eg. the fringed fins of the *targie naine* that attach to rocky ledges, even upside down (it is the only fish to do so), creating a vacuum-like seal that takes a considerable force to dislodge. There may be some association between feminine gender assignment and an adaptation that enables a fish to grip or cling. It is also recognised that such adaptations are 'rare', and the association with feminine gender assignment may be less immediately linked to the attribute than to the effect of that attribute, or its rareness. These notions require to be clarified.

Fish denoted by *barbue* (F) 'brill', *plie* (F) 'plaice' and *raie* (F) 'ray' present a 'flattened' shape but they are formed quite differently. The *raie* is extremely vertically compressed, from above; it swims in an upright position on a horizontal plane. The *barbue* and *plie* are laterally compressed, from the side; but rather than swimming upright on a vertical plane, these two fish turn on their sides and swim in a flat, 'recumbent' position on the same horizontal plane as the *raie*. While this side-on position for most fish would suggest that they are dead, it is the most obvious attribute of the *barbue* and *plie*, and both of these nouns are feminine.

Other attributes of fish denoted by irregular feminine nouns

The *raie* (F) 'ray' has other notable adaptations – the ability to leap out of the water, and a whip-like tail armed with one or more spines or barbs that can keep harm at bay. These attributes are sufficiently distinctive to warrant recognition in terms of gender assignment, and their possible association with feminine gender assignment will continue to be explored. It is noted that the *orphie* can skip across the surface of the water using its tail to propel itself forward, a motion that is as unpredictable for a predators waiting below as it is for predators waiting above. There may be some association between 'unpredictable' movement and feminine gender assignment, and it will continue to be explored.

While there are several species of cod, the noun *morue* is most closely identified with the Atlantic cod of North America. Although this fish had been an important economic commodity since the Viking period, its location meant that it was largely unknown in wider European circles until Norwegians developed a dried cod market in Southern Europe. However, at the end of the fifteenth century/beginning of the sixteenth century Portuguese and Basque fishermen began sailing to North America and discovered a fish in such extraordinary abundance that it quickly became one of the most important natural resources known to humans (Freedman, 1995:494). They called this fish *baccalaos* and named Newfoundland *Baccalaos* 'land of the cod'. For mile after mile after mile along the 50 or so kilometers of the Grand Banks of Newfoundland cod swarmed, chasing the abundance of food available in the shallow waters. Not only were they present in such amazing numbers, but their delicious flesh remained so even after being cured by salting or drying and could be sent back to the hungry markets of sixteenth century Europe and within a short time hundreds of boats came to these waters and cod soon became one of our most crucial food resources.

The abundance of the *morue* is similar to the abundance that once existed for the American *tourtre* (F) 'passenger pigeon' whose migrations were so dense that they darked the skies and took days to pass by -- until its extinction in the twentieth century (see Chapter 4). However, it is not this attribute itself that is associated with feminine gender for *tourtre*. The *morue* is also noted for its extraordinary reproductive ability, spawning in such abundance that sailors and those who observed it marvelled at the sight. The *morue* is equally renowned for its voracious appetite and varied diet. It quickly came to notice during the gutting part of its processing:

Adult (cod) will eat almost anything small enough to fit into their mouths, including clams, cockles, mussels and other mollusks (sic), as well as crabs, lobsters and sea urchins. Adults also pursue schooling fish ... herring, capelin, shad, mackerel, silver hake, young haddock and other species. Voraciously pursuing a variety of potential food, cod will occasionally dine upon some very exotic items; ducks, shoes, jewelry and rope have been found in the stomachs of captured cod.

(<[www.cptdave.com/atlantic-cod.html](http://www.cptdave.com/atlantic-cod.html)>, 2005)

A voracious appetite and adaptable diet have previously been associated with feminine gender assignment (see Chapter 4, Birds). There is also some evidence of an association between 'abundant' and feminine gender assignment, eg. *générosité* (F) 'generosity', *extravagance* (F) 'extravagance', *abondance* (F) 'abundance', *largesse* (F) 'bounty', while abundant spawning is so closely linked to 'female' that its association with feminine gender assignment may be considered predictable. Thus, while previous evidence places some weight on the voracious appetite and varied diet, it is not possible to identify at this stage which of these attributes is salient.

The *blennie* (F) 'blenny' is not only *une espèce nocturne* 'a nocturnal species' (<www.roscoff.fr>, 2004), but can mimic other fish in colour, form and behaviour, tricking prey into allowing it to approach closely enough to be captured. It is able to survive for long periods out of the water, but even more crucial is its ability to 'walk' across solid ground using its pectoral fins as 'feet', which enables it to propel itself back into the water. For a fish that lives amongst reefs where waves and tidal changes may leave it stranded, it is perfectly adapted for this environment since it can regain water under its own power. It is possible that these life-saving attributes may be associated with feminine gender assignment as are other life-saving attributes of birds suggested in Chapter 4. This possible explanation will continue to be explored.

These fish can be recognised through other equally formidable attributes: for *orphie* (F) 'garfish' and *lamproie* (F) 'lamprey' their slender, even serpent-like, form, for *plie* (F) 'plaice' and *raie* (F) 'ray' their slender but angular outline, while *barbue* (F) 'brill', *baudroie* (F) 'anglerfish' and *targie* (F) 'Norwegian topknot' are noted for the wide fringe of fins that surrounds their bodies (highlighted in the derivation of *barbue* from the adjective *barbul-ue*, 'bearded'). While all fish have colourations that camouflage them in their specific habitats, the *morue* (F) 'cod' is covered with 'speckles' across its back, and *raie* has dark-and-light counter-shading which provides camouflage from above and below. These attributes are sufficiently significant to warrant some recognition, although the precise way they may interact with the classification of these fish is not yet clear. Since nouns in this set are all vowel-final, there is some possibility of an association between any of these attributes and vowel-final pronunciation, particularly given

the previous evidence of an association between 'slender' and vowel-final pronunciation in relation to birds, particularly *héron* (M) 'heron'. These attributes will remain of interest.

#### 5.4.2 Irregular nouns - masculine and consonant-final

Other irregular nouns have masculine gender assignment and consonant-final pronunciation.

The set below in Table 5.5 contains such nouns and specific information from descriptions.

Table 5.5: Masculine nouns with consonant-final pronunciation

<i>able</i>	M	'rain bleak'	tiny, freshwater, lives in schools on the surface; elongated body but thick through; counter shade camouflaging
<i>ange (de mer)</i>	M	'angelshark'	nocturnal; vertically flattened, elongated; ray-like wings' surround the body; buries in the sand and waits for prey to pass
<i>baliste commun</i>	M	'triggerfish'	laterally flattened; dorsal fin locks/unlocks to wedge fish into crevices; silvery, with slightly darker bars
<i>bar commun</i> syn. <i>loup, loubine</i>	M	'European sea bass'	elongated but stocky, lightly compressed; striped colouration
<i>callionyme</i>	M	'stinkfish'	elongated, strong spine, scaleless
<i>chinchard</i> syn. <i>saurel</i>	M	'Atlantic horse mackerel'	long slender schooling fish, bluish green or black above, silvery white below ( <i>Trachurus trachurus</i> )
<i>coffre</i>	M	'cofferfish, boxfish'	thick box-shaped body enclosed in bony carapace; brightly coloured yellow fading with age, black spots fading to blue
<i>comète coussut</i>	M	'false scad'	elongated slender shape, false 'eye' and other camouflage countershading ( <i>Caranx rhoncus</i> )
<i>comète saumon</i>	M	'rainbow runner'	long narrow body (180 cm)
<i>congre</i>	M	'conger eel'	elongated cylindrical saltwater eel; nocturnal hunter; scaleless
<i>coq</i> syn. <i>castagnole</i> (F)	M	'cardinal fish'	synonym <i>castagnole</i> ; high, rounded body, red, with huge eye; protruding spines from each side resemble cock spurs
<i>corégone</i> syn. <i>lavaret</i>	M	'common 'whitefish',	torpedo-shaped freshwater fish, silvery with slight countershading; moves in schools
<i>coryphène</i>	M	'common dolphinfish'	long (2m.) thickened body laterally compressed; metallic blues and greens on back/sides, white and yellow on the underparts
<i>fanfre</i> syn. <i>pilote, rémora,</i>	M	'pilot fish'	slender, torpedo-shaped form with dark bands of colour
<i>gymnote rayé</i>	M	'banded knife-fish'	long, narrow striped body; electronic discharge distinguishes between friend and foe; survives for some time out of water



<i>hippocampe</i>	M	'sea-horse'	upright swimming position, long tail
<i>joël</i> syn. <i>siouclet</i> (M)	M	'sandsmelt'	slender spindle shape, large characteristic brilliant silvery stripe running along flanks outlined in black
<i>maigre</i> (commun)	M	meagre	long (230cm), silvery colour
<i>muge</i> syn. <i>mulet</i>	M	'mullet'	elongated spindle-shaped; narrow dark gold horizontal stripes over silvery body
<i>omble chevalier</i>	M	'charr, hill' trout'	elongated spindle-shaped body, larger than brook trout (70 cm cf 35-50 cm), robust body; countershading and cryptic colouration
<i>omble de fontaine</i>	M	'brook trout	elongated spindle-shaped body, limited to cold, clear, fast running freshwater habitats
<i>picarel</i>	M	'picarel'	small, elongated nocturnal silvery fish with vertical dark bands provide excellent night camouflage
<i>porc-épic</i> syn. <i>diodon</i> (M), <i>hérisson</i> (M)	M	'porcupine-fish'; 'spotfin burrfish'	globular form when responding to threat, spines stand erect; used only in desperation since it loses manoeuvrability
<i>rotengle</i>	M	'rudd'	elongated fish with oval form, golden body, red fins, back greenish brown; varied colouring
<i>sabre</i>	M	'scabbardfish'	long (2 m.); whip-like scaleless body; silver with slight countershading
<i>saint-pierre</i>	M	'Atlantic John Dory	laterally compressed upright fish; sharp spines on back and around edges of body; impressive camouflage colouration
<i>sandre</i>	M	'pikeperch'	elongated; cylindrical body; flanks with bands; feeds early and late, sometimes nocturnally
<i>sar</i> syn. <i>veirade</i> (F), <i>sargue</i> (M)	M	'white bream'	upright, laterally compressed, deep-bodied; rounded shape; black and grey vertical bands; hermaphroditic (female, then male)
<i>scare</i> syn. <i>perroquet</i>	M	'parrotfish'	upright oval shape, diverse but striking colouration of its name; highly specialised teeth in rows to grind, crop and crush
<i>silure</i>	M	'catfish'	long body, thick through; bluish-grey colour; scaleless
<i>tambour</i> aka <i>sar tambour</i>	M	'redbanded sea bream'	upright, rounded body, striped; solitary but may be found in small groups
<i>targeur</i>	M	'topknot'	oval-shaped 'flatfish' with thick-set body that swims side-on
<i>tassergal</i>	M	'bluefish'	elongated shape, back greenish, with countershading on sides and silvery belly
<i>trigle</i>	M	'gurnard'	long with rounded front and thick body, heavily armoured head; red or greyish colour; spreads fins if threatened; grunts during feeding

The above nouns include some 22 of 35 fish described variously as *allongé*, 'elongated', or *fuselé*, 'fusiform' or 'spindle-shaped'. It is possible that there may be some association between an 'elongated' form and masculine gender assignment, although almost half of the nouns in the irregular feminine set are also described as 'elongated', eg. *morue* (F) 'Atlantic cod', *baudroie* (F) 'anglerfish', *blennie* (F) 'blenny', *lamproie* (F) 'lamprey', *orphie* (F) 'garfish'.

Some of these fish are laterally compressed, such as *tambour* (M) 'redbanded sea bream' and *saint-pierre* (M) 'Atlantic John Dory', *sar* (M) 'common or white sea bream', and such forms are usually described as tall or deep. One of the fish in this set, *hippocampe* (M) 'sea-horse', has a slender tubular form and also moves around in an 'upright' vertical position. It is possible that this 'upright' form may be salient and it will continue to be explored.

It is noted that two fish with a 'flattened' form, *ange de mer* (M) 'angelfish' and *targeur* (M) 'topknot' are included in this set and while 'elongated' might account for *ange de mer*, it would not account for *targeur*, a flatfish that is almost as round as it is long.

One laterally compressed 'upright' fish, the common freshwater *sar*, is 'nocturnal' as are other masculine fish such as *congre* (M) 'conger eel' and *picarel* (M) 'picarel'. While 'nocturnal' is suggested to be associated with feminine gender assignment in the contrast between diurnal and nocturnal birds of prey (see Chapter 4), these potential counter-examples with masculine gender assignment require to be accounted for. They are examined further in Section 5 below. The *sar* is remarkable in that those born 'female' do not die but change to 'male' at a certain point. It has a feminine synonym *veirade*, which must be accounted for.

As well as *sar* (M)/*veirade*, others of these masculine consonant-final nouns also have feminine synonyms, eg. *coq* (M)/*castagnole* (F) 'cardinalfish'. Some have vowel-final synonyms, eg. *scare/perroquet* (M) 'parrotfish'. These variations in synonyms require an explanation.

Two fish have potentially life-saving attributes. The *porc-épic* (M) 'porcupinefish' can inflate its body into a globular form so that spines that would otherwise lie flat along the body can stand

out and repel predators. This mechanism is highly successful, but it is costly in terms of manoeuvrability since it becomes almost stationary when inflated, and in terms of the energy required to recover its original form. The *gymnote rayé* (M) 'banded knifefish' is able to survive for long periods when ponds and ditches dry out. It can be compared with the feminine noun *blennie*, a reef fish that is also able to survive for a considerable period out of the water. However, while the *blennie* can use its pectoral fins as 'feet' to propel itself across the ground and back to the water, there is no certainty that the *gymnote rayé* will benefit – rains/water may not come in time. An adaptation that emerges when the threat is dire is well-nigh useless. The *sandre* has a preference for murky conditions and large eyes and reflective material allow maximum usage in low light conditions, and while it is active mainly towards evening and early in the morning, this can extend to nocturnal feeding.

This set of fish also includes those whose forms are atypical, unlike other fish although they may resemble other entities, eg. *sabre* (M) 'scabbard fish' which has a whip-like form, *porc-épic* (M) 'porcupine fish' described above, and *coffre* (M) 'cofferfish' which has a box-like shape enclosed within a hard carapace.

Descriptions also include 'thick through', eg. *coryphène* (M) 'dolphinfish', *porc-épic* (M) 'porcupinefish', *silure* (M) 'catfish', or 'oval', eg. *rotengle* (M) 'rudd', *sar* (M) 'white sea bream', *scare* (M) 'parrotfish'. Some descriptions identify a curved outline, eg. *muge* (M) 'mullet', *omble* (M) 'brook trout'. These various descriptives are not unlike similar descriptives for birds also associated with consonant-final pronunciation, eg. the broad curved chests of *cygne* (M) 'swan' and *canard* (M) 'duck', and heavy-set birds of prey *aigle* (M) 'eagle', *buse* (F) 'buzzard' and *vauture* (M) 'vulture'.

Both *gymnote rayé* (M) 'banded knifefish' and *fanfre* (M) 'pilotfish' are very slender, which form is suggested to be associated with vowel-final pronunciation. However, these consonant-final fish have distinctive bands or stripes across their bodies, and several other consonant-final fish are also described as 'barred' or 'striped', eg. *baliste* (M) 'triggerfish', *bar* (M) 'bass', *fanfre* (M) 'pilotfish', *joël* (M) 'sandsmelt', *picarel* (M) 'picarel', *sandre* (M) 'pikeperch', *sar* (M) 'white

sea bream', *tambour* (M) 'redbanded sea bream'. Given that the quintessential representative with a 'striped' coat, *zèbre* (M) 'zebra', also has consonant-final pronunciation the possibility is that they may be associated. This pattern is related to colouration rather than to shape or form. The slender *sabre* (M) 'scabbardfish' has neither a 'curved' shape nor 'striped' patterning, but it has a smooth, scaleless body in contrast to the normal roughened surface typical of scales. If this smooth, scaleless body is associated with consonant-final pronunciation, there is a certain regularity in its opposition with the rough surface of scales and its associated with vowel-final pronunciation.

The various notions and their potential associations with masculine gender assignment and different word-final pronunciation patterns will continue to be explored.

#### 5.4.3 Regular nouns - masculine and vowel-final

Masculine nouns with vowel-final pronunciation are found in Table 5.6 alongside descriptions.

Table 5.6: Masculine nouns with vowel-final pronunciation

<i>aiglefin/églefin</i>	M	'haddock'	similar to but smaller than cod (LRPT, 1994:367); migratory
<i>aiguillat</i>	M	'spiny dog-fish' (shark)	torpedo-shaped, white spots; spines can inflict toxins
<i>anchois</i>	M	'anchovy'	long and slender, tiny; silvery; schooling fish
<i>anoli de mer</i>	M	'brushtooth lizardfish'	cigar-shaped, slender; lizard-shaped head, spotted body
<i>barracuda</i>	M	'barracuda'	elongated, fusiform
<i>beluga</i> (aka <i>esturgeon</i> )	M	'beluga sturgeon'	elongated spindle-shaped; smooth-skinned; huge size
<i>brochet</i>	M	'pike'	long narrow bodied fresh-water fish, greenish with spots that simulate its prey
<i>brochet de mer</i>	M	'European hake'	long, slender
<i>capelan</i>	M	'poor cod'	elongated form, red-brown with paler sides; forms small shoals on bottom floor
<i>cyprin</i> syn. <i>carassin</i>	M	'goldfish'	tiny fish; elongated shape, oval body
<i>colin</i> syn. <i>lieu</i>	M	'coalfish'	elongated shape; dark back and silvery sides

<i>crapaud</i>	M	'Lusitania toadfish'	elongated shape; very well camouflaged
<i>dragonnet</i>	M	'dragonet'	elongated tapering body, flat head, laterally compressed; scaleless
<i>éperlan</i>	M	'smelt'	long slender form; silvery
<i>espadon</i>	M	'broadbill', 'swordfish'	elongated shape, silvery; long jaws used as sword; can leap out of water
<i>exocet aux ailes</i> syn. <i>poisson volant</i>	M	'blackwing flyfish'	long, narrow; iridescent blue above, silvery below
<i>flet</i>	M	'flounder'	flatfish
<i>flétan</i>	M	'halibut'	flatfish, 'veritable giant'
<i>gardon</i>	M	'roach'	freshwater fish with elongated slender body
<i>germon</i>	M	'albacore' (tunny)	torpedo-shaped; migratory
<i>goujon</i>	M	'gudgeon'	tiny, slender, splotches across the mid-line
<i>hareng</i>	M	'herring'	slender, spindle-shaped; silvery; travels in enormous schools; rises to the surface at night to feed
<i>jarret</i> syn. <i>picarel</i>	M	'picarel'	spindle-shaped body, tubular mouth
<i>lançon</i>	M	'sand-eel, sand-lance'	long very narrow body
<i>lavaret</i>	M	'freshwater herring'	torpedo-shaped body; silvery grey; restricted to Lac du Bouget
<i>lieu noir</i>	M	'pollack'	torpedo-shaped body, silvery with dark back
<i>maquereau</i>	M	'Atlantic mackerel'	tapering spindle shape, dark coloured; swims nr. surface
<i>marlin</i>	M	'Mediterranean spearfish'	spindle-shaped; travels in pairs
<i>merlan</i>	M	'whiting'	elongated, slender; silvery
<i>mulet</i> syn. <i>muge</i> (M)	M	'mullet'	long narrow body; silvery; edible
<i>nonnat</i>	M	'transparent goby'	tiny slender form; transparent
<i>requin</i>	M	'shark'	torpedo-shaped, tapering
<i>rouget</i>	M	'red mullet'	long narrow body; reddish
<i>rouget-barbet</i>	M	'striped red mullet'	long narrow body
<i>rouvet</i>	M	'oilfish'	long spindle-shaped body, uniformly brown
<i>saumon</i>	M	'Atlantic salmon'	spindle-shaped, tapering; silvery sides and belly
<i>serran (tambour)</i>	M	'brown comber'	torpedo-shaped

<i>siouclet</i>	M	'sand smelt'	elongated narrow shape
<i>sublet</i>	M	'long-snouted wrasse'	tiny elongated fish that rests immobile; colouration varied
<i>surmelet</i>	M	'striped red mullet'	long narrow body
<i>terrassier</i>	M	'wrymouth', 'ghostfish'	saltwater fish, eel-like body, spotted
<i>thon</i>	M	'tuna, tunny'	spindle-shaped body
<i>turbot</i>	M	'turbot'	vertically flattened body, rhomboid shaped
<i>vairon</i>	M	'minnow'	tiny slender freshwater fish; silvery
<i>volant</i>	M	'blackwing flyfish'	cigar-shaped body

Descriptions such as 'torpedo-shaped' and 'elongated' amongst fish in this set of masculine nouns all suggest a 'long' body, the form identified in the prototypical shape regularly found in minimal representations of a fish. These examples add weight to a potential association between 'elongated' and masculine gender assignment.

However, three of the fish in the above set, *flet* (M) 'flounder', *flétan* (M) 'halibut' and *turbot* (M) 'turbot', are 'laterally flattened' but swim side-on in the same way as the feminine 'flatfish' *barbue* (F) 'brill' and *plie* (F) 'plaice'. The different gender assignments among similar 'flatfish' require an explanation, and they are discussed as a set below.

Certain descriptions of fish identify habits similar to those of certain birds, eg. *gardon*, where the young keep together during the day without the protection of adults – but this separation is crucial for these diurnal fish since large adults are cannibalistic. Adult and young *rouget* also live a separate existence, as do fish denoted by *turbot* since the young up to two years of age live in the shallows near beaches where they are forced to fend for themselves since adults cannot follow as they run the risk of beaching themselves. These habits are important but they also take time to learn, and other more accessible attributes are offered. There is, nonetheless, a consistency between masculine gender assignment and habits that leave the young exposed to danger and the potential relationships identified here will continue to be of interest.

Some of the fish denoted by nouns above are distinctive because of their size. For some, this distinctive size relates to 'diminutive' since they are tiny, 10cm. or less in length, eg. *anchois* (M)

'anchovy', *cyprin* (M) 'goldfish', *nonnat* (M) 'transparent goby', *vairon* (M) 'minnow', *sublet* (M) 'long-snouted wrasse'. Others may be considered 'diminutive' in their comparison with other similar fish, eg. *goujon* (M) 'gudgeon' described as *de petite taille* 'tiny in size' in comparison with 'carp', a term that incorporates members of the Cyprinid family. The analysis of birds suggested that 'diminutive' may be associated with vowel-final pronunciation and these examples are consistent with that generalisation.

Other fish are distinguished by their enormous size. The *beluga* (M) 'sturgeon' is the largest of all European 'freshwater' (or 'inland') fish since it can grow to around nearly 6 m. in length and weigh up to 2,700 kg. (although such dimensions are extremely rare today). Another fish considered 'huge' is *flétan* (M) 'halibut'. This North Atlantic fish is described as *de taille remarquable ... géant* 'remarkable in size ... gigantic' (<www.pecheweb.com>, 2005); it grows to an enormous 3 m. in length and can weigh up to 320 kg. It would be most unlikely for these enormous fish not to be marked in their classifications. Both *beluga*, larger than any other river fish, and *flétan*, larger than any other flatfish, have vowel-final pronunciation. There is a consistency between these classifications and comparatives both 'larger' and 'smaller' for fish as there is for comparatives 'larger' and 'smaller' among birds.

Many of the fish in Table 5.6 above are described as 'slender', and they contrast with 'thick-set' and 'curved' for masculine consonant-final fish in the set above, suggesting some opposition between 'slender'/'other than slender' in the classification of fish. The opposition between certain attributes and their association with contrasting classifications is consistent with the findings for birds in Chapter 4, eg. the 'slender' *héron* (M) 'heron', which is masculine and vowel-final, while the plump-chested, solid-bodied *cygne* (M) 'swan' and *canard* (M) 'duck' are masculine and consonant-final.

Descriptions of these masculine vowel-final fish in Table 5.6 also identify other attributes such as 'slender', eg. *anchois* (M) 'anchovy', *brochet* (M) 'pike', and camouflage colourations, particularly 'silvery', eg. *éperlan* (M) 'smelt', *hareng* (M) 'herring', as well as 'spotted', 'speckled' or 'blotched', eg. *saumon* (M) 'salmon', *aiguillat* (M) 'spiny dogfish'. The *morue* (F) 'cod' has a

similarly speckled colouration, and the contrasts in gender assignment suggest that this attribute may be associated with their shared vowel-final pronunciation patterns, as may 'slender' since this same attribute is shared by the vowel-final but feminine *lamproie* (F) 'lamprey' and *orphie* (F) 'garfish'. Descriptions also include 'spindle-shaped', eg. *aiguillat* (M) 'spiny dogfish', *germon* (M) 'albacore (tunny)', the same 'curved' form identified for fish in the consonant-final set and these variations are considered further below.

#### 5.4.4 Feminine and consonant-final pronunciation

Fish denoted by feminine consonant-final nouns are set out in Table 5.7 below alongside distinctive attributes relating to appearance and habits.

Table 5.7: Feminine consonant-final nouns

<i>bécasse de mer</i>	F	'longspine snipefish', 'trumpetfish'	elongated fish that swims vertically to blend in; uses stealth and camouflage to prey on small fish
<i>canthare</i>	F	'black sea bream'	laterally compressed upright fish; all born female and become male; eggs guarded by males
<i>bogue</i>	F	'bogue'	long, slender but oval shape; ascends to surface at night (< <a href="http://www.acquariodigenova.it">www.acquariodigenova.it</a> >, 2007)
<i>bonite</i>	F	'bonito'	fusiform shape, migratory; travels in large schools, able to jump out of the water; disruptive colouration
<i>brème</i>	F	'bream', 'carp bream'	upright, laterally compressed oval freshwater fish ( <i>Abramis brama</i> ) silvery grey; bottom dwellers, at night they feed close to the shore; non-migratory, but has spread across Europe and Asia; can survive out of water for extended periods
<i>capucette</i>	F	'capucette', 'Atlantic silverside'	elongated, slender but rounded belly; covered with large scales; congregates in schools made up of same-sized individuals; abundant spawners
<i>castagnole</i>	F	'damselfish'	high, oval, laterally compressed body
<i>cardine</i>	F	'megrim'	narrow-bodied 'flatfish', oval outline; left-eyed; scales detach easily (< <a href="http://www.habitas.org">www.habitas.org</a> >, < <a href="http://www.oceansatlas.org">www.oceansatlas.org</a> >, 2005)
<i>carpe</i>	F	'crucian carp'	freshwater fish, elongated with high body; global distribution through abundant spawning and adaptability to any freshwater habitat
<i>chupéonelle</i>	F	'Black Sea sprat'	elongated body, flattened, with saw-toothed edge along belly; schools; tolerates various salinities
<i>coquette</i>	F	'wrasse'	slender, spindle-shaped tapering at ends; sexually dimorphic (capable of changing sex); largest female adult becomes territory-holding 'male' in harem



<i>daurade/ dorade</i>	F	'(black) sea-bream'	deep body, laterally compressed oval shape; nocturnal, hermaphrodite; tolerates changes in salinity
<i>dorade royale</i>	F	'snapper', 's(ch)napper'	Australian member of the sea bream family, high, oval; pinkish in colour; predatory, will eat almost anything; hermaphrodite, first male, then female (<pagesperso-orange.fr>, 2005);
<i>épinoche</i>	F	'three-spined stickleback'	elongated form, thickset; freshwater, brackish or salt-water species; the <i>épinoche</i> returns to freshwater to spawn
<i>feuille</i>	F	'Atlantic spotted flounder	'flatfish', vertically compressed form but swims on its side; oval shape
<i>gréminille</i>	F	'Eurasian ruffe'	tiny aggressive fish, with large spiny dorsal fin distasteful to predators; accelerated reproduction rate; unique in its ability to adapt to wide-ranging habitats, temperatures; detects potential threat at some distance; spotted or <i>tacheté</i>
<i>girelle royale/commune</i>	F	'rainbow wrasse'	long and slender, can change colour during its life; 'females' can change to 'male'; known for quick changes in direction (<www.vertde terre.com>, DORIS-FFESSM, 2005)
<i>limande</i>	F	'dab'	flatfish, oval shape; right-eyed; smoother and slimmer skin than 'dab'
<i>loche</i>	F	'loach minnow'	tiny sleek freshwater fish; opportunistic feeders; nocturnal (<www.aquariophilie-pratique.net>, <www.biologicaldiversity.org>, 2005)
<i>loche de rivière</i>	F	'spined loach'	elongated spotted body; has double respiratory system; nocturnal freshwater fish
<i>môle</i>	F	'sunfish'	heaviest bony fish in the ocean (can weigh up to 5000 lb., 2 m. tall) laterally compressed form with upright oval body
<i>perche commune</i>	F	'European, perch'	laterally compressed, upright oval-shaped body; rough scales; freshwater has spread across Europe and adapts readily, replacing native species; eggs unpalatable to other fish, which protects them
<i>rascasse</i>	F	'scorpion-fish'	head and body protected by spines, extensive body armour and fins with venomous tips; flesh tasty
<i>sardine</i>	F	'sardine'	elongated narrow body; gregarious, found in huge shoals that feed at great depths during the day and rise to the surface at night to feed on zoo-plankton; can jump clear of the water
<i>sole</i>	F	'sole'	nocturnal flatfish renowned for its flesh
<i>truite</i>	F	'trout'	'elongated' freshwater fish noted for jumping and leaping out of the water; excellent camouflage colouration
<i>vandoise</i> syn. <i>chevesne, meunier</i>	F	'dace'	slender shoaling fish that moves in unpredictable darting movements
<i>vive</i>	F	'weaver' (greater, lesser')	'elongated' nocturnal saltwater fish, dorsal fin has venom glands on dorsal fin and/or gill cover

More than half of the 28 fish in this set have an 'elongated' shape, and the potential association between 'elongated' and gender assignment is further explored below. Among the descriptions above, certain other attributes are particularly distinctive, either because they appear elsewhere, or because they are remarkable and thus difficult to miss.

The major attribute shared by fish in the above set is a 'nocturnal' habit, eg. *loche* and *loche de rivière*, *bogue*, *brème*, *daurade*, *murène*, *sardine*, *sole*, *vive*. The limited application of this attribute amongst birds, and the presence of masculine counter-examples in the previous set suggests that 'nocturnal' may not be as widespread as these several examples suggest. The potential association between 'nocturnal' and feminine gender assignment is also examined further below.

Some of these regular feminine nouns denote fish with a 'laterally flattened' shape that swim side-on, eg. *cardine*, *feuille*, *limande*, *sole*, consistent with other feminine nouns denoting similar fish. However, given the masculine nouns discussed above, nouns denoting 'flatfish' are examined together as a set below. There is previous evidence of that an upright or vertical orientation may be associated with masculine gender assignment, eg. *hippocampe* 'sea-horse', yet *bécasse de mer* (F) 'longspine snipefish' is feminine.

More unusual are *sardine*, *truite* and *bonite* that are able to leap out of the water. Such movements are difficult for predators to predict, as are the darting movements of the tiny *vandoise*. Freshwater fish denoted by *brème* and saltwater fish denoted by *dorade* are able to survive out of water for considerable periods. The eggs of the *perche* are unpalatable, greatly increasing the chance to survive to adulthood. The *perche* is also perfectly adapted to changes in seasons that occur in temperate climates and can cope with a variety of freshwater habitats from stagnant water to flowing rivers, and its diet is not only extensive but is unrelated to time of day since '... it 'eat(s) everything, at all times' (<[www.Fishbase.com](http://www.Fishbase.com)>, 2005). Fish such as *grémille*, *rascasse* and *vive* are protected from predators by sharp projecting spines that in some cases are venomous, in others distasteful, making them less attractive as prey. It is interesting to compare the feminine *rascasse* and masculine *porc-épic* since both have spines.

However, those of the *porc-épic* only emerge when it inflates its body, an effort that is time-consuming and costly – in energy and in manoeuvrability since it becomes stationary. These disadvantages are not present for the *rascasse*.

The term *dorade/daurade* denotes various species of 'sea bream'. Some tolerate extraordinary variations in salinity, eg. *daurade royale* (F) 'gilthead sea bream' (*Sparus aurata*), others are hermaphroditic, eg. *daurade royale* (F) 'gilthead sea bream' and *daurade rosé* (F) 'bluespotted sea bream' (*Pagrus caeruleostictus*) and (*Pagellus bogaraveo*), born female before becoming male after the age of three. The *daurade grise* (syn. *canthère* (*Spondyllosa cantharus*)) is also born female and changes to male at around 8 years of age, and guards the nests of young and protect eggs and the young *alevins* from predators. At this stage they are often called *griset*, a masculine synonym.

Others in this set are also 'hermaphroditic', eg. *bogue* (F) 'bogue', *coquette* (F) 'wrasse', *girelle* (F) 'rainbow wrasse' in that the female can extend its life by changing sex to 'male'. While for the *girelle* this change is accompanied by changes in size, colouration and behaviour, other species do not display visible changes, suggesting that this is not a stable attribute. Other more constant or more general attributes offer more likely possibilities.

The *girelle*, a Mediterranean fish (often found in *bouillabaisse*), is particularly noted for its quick changes in direction (and the stem *gir-* is from the Provençal *gyr* meaning *tournoiement* (<doris.ffessm.fr>, 2005), or 'whirling around'). These darting changes in direction are particularly difficult to predict. The tiny *vandoise* (F) 'dace', mentioned above, swims with the same quick, darting changes in direction. This mode of swimming offers considerable advantage in escaping from predators (not least from humans) and there is a certain consistency between a life-saving attribute and feminine gender assignment that fits with evidence in relation to birds in Chapter 4.

Feminine gender assignment for a number of fishes in the above set, such as *capucette* (F)

'Atlantic silverside' and *clupéonelle* (F) 'Black Sea sprat' is yet to be accounted and these nouns are further examined below.

The *môle* (F) 'sunfish' is interesting since this enormous, laterally compressed fish swims in an upright position. Both of these attributes, 'upright' and 'enormous', are otherwise suggested to be associated with masculine gender assignment yet *môle* is feminine. Other feminine fish in Table 5.7 above are also 'laterally compressed' and swim in an 'upright' position, eg. *blade* (F) 'saddled sea bream, *carpe* (F) 'carp', *brème* (F) '(freshwater) bream', etc. These feminine counter-examples require explanation and they are examined below.

#### 5.4.5 Word-final pronunciation

The above analysis includes a limited discussion in relation to word-final pronunciation but it suggests that certain attributes may be associated with specific word-final pronunciation patterns, although some differences emerged that need to be accounted for. One attribute that continues to be associated with vowel-final nouns is a 'narrow' or 'slender' form, both masculine, eg. *aiguillat*, *anchois*, *anoli*, *barracuda*, *brochet*, *chirurgien*, *colin*, *dérivant*, *exocet*, *lançon*, *vairon*, and feminine, eg. *lamproie*, *orphie*. These examples are consistent with previous evidence identifying an association between 'slender' and vowel-final pronunciation in the analysis of birds, such as the vowel-final *cormoran* (M) 'cormorant', *guillemot* (M) 'common guillemot', *plongeon* (M) 'diver/loon' (see Chapter 4, Birds).

Descriptive terms for consonant-final masculine and feminine nouns are shown in (6):

- (6) • *fuselé* 'spindle-shaped' ('curved' body shape), eg. *blade*, *muge*, *truite*, etc., or 'oval', eg. *brème*, *daurade*, *feuille*, *perche*, *saint-pierre*, *sar*, *tambour*
- 'thickset' body, eg. *carpe*, *porc-épic*, *rascasse* *sandre*, *silure*
- 'broad', as in the 'winged' form of *ange de mer*.

There is also previous evidence of an association between these various shapes and consonant-final pronunciation in the analysis of birds, such as *cygne* (M) 'swan', *canard* (M) 'duck', *guignard* (M) 'dotterel', etc. (see Chapter 4, Birds).

While 'flatfish' are discussed below, this set cannot include *raie* (F) 'ray', a very different species. It is equally recognisable for its rectangular shape and its slender form as in its slow movement through the water, and each of these attributes offers a potential explanation for vowel-final pronunciation, although 'rectangular' has not previously been identified. At this stage it is not possible to identify which may be the salient attribute for the *raie*.

Some fish are 'scaleless' and have a smooth surface, eg. *anguille*, *baveuse*, *callionyme*, *congre*, *murène*, *sabre* and *silure*, where others have the typical 'textured' rough scales or 'bumpy' surfaces created by tubercles or thorns across their backs, eg. *grandin*, *raie*, *requin*, *turbot*. However, while both *blennie* and *dragonnet* are scaleless, denoting nouns are both vowel-final. Like the *raie*, these two fish are also noted for their slow passage through the water, and this movement contrasts with other fish such as *comète*, *coryphène*, *fanfre*, *girelle* and *vandoise*, noted for their agility and turn of speed. These examples suggest that for some fish oppositional distinctions in ways they move may become salient since they offer an easily identifiable and consistent means of identification.

The various attributes mentioned above form sets of antonyms, 'thick' and 'slender', 'oval/curved' (spindle-shaped) and 'narrow', 'smooth' and 'rough', and 'agile' and 'slow-moving'. These contrasting notions appear to be associated with contrasting consonant- and vowel-final pronunciation patterns in the same way as for binary oppositions associated with certain contrasting masculine and feminine gender assignments observed earlier (see Chapter 4). However, the distribution of these attributes between the two classifications is of considerable interest since the principles on which they are based have not yet been discussed. It is possible that a more 'rounded' or 'curved' form and 'smoother' shape may be more closely associated with 'female' and that consonant-final pronunciation is more closely associated with feminine, which would leave contrasting attributes (particularly relating to shape, and possibly movement) associated with the contrasting vowel-final pronunciation pattern. However, associations between 'thickset' and consonant-final pronunciation, and 'narrow' and vowel-final pronunciation, appear less direct, and it is possible that other semantic links underpin the distributions not only for this oppositional pair but for others.

However, none of these attributes can account for vowel-final pronunciation of *beluga*, *espadon* or *flétan*. In each case these fish have massive, thickset bodies and are better known for their enormous size compared with other similar fish – with other 'flatfish' for *flétan*, with other freshwater fish for *beluga*, and with other oceanic fish for *espadon*, the latter being particularly highly-regarded for its turn of speed and agility. It is possible that this comparative size may account for the same vowel-final pronunciation patterns previously related to distinctions associated with a comparative difference in size – both 'diminutive' and 'augmentative'.

It is also noted that although all fish may form part of the human diet, many of these fish are highly prized for the quality of their flesh, eg. *bar*, *chinchard*, *omble*, *saint-pierre*, *rascasse*, *sole*, *truite*, etc., and these nouns have the same consonant-final pronunciation pattern suggested to be associated with 'good to eat' for birds. However, some of the most crucial food fishes, *saumon*, *morue*, *hareng*, *laveret*, etc. are highly prized for their flesh yet have vowel-final pronunciation. It would appear that other attributes would more salient for fish and they will continue to be explored.

Fish are recognisable not only by their form but by specific colourations that allow them to meld into their specific habitats. The 'barred' colouration associated with consonant-final pronunciation may also account for consonant-final pronunciation of *gymnote* (*rayé*) and *fanfre* both of which are otherwise noted for their slender form. Other fish with this 'barred' patterning include *allache*, *alose*, *bar*, *bogue*, *daurade marbré*, *girelle*, *perche*, *pilote*, *sar commun*, *sandre*, *tambour*, *vive*, some of which are masculine and others feminine, but all have consonant-final pronunciation. While other attributes associated with consonant-final pronunciation may also be present, such as 'oval'/'rounded', there is some evidence that there may also be an association between barred patterning and consonant-final pronunciation.

Some fish have a 'speckled' or 'spotted' colouration pattern, eg. *morue*, *anoli de mer*, *cabot*, *crapaud*, *diodon*, *gougon*, each of which also has vowel-final pronunciation. 'Spots' and 'stripes' provide different patterns of variegation and while they regularly occur in combination for fish, they may form semantic oppositions alongside others observed to this point. However,

the principle on which this distribution is based is also of interest and the basis for any association of 'irregular/speckled' with vowel-final pronunciation and 'regular/striped' with consonant-final classification remains unclear at this stage.

In some cases, fish may have more than one of the various attributes and it is interesting to observe the different outcomes, particularly where they are associated with different word-final pronunciation patterns. For instance, *perche* (F) 'perch' has a 'rounded' body shape but it is also noted for its 'rough' scales. Consonant-final pronunciation for *perche* suggests that its 'rounded' form is more crucial than 'rough' scales, and its application does not require the same proximity. The *franfre* is both agile and striped, and has a consonant cluster word-finally.

While these attributes can account for word-final pronunciation patterns in many cases, for a number of nouns an explanation still awaits, eg. *chinchard*, *carassin*, *lieu*, *perroquet*, *sprat*, which suggests that other attributes may yet be unidentified.

However, different word-final pronunciations of 'flatfish', vowel-final for *barbue* (F) and *turbot* (M), and consonant-final for *sole* (F) and *targeur* (M), are discussed further below.

#### Synonyms with different word-final pronunciation patterns

A number of nouns have synonyms with different vowel- and consonant-final pronunciation patterns. For instance, the feminine vowel-final noun *orphie* (F) 'garfish/'garpike' has a feminine consonant-final synonym, *belone*. The fish denoted by these two nouns has a distinctive 'slender' shape, an attribute associated with vowel-final pronunciation. It also has a scaleless smooth outer covering, and the sweet flesh of this fish is highly regarded even though it is slender and bony. The potential for some association between consonant-final pronunciation and a smooth outer surface is argued above in relation to *sabre* (M) 'scabbardfish', and may possibly include other scaleless fish such as the eels *anguille* (F) 'eel', *murène* (F) 'Moray eel', *congre* (M) 'conger eel'. Although 'eels' are captured for their flesh, it is regarded as something of an acquired taste and the more obvious attribute, a 'smooth' texture that can be identified both visually and through touch, appears more likely and perhaps more

easily applicable for fish. Thus, vowel-final pronunciation for the noun *orphie* can be argued to relate to its 'slender' shape and consonant-final pronunciation for synonymous *belone* to the 'smooth' texture of its outer layer.

These variations in word-final pronunciation patterns for synonyms are not unlike alternative gender assignments for nouns, or contrasting gender assignments for synonyms in that they occur where an entity has more than one crucial attribute associated with contrasting, and thus competing, classifications.

#### 5.4.6 Summary - count nouns in the corpus

The analysis of nouns in sets according to gender assignment and word-final pronunciation patterns suggests that masculine gender assignment appears to be associated with:

- 'upright' form, eg. *hippocampe* (M) 'sea-horse', *saint-pierre* (M) 'Atlantic John Dory', *sar* (M) 'white sea bream'
- 'elongated' form, eg. *brochet* (M) 'pike', *coq* (M) 'cardinalfish', *omble de fontaine* (M) '(N. American) brook trout', *sandre* (M) 'pikeperch', *barracuda* (M) 'barracuda', *requin* (M) 'shark', *scare* (M) 'parrotfish'

For fish with an 'atypical' form, such as *sabre* (M) 'scabbard fish', *coffre* (M) 'coffer fish', *porc-épic* (M) 'porcupine fish', these attributes seem less crucial than a form which is entirely unlike a fish but is strikingly similar to an object in an entirely different lexical field, to the extent that the names of such an object is used in extension, and has the same gender assignment as the original meaning. There is some possibility that masculine gender relates to notions 'unlike', or 'similar but different', but this is not clear at this stage.

Feminine gender assignment appears to be associated with:

- 'flat', eg. *plie* (F) 'plaice', *raie* (F) 'ray', *sole* (F) 'sole', *targie* (F) 'topknot'
- 'elongated', eg. *lamproie* (F) 'lamprey', *morue* (F) 'cod', *orphie* (F) 'garfish'
- 'nocturnal', eg. *vive* (F) 'weaver', *bogue* (F) 'bogue'
- adaptations that enhance the opportunity of escaping from predators, eg. *orphie* (F) 'garfish', *bonite* (F) 'bonito', *raie* (F) 'ray', *sardine* (F) 'sardine', *truite* (F) 'trout',



*épinoche* (F) 'three-spined stickleback', *rascasse* (F) 'scorpion fish'

- having a voracious appetite, eg. *morue* (F) 'cod'
- able to survive out of water for extended periods, eg. *blennie* (F) 'blenny', *brème* (F) '(freshwater) bream'
- 'tallest', 'superlative' in size, eg. *môle* (F) 'sunfish'.

Fish denoted by *daurade* (F) 'sea bream' and *dorade royale* (F) 'snapper' have also been able to adapt their diets to the extent that they eat carrion. Feminine gender for these nouns is consistent with *morue* (F) 'cod', another fish noted for its voracious appetite and the variety of foods it consumes. This adaptability means that they are much less likely to starve when times are tough. Some freshwater fish, eg. *brème* (F) 'bream', *carpe* (F) 'carp', *perche* (F) 'perch' have been able to colonise and spread throughout river systems since they combine abundant spawning with adaptability and their capacity to spread is unrestricted. The same abundant spawning occurs for the *morue*.

While 'freshwater' and 'saltwater' habitats are equally crucial in the identification of specific fish, broad distinctions along these parameters in relation to gender assignment would not be particularly helpful. On the other hand, it is noted that some fish can tolerate enormous changes in salinity, as well as temperature and diet, which attributes can be compared with similar ones found for birds, and these adaptations are also associated with feminine gender assignment. While a specific colouration can camouflage a fish within a specific habitat, some fish are able to alter their colouration to their immediate surrounds as those habitats change, an attribute that offers a freedom of movement while remaining invisible. It is possible that this attribute may be relevant and it will continue to be of interest.

Counter-examples can be found for all sets, those associated with masculine gender assignment and those associated with feminine gender assignment. For instance, a number of 'flatfish' have masculine gender assignment, eg. *flet* (M) 'flounder', *turbot* (M) 'turbot' although most are feminine, and while 'nocturnal' is suggested to be associated with feminine gender for 'birds of prey', nocturnal fish such as *ange* (M) 'angelshark', *congre* (M) 'conger eel', and *sar* (M) 'white sea bream' are masculine. The 'upright' *sar* (M) 'white sea bream' has a feminine synonym,

*veirade*, which may be associated with the various abilities of sea bream to survive for a considerable length of time out of the water. These counter-examples can be accounted for by other attributes associated with a different gender assignment.

The analysis of word-final pronunciation patterns above suggests that another set of attributes may be associated with variations in word-final pronunciation patterns.

Certain attributes appear to be associated with vowel-final pronunciation:

- 'slender'
- 'rough' texture
- 'speckled' colouration
- comparative differences in size, 'smaller/larger' than another or others.

The attribute 'rough' relates to texture and can apply not only to fish with scales but also to some scaleless fish whose leathery skin is covered with tubercles or thorns across their backs, eg. *grondin* (M) 'red gurnard', *raie* (F) 'stingray', *requin* (M) 'shark', and *turbot* (M) 'turbot'.

Other attributes appear to be associated with consonant-final pronunciation:

- 'curved' (oval, spindle-shaped, etc.)
- 'thickset'
- 'smooth'
- 'barred' bands across the body
- 'superlative size'.

Consonant-final pronunciation may also be associated with 'delicious' flesh, eg. *rascasse*, but since fish are typical edible – even those *rascasses* with poisonous tips or fins, or without much flesh – it would not provide quite the same distinction as is suggested for birds.

Terms designating European fish may also designate Australian fish, such as *orphie* (F) 'gar', and the feminine term *rascasse* may also designate 'stonefish' that are similar to the Australian 'stonefish', eg. the 'spotted scorpionfish' (*Scorpaena plumieri*) although it has other masculine synonyms, *poisson-scorpion*, *poisson-pierre* (<[www.guadeloupe-fr.com](http://www.guadeloupe-fr.com)>, 2005). What is

interesting is that, in the Australian Aboriginal language Dyirbal, 'stonefish' is found in the same class II (*balan*) as 'female' – as is 'gar fish' – although most fish are in class I (*bayi*), suggested to relate to 'animacy' (Dixon, 1972:307). Dixon argues that the different classifications for fish are based on a contrast between those that are 'harmful' (Class II) and those that are not (Class I), and that this same argument can account for the different classifications of birds (although it does not explain their distribution in Class II along with 'female', 'sun', 'rain', 'fighting') (1972:309).

Several of the attributes identified above in relation to French nouns reflect attributes earlier identified in the analysis of birds in Chapter 4, and are consistent in their association with a specific classification. Further evidence is required for other attributes where evidence is not substantial. Also requiring further analysis are nouns that remain unaccounted for as well as the various counter-examples identified above. These nouns are explored further below.

## 5.5 Attributes - further discussion

Certain attributes of fish, such as 'elongated' body, 'upright' orientation, 'diminutive/ augmentative' size, 'nocturnal' activity, 'schooling', may be salient in their association with specific classifications. These notions are explored further below, particularly in relation to counter-examples and explanations for their different treatments.

Variations in word-final pronunciation will continue to be explored, particularly amongst sets of related fish below.

### 5.5.1 Elongated shape

Nearly seventy per cent of those fish denoted by masculine nouns are described as 'elongated'. However, more than fifty per cent of the feminine nouns in the database denote fish with a similarly 'elongated' form, such as the vowel-final *lamproie* (F) 'lamprey' and *morue* (F) 'cod', and consonant-final *ablette* (F) 'bleak', *anguille* (F) 'eel', *bonite* (F) 'bonito', *auxide* (F) 'frigate tuna', *bogue* (F) 'bogue', and etc. The possible association between this attribute and gender assignment is explored further below.

### 5.5.1.1 Counter-examples - 'elongated' but feminine

If, as figures suggest, some association exists between masculine gender and an 'elongated' form, particularly the prototypical form used to indicate a fish, feminine nouns denoting fish with a similar form require an explanation. Feminine counter-examples are set out in Table 5.8 below.

Table 5.8: Elongated shape – feminine counter-examples

<i>ablette</i>	F	'bleak'	freshwater fish related to 'carp', mouths adapted to feed from the surface without itself surfacing (< <a href="http://www.pechez.com">www.pechez.com</a> >, 2005)
<i>allache</i>	F	'sardinella'	scales of this fish are deciduous
<i>alose</i>	F	'twaité shad'	saltwater fish able to survive in freshwater environment when it returns to spawn
<i>anguille</i>	F	'eel'	freshwater eel spawned in saltwater; tough but smooth slimy skin
<i>athérine</i>	F	'hardyhead silverside'	spreading from Red Sea and East Africa to Hawaii and now the Mediterranean
<i>auxide</i>	F	'frigate tuna'	food- or game-fish with enormous turn of speed and changes in direction when threatened/caught
<i>badèche</i>	F	'golden grouper'	born female but changes to male later in life;
<i>baveuse</i>	F	'freshwater blennie'	scaleless but covered in mucus; mouth armed with two pointed canine teeth
<i>bogue</i>	F	'bogue'	elongated, fusiform; hermaphroditic; rises to the surface at night to feed (< <a href="http://www.FishBase.com">www.FishBase.com</a> >, 2005)
<i>bonite</i>	F	'bonito'	spread from Eastern Atlantic to South Africa, Canada to South America; able to leap into air
<i>clupéonelle</i>	F	'Black Sea sprat'	essentially a brackish water species, but able to move between very saline and purely freshwater environments without dying
<i>épinuche</i>	F	'three-spine stickleback'	strong spines on back prevent predators from attacking
<i>grémille</i>	F	'ruffe'	small freshwater fish whose extraordinary ability to reproduce displaces other fish;
<i>lingue</i>	F	'common ling'	member of cod family, females can spawn in abundance (20 to 60 million eggs per female)
<i>loche franche</i>	F	'stone loach'	nocturnal; fish has spread from Europe to China
<i>lotte</i>	F	'burbot'	long, slender, cylindrical fish, nocturnal
<i>murène</i>	F	'moray eel'	nocturnal saltwater fish, scaleless, slimy
<i>sardine</i>	F	'sardine'	schools rise to the surface at night to feed in greater safety from numerous diurnal predators
<i>truite</i>	F	'trout'	able to jump and leap; adapts food intake to nothing during long winter months

<i>thonine</i>	F	'little tunny'	forms schools; consumes anything
<i>vandoise</i>	F	'dace'	slender shoaling fish with darting movement

Some of these fish are also identified as 'nocturnal', eg. *anguille*, *bogue*, *loche franche*, *lotte*, *murène*, many of which that spend their daylight hours on the sea floor and ascend at night to eat prey found in greater abundance at this warmer level when it is safer to do so, eg. *sardine*. It is possible that this attribute may be associated with feminine gender assignment. However, two feminine nouns, *anguille* and *murène*, apply to eels while another eel, *congre* (M) 'conger eel', is masculine. Since all eels are 'nocturnal', the different classifications among these nouns suggests that an association with some other attribute/s, and these eels are examined below.

Some 'elongated' fish have another attribute that is extraordinarily distinctive, eg. 'deciduous' scales for *allache*, mouthpart adapted to provide safer surface feeding for *ablette*, luminous fishing filament on its head to lure prey towards its jaws for *lotte*. While these attributes are quite 'unique', other attributes that are perhaps more common are nonetheless remarkable for their association with life-giving properties, as set out in (7):

- able to colonise and spread wherever it is introduced, eg. *carpe*, *brème*, *perche*
- combining speed and unexpected changes in directions, eg. *auxide*, *épinoche*, *vandoise*
- able to escape from threat by leaping out of the water, eg. *bonite*, *truite*
- able to inflict serious injury forcing a predator to release it, eg. *baveuse* and *murène* which are armed with powerful and sharp projecting canine teeth
- able to move between freshwater and saltwater on a daily basis, eg. *clupéonelle*
- females can extend their life by changing sex at the end of their egg-laying potential, eg. *bogue*, *girelle*.

While fish denoted by the masculine noun *saumon* can also move between saltwater and freshwater, it takes years of development in its freshwater birthplace to reach the stage where they can journey downstream, and they then spend some years in a marine environment to develop the maturity that enables it to return to its freshwater birthplace to spawn. However, adults cannot sustain this annual migration for more than a couple of seasons before dying. Masculine gender assignment for this fish is not fully accounted for at this stage.

The extraordinary attributes of these feminine 'elongated' fishes are sufficiently significant that they may be associated with feminine gender assignment, although the principles on which these associations might be based would not necessarily be the same. While there is some association between 'deciduous' and 'seasonal' which, in an earlier discussion (see Chapter 4) appears to be associated with feminine gender assignment, this strikingly different attribute is sufficiently rare for it to be marked as 'unique', and there is considerable evidence of an association between 'unique' and feminine gender assignment.

There is also some evidence for an association between feminine gender and adaptations that offer an enhanced opportunity for survival – of the individual, in some cases, but for the species in others – particularly those that can combine turn of speed with changes in direction, or those sufficiently adaptable that they can spread and colonise in a continuous cycle, as occurs for some 'dove-like' birds identified in Chapter 4. 'Schooling' also enhances the safety of the group and although the list above is not exhaustive, the lack of regularity with regard to schooling plus the presence of other attributes that offer greater consistency suggest that 'schooling' may not have any bearing on gender assignment. Nonetheless, it should be examined further.

Some nouns denoting fish with this 'elongated' form cannot be further analysed since little information is available, eg. *cavillone commune* (F) 'large-scaled gurnard', denoted by a feminine noun although other nouns denoting 'gurnard' are masculine. Also not included in this discussion are those already discussed, eg. *lamproie* (F) 'lamprey', *orphie* (F) 'garfish', whose feminine gender assignment is argued above to relate to an adaptation that provides an enhanced opportunity for survival, and *morue* (F) 'Atlantic cod', where various attributes are offered.

#### 5.5.1.2 Further discussion regarding 'elongated'

While 'elongated' incorporates the prototypical outline assumed for fish, beyond 'longer than wide' it provides little information regarding overall form. 'Elongated' is equally applicable to fusiform bodies (spindle-shaped and thick through, as for tuna), laterally compressed bodies (as for 'bream' and 'wrasse'), 'filiform' or eel-like bodies, even those that are vertically compressed as for 'angelfish', 'flathead' and the tongue-shaped 'anglerfish' and 'blenny'. Possibly the only

forms 'elongated' might not include are bodies that are more 'rounded' or 'broader' than 'long', and bodies that are highly unusual in their form. Thus, although 'elongated' is more closely associated with masculine gender in terms of numbers, and although various attributes identified above appear to account for apparent feminine counter-examples, it is not entirely certain that the notion 'elongated' itself can be regarded as crucial. It will continue to be examined.

#### 5.5.1.3 Similar fish, different gender assignments

Two North Atlantic fish with similar 'elongated' bodies can be compared – *morue* (F) 'Atlantic cod', and *saumon* (M) 'Atlantic salmon'. While an 'elongated' form may be associated with masculine gender assignment for *saumon*, feminine gender assignment for *morue* suggests the presence of some other attribute. The *morue* is particularly notable for its abundant spawning since a single adult female can produce up to five million eggs annually (<en.wikipedia.org>, 2005). On average, an adult *saumon* deposits 700-800 eggs per pound of her body weight but since an adult can reach up to 78 lbs., it might also be considered 'abundant'.

More pertinent, perhaps, is the contrast between these two fish in regard to their diet. The adult *saumon* migrating back to freshwater environments to spawn does not eat again after re-entering fresh water. Unable to re-adapt their diet to the freshwater habitats that once nurtured them, many salmon die. 'About 90-95% of all Atlantic salmon die following their first spawning' (<animaldiversity.ummz.umich.edu>, 2005). On the other hand, the omnivorous *morue* is noted not only for both its prodigious appetite but for the varied nature of its diet, and the migrations undertaken in its lifetime do not force the life out of this fish.

#### 5.5.2. 'Upright' orientation

Also suggested above to be significant is another form, one that differs from 'elongated' in that the body is laterally compressed and more rounded – such fish are described as 'deep-bodied', or 'tall'. For the most part fish with laterally compressed bodies orient themselves in an 'upright' position as they move through water and it is possible that this very general attribute may also be associated with masculine gender. It can be argued that an upright or vertical orientation is not unrelated to an 'elongated' form since it could be said that most fish that are 'elongated' also

swim in an 'upright' way – a side-on position usually suggesting 'dead' or 'dying' for a fish (as it would for many living things, trees, for instance). For the most part, nouns denoting 'upright' fish are masculine but some are feminine. Any association between this attribute and masculine gender assignment requires that these feminine counter-examples be accounted for.

#### 5.5.2.1 Counter-examples - 'upright' form but feminine

Laterally compressed fish with an upright orientation that are denoted by feminine nouns include *blade* (F) 'saddled sea bream', *brème* (F) 'bream', *carpe* (F) 'carp', *castagnole* (F) 'cardinalfish', *daurade* (F) 'black sea bream'/'snapper', *môle* (F) 'sunfish', *perche* (F) 'perch'. While feminine gender assignment for some is accounted for in the analysis related to other attributes, some of these feminine nouns have not been discussed.

The *brème* uses its protractile mouth to dig for larvae and smaller mud-dwelling creatures, but when times are tough it can filter-feed using its gill rakers which are able to move far apart. It can also survive out of water for a considerable period, as can the Australian *daurade* (F) 'snapper'.

Descriptions of the freshwater fish *brème*, *carpe* and *perche* all note their ability to spread out and colonise in a continuous way. Feminine gender assignment for these fish is consistent not only with birds noted for their extraordinarily fertility, *oie cygnoïde* (F) 'swan goose', but the ability to spread out and colonise, forming new family groups that will repeat the process, eg. pigeons denoted by the feminine noun *tourterelle* (F) 'dove', described in Chapter 4. The association between feminine gender assignment and these attributes – abundant fertility, and the ability to adapt to new environments that enables a creature to continue multiplying and spreading out – will continue to be explored.

The *môle* (F) 'sunfish' moves slowly through water in an upright orientation, like some gigantic concrete wheel. This fish prefers warmer waters since colder waters may cause it to become disoriented. They can grow to extraordinary size, as tall as they are long – the largest individuals recorded being 3.3 m. (10.8 ft) in length, 4.2 m. (14 ft.) in height, and weighing up



to 2,300 kg. (5,100 lb.) (<en.wikipedia.org>, 2005). This upright form and a restriction to warmer waters might otherwise be related to masculine gender assignment. However, the *môle* is regarded as the 'heaviest' of all bony fish, although rare 'whale sharks' may reach a similar weight, but its unique status as the 'tallest' fish is unchallenged, and it shares the same feminine gender assignment and consonant-final pronunciation as *autruche* (F) 'ostrich', the 'tallest' living bird, and *girafe* (F) 'giraffe', the tallest mammal. For each of these creatures there appears to be an association between feminine gender assignment and a size that is unique in its relation to a 'superlative' rather than comparative degree. The association between these attributes and feminine gender assignment and consonant-final pronunciation will continue to be examined.

The laterally compressed 'upright' fish *coq* (M) 'cardinal fish' has a feminine synonym *castagnole*. The 'cardinal fish' has a unique adaptation that protects it during its nocturnal surface fishing in that luminescent organs under the body match the intensity of moonlight and make it invisible to any predators beneath. Thus it can prey without itself being preyed on. It can be argued that masculine gender for *coq* relates to an upright fish, or a 'nocturnal' fish that lights itself up, while the less common feminine synonym *castagnole* may be used by those aware of its unique adaptation that protects it while feeding.

Various 'sea bream' identified as *daurade* are also 'hermaphrodite', as is the Australian 'snapper'. The *sar* (M) 'white sea bream' is also 'hermaphrodite', but it has a feminine synonym, *veirade* (F). It is possible that this less well-known, but crucial, ability to extend the term of its natural life by changing sex when fertility comes to an end may be associated with this feminine synonym. However, fish known as 'sea bream' are also known to eat almost anything. This ability to adapt their diet to increase the opportunity of obtaining food also appears to be associated with feminine gender assignment. It is certainly more constant and easier to identify.

The French noun *dorade/daurade* is used in extension to denote the very common Australian 'snapper' whose laterally compressed 'upright' form might otherwise have been associated with masculine gender assignment. The similarity with 'sea bream' known as *dorade/daurade*, however, not only in shape but in an ability to survive out of water for long periods, allowed

French speakers to draw on that name in extension while English speakers did not make the same connection and coined another lexical term.

The various fish to which the feminine nouns *daurade/dorade* apply and the use of a feminine and masculine nouns for 'sea bream' are discussed further below.

It can be argued that while the various attributes associated with feminine gender assignment may be very different for all except one, *môle*, they appear to be directed towards enhancing survival – by increasing opportunities to obtain food, by evading predators or prompting predators to prefer others since they are unpleasant-tasting, and an adaptability that copes with changes in food or food supply, water salinity and water temperature. Feminine gender for *môle* is suggested to be associated with its uniquely superlative size.

#### 5.5.2.2 'Upright' and 'elongated' in combination

The notion 'upright' may also include an 'elongated' fish such as *hippocampe* (M) 'sea-horse' which typically orients itself in an upright position, and it has the same masculine gender assignment as the majority of those that are both 'elongated' and 'upright'.

The *bécasse de mer* (F) 'longspine snipefish' has a slender, elongated form and is closely related to the *hippocampe*; in both form and orientation, then, it might have been expected to be masculine. The *bécasse de mer* is able to mimic plants in a way that allows it to move slowly up on its prey without being observed. It can mimic other fish so successfully that they allow it to join their schools where it can simply pick off its prey. Feminine gender assignment appears less related to the ability to camouflage itself – an attribute shared by all fish in relation to their specific environments – than to its ability to take on the form of its prey and increase the likelihood of obtaining a ready supply of food.

These two notions related to shape and orientation seem less relevant for *lançon* (M) 'sand-eel', a slender snake-like fish that buries itself in the sand, and for *sabre* (M) 'scabbardfish', a slender, scaleless snake-like creature whose overall form identifies it as a fish rather than a

water-snake, since it soon dies if it is removed from the water. The nature of the association of these nouns with masculine gender assignment requires greater clarification. Other nouns denoting 'eels' are examined as a set below.

The notion 'upright' is irrelevant for 'flatfish', equally laterally compressed as those that orient themselves upright but instead orient themselves side-on, and while 'elongated' might also pertain to many of the flatfish, the majority of nouns denoting these fish are feminine. They are discussed further below as a set.

### 5.5.3 Distinctions in age and size

Descriptions of fish in the database suggest the possibility of distinctions according to age and size. These different areas are examined below.

#### 5.5.3.1 Diminutive in age - 'young' fish

Some nouns in the database denote the 'young' of various kinds of fish, as in Table 5.9 below.

Table 5.9: Nouns denoting 'young' of various species

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<i>alevin</i>	M	'young fish destined to populate rivers'
<i>barbillon</i>	M	'young <i>barbeau</i> (M) 'barbel'
<i>carpeau</i>	M	'young carp'
<i>fretin</i>	M	'fry, young fish'
<i>turbotin</i>	M	'young turbot'

These nouns denoting the 'young' of various kinds have the same masculine gender assignments and vowel-final pronunciation patterns as for the 'young' of various birds, eg. *perdron* (M) 'newborn partridge chick', and the general term *poussin* (M) 'chick', any bird newly emerged from the egg. Amongst nouns in Table 5.9, *alevin*, *carpeau* and *turbotin*, can apply to the newly-hatched 'young', and those that are 'comparatively smaller' in size than the mature adult. The general term *alevin* can also denote a specific kind of species, 'pollack', specifically the 'young' spawned in freshwater rivers that must reach a specific size before they are able to migrate to open seas – a size at which they have developed sufficiently to tolerate their new saltwater habitat. The term *turbotin* applies not only to newly-hatched forms, but to

any catch less than one metre in length (<www.saveurs.sympatico.ca>, 2005). For both *alevin* and *turbotin* these secondary applications are associated with a 'comparative' size relative to the mature adult rather than absolute smallness in size.

In Chapter 4 certain evidence, particularly different suffixes for two masculine nouns denoting young partridges, suggested that 'comparative' size may be related to vowel-final pronunciation. The tiny-sized fish identified in Table 5.9 are all vowel-final, consistent with that earlier generalisation. However, while masculine gender for the 'tiny/young' fish may be associated with an 'immature' form, these tiny/adult fish are also sufficiently 'different' from adult form and size and it may be this attribute, 'different', that can account for masculine gender assignment of these 'tiny' fish.

A possible counter-example is *civelle* (F) 'small-sized *anguille* (eel), that may also be referred to as *pibale*. Both of these terms apply to eel larvae grown to approximately 60 mm. by which time they are similar in appearance to the adult. Once they achieve this size they commence their migration back towards the freshwater rivers that they will eventually inhabit, and during this period they develop an adaptability that will eventually allow them to enter freshwater. Either of these attributes, a similar appearance, or an adaptability that allows it to move successfully from saltwater to freshwater, may account for feminine gender assignment of *civelle* and *pibale*. Consonant-final pronunciation may relate to the smooth, scaleless bodies of these forms as for the adult, *anguille* (F) 'eel'.

#### 5.5.3.2 'Diminutive' in size

The database includes many fish that are 'diminutive' in size, as shown in Table 5.10 below.

Table 5.12: Fish 'diminutive' in size

<i>anchois</i>	M	'anchovy'	9 cm	marine
<i>apagon</i>	M	'cardinalfish'	10-15 cm.	marine
<i>cyprin</i>	M	'goldfish'	5-7 cm	freshwater
<i>nonnat</i>	M	'transparent goby'	8 cm	marine
<i>spirlin</i>	M	'chubb'	12-15 cm	freshwater

<i>sublet</i>	M	'long-snouted wrasse'	10 cm	marine
<i>vairon</i>	M	'minnow'	11 cm	freshwater

While these fish vary in shape, from the cylindrical *spirlin* to the large head and tapering body of *nonnat*, and oval *sublet*, and slender *vairon*, all are tiny, 'diminutive' in absolute size in comparison with other fish in their respective environments. All have the same vowel-final pronunciation patterns as nouns denoting 'young' of their species. 'Comparative' differences in size may encompass 'tiny' in comparison, and 'smaller' in contrast, with another or others, as identified for the 'young' of various birds, as well as smaller-sized birds, particularly among shore birds in Chapter 6. 'Tiny' appears to be significant in meanings of nouns such as *morceau* (M) 'bit', *bout* (M) 'tip', *fragment* (M) 'fragment', *point* (M) 'dot', *brin* (M) 'jot', *soupçon* (M) 'a tiny amount' as well as *mie* (F) 'crumb', and in each case nouns have vowel-final pronunciation. Interestingly, the term *miette* (F) 'the smallest possible crumb', has consonant-final pronunciation. Differences in meaning between *mie* and *miette* suggest that, just as 'augmentative' can be contrasted with 'superlative' in relation to largeness of size, 'diminutive' and superlative can be reflected in relation to smallness of size.

The different comparative aspects of 'diminutive' – tiny in size and young in age – will continue to be explored in other lexical fields. While vowel-final pronunciation is also found alongside masculine gender assignment, we would not expect to find that the same attribute would be salient for two apparently separate systems, and the notion 'different' is suggested as a possible attribute associated with masculine gender assignment for these nouns.

The term *dragonnet* applies to various bottom-dwelling marine fish similar to the *blennie* (F) 'blenny' in both form and texture – a flattened triangular head, large wide-set eyes, tapering body, fan-shaped tail fin and scaleless bodies covered in mucous. Some have spectacularly brilliant colourations, particularly those that feed around reefs, but those feeding along sandy coastal shores have a mottled colouration that enables them to blend perfectly into their specific habitats. Dorsal fins usually have four spines, some of which may be venomous. These fish move slowly over the floor, settling every few inches to pick at small crustaceans. All, however, are smaller than the *blennie*, indeed they are smaller in general than other fish since most are under 3 cm. and none exceeds 30 cm. These two attributes – 'different' from others, and

'smaller' in its adult size – may be argued to be associated with masculine gender assignment and vowel-final pronunciation, consistent with other nouns denoting fish and birds differentiated from others in their smaller size.

#### 5.5.3.3 Counter-examples - 'diminutive' but feminine

A number of tiny fish are denoted by nouns that are not only feminine but have consonant-final pronunciation, and these counter-examples require some explanation. For instance, the torpedo-shaped *épinuche* (F) 'three-spined stickleback' grows to approximately 7 cm. While it has sharp spines on its back that are long and strong and offer some protection from fish that prey on it so, too, do fish denoted by the masculine term *dragonnet*. However, those denoted by *épinuche* move around at speed and constantly change direction in unexpected darting movements. The unpredictable nature of this movement contrasts with that of the *dragonnet*, and enables it to survive where other slower creatures are more easily taken, and this attribute may be associated with its feminine gender assignment.

The tiny slender *vandoise* (F) 'dace' grows to approximately 9 cm., a size and shape that might suggest masculine gender assignment and vowel-final pronunciation. This fish has a wariness and swims around in a darting movement that combines an extraordinary turn of speed and change of direction allowing it to escape even from inside the mouths of predators. As with the *épinuche*, it is possible that a habit that allows a fish to escape capture may be associated with its feminine gender assignment. It is noted that these wily, agile fish *épinuche* and *vandoise* both have consonant-final pronunciation.

The term 'smelt' denotes small silvery fish such as *siouclet* (M), *joël* (M) 'sand-smelt' that are closely related to the 'silverside' family (*Atherininae*) and grow to around 15 cm. These fish are constrained to temperate and cold Northern waters, or to a specific region. However, *athérine* (F) 'hardyhead silverside' denotes a fish found widely around the Indo-Pacific region and the adaptability that produced this spread has continued since its migration into the Mediterranean through the Suez Canal. The *capucette* (F) 'Atlantic silverside', which also grows up to 15 cm., has spread along the eastern coastline of North America, from the Gulf of St. Lawrence in

Canada to north eastern Florida. The ability of the *athérine* and *capucette* to survive and spread through these different environments contrasts with the masculine *sioucler*; instead, it reflects the same adaptability and spreading of doves denoted by the feminine noun *tourterelle* (F) 'mourning dove', and these nouns are consistent in their feminine gender assignments. For these tiny fish, it seems that the ability to spread reflects an adaptability that can overcome any changes in environment or habitat and is more crucial to long-term survival than their small size.

#### 5.5.3.4 Comparative difference in size – other examples

Distinctions in comparative size include not only 'smaller' but 'larger', which attribute may be salient for some fish in the database – particularly those noted for their larger size in comparison with others in the same environment, or otherwise similar in form, such as those listed below in Table 5.11.

Table 5.11: Fish noted for their comparatively large size

<i>brochet</i>	M	'pike'	river fish growing up to 135 cm. or more
<i>beluga</i>	M	'beluga sturgeon'	<i>grand poisson</i> 'large fish' (considered 'freshwater' but inhabits marine lakes)
<i>espadon</i>	M	'swordfish'	( <i>g</i> ) <i>rand poisson</i> 'large (ocean) fish'
<i>flétan</i>	M	'giant halibut'	<i>remarquable</i> in its size (3 m. and 320 kg.), largest of all 'flatfish'
<i>lançon</i>	M	'giant sand eel'	larger than other sand eels
<i>lieu noir</i>	M	'pollack'	<i>gros poisson de mer</i> 'large saltwater fish'
<i>marlin</i>	M	'Mediterranean spearfish'	large Mediterranean fish 240 cm. in length
<i>requin</i>	M	'shark'	<i>poisson de grande taille</i> (LRPT, 1994:974)
<i>thon</i>	M	'tuna', 'tunny'	<i>poisson de grand taille</i> (LRPT, 1994:1180)

Previous evidence suggests that a difference in comparative size appears to be associated with masculine gender assignment and vowel-final pronunciation. Descriptions of each of these fish note their 'large' size, suggesting that they are comparatively larger than fish found in similar environments.

Two fish can be highlighted from the above set. One, the oceanic *flétan*, can grow up to 3 m. and can weigh up to 320 kg. This size is not only large in a direct comparison with other 'flatfish' but also in relative terms with other fish, even many sharks. The other example is

*beluga*, considered a 'freshwater' fish although it inhabits inland saltwater lakes. This fish grows up to 6 m., and can weigh up to 2000 kg. (<fr.wikipedia.org>, 2005), although individuals 9 m. long and 2700 kg. have been recorded. Its position as the largest freshwater fish is indisputable. Thus, these two fish can be singled out from others by a difference in size relative to others. It is suggested that these attributes can account for masculine gender in relation to 'different', and for vowel-final pronunciation in relation to the comparative attribute 'larger'.

The 'halibut' is often used as a point of comparison for *turbot* (M) 'turbot', reflected in its English synonyms 'Greenland halibut' and 'lesser halibut', while the French term draws on an Old Scandinavian (Old Norse) term (<atilf.atilf.fr>, 2005). It grows up to around 1 m. in length and 25 kg. in weight. Compared with other 'flatfish', such as 'plaice' at 100 cm/7 kg., 'Dover sole' at 60 cm./3 kg., and 'dab' at 40 cm./1 kg., 25 kg. and the many very much smaller 'flatfish', the *turbot* is considerably larger in size, but in turn it is very much smaller than the 'halibut' that weighs in at 320 kg. The *turbot* thrives in the deepwater seas of the colder more northerly latitudes and suffers in warmer temperatures, and its masculine gender assignment is more likely to relate to its restriction to these latitudes rather than a distinction that includes both 'smaller' and 'larger' at the same time. It is interesting to note that these same attributes are reflected in the English synonyms.

It is interesting that *saumon* (M) 'salmon' is also described as a *gros poisson migrateur* 'large migratory fish'(LRPT, 1994:1014) and its masculine gender and vowel-final pronunciation are consistent with others in this set. The one counter-example, *môle* (F) 'sunfish', an enormous fish denoted by a feminine consonant-final noun, is accounted for in its unique size.

#### 5.5.4 'Nocturnal' fish

A number of fish in the database are described as 'nocturnal', a habit which brings with it a considerable number of other adaptations in relation to eyesight, colouration, fishing techniques, etc. While these adaptations required for nocturnal hunting are costly in energy, the benefit comes from a reduction in the number of predators that would otherwise prey on them,



particularly surface feeders where food is more abundant, and the ability to feed while remaining hidden. 'Nocturnal' fish in the database are included in Table 5.12 below.

Table 5.12: Nouns denoting 'nocturnal' fish

Masculine nouns			
<i>ange</i>	M	'angelshark'	nocturnal
<i>cardinal</i>	M	'squirrelfish'	nocturnal
<i>congre</i>	M	'conger eel'	nocturnal
<i>corb commun</i>	M	'brown meagre'	nocturnal
<i>hareng</i>	M	'herring'	nocturnal
<i>loup de mer</i>	M	'catfish'	nocturnal
<i>omble de fontaine</i>	M	'N. American brook trout'	nocturnal
<i>poisson-pierre</i>	M	'stonefish'	nocturnal
<i>porc-épic</i>	M	'porcupinefish'	nocturnal
<i>requin-tapis</i>	M	'carpetshark'	nocturnal
Feminine nouns			
<i>abadèche</i>	F	'goldblotch grouper'	nocturnal
<i>anguille</i>	F	'European eel'	nocturnal freshwater eels
<i>blennie</i>	F	'blenny'	nocturnal
<i>castagnole rouge</i> syn. (M) <i>coq, apogon</i>	F	'cardinalfish'	nocturnal
<i>coquette</i>	F	'cuckoo wrasse'	nocturnal; older females can change sex
<i>daurade</i>	F	'snapper'	nocturnal; oval-shaped
<i>morue</i>	F	'Atlantic cod'	nocturnal
<i>murène</i>	F	'moray eel'	nocturnal saltwater eel
<i>rascasse</i> <i>brune/rouge</i>	F	'scorpionfish'	nocturnal, solitary, sedentary; protected by venomous fins/spiny tips
<i>grande vieille</i>	F	'ballan wrasse'	nocturnal; heavily-built body, older females change sex to become male

These nocturnal feeders must rely on highly developed non-visual sensory systems to detect prey or other food (<www.marine.auckland.ac.nz>, 2008). If such an adaptation is associated with feminine gender assignment, as is suggested in the analysis of birds, the masculine counter-examples above require to be accounted for.

#### 5.5.4.1 Potential counter-examples - masculine nouns

A number of fish are described as 'nocturnal' but are denoted by masculine nouns. The 'nocturnal' *loup de l'Atlantique* (M) 'catfish' inserts itself into fissures and holes with only the head protruding and waits for prey to pass. This 'stand-and-wait' approach is also employed by 'nocturnal' herons which share the same masculine gender assignment. It may be associated with the failure to exploit this adaptation to its fullest extent in their attempt to find food.

Fish known as *porc-épic* and *diodon* (M) and other members of the 'porcupine' family, such as the 'spotfin burrfish', can inflate their bodies when they sense danger and spines that otherwise rest flat along the body stand out, protecting it from all predators except sharks. However, this fish is a poor swimmer under normal circumstances, and this "puffing" ploy is used only in desperation as the inflated fish loses most of its maneuverability (<marinebio.org>, 2005). The 'nocturnal' *cardinal* (M) 'squirrelfish' would remain undetected except that it emits sounds at night that signal its presence. The *hareng* (M) forms schools of considerable size that rise to the surface at night to feed, but during the spawning period they emit thumping noises which can be heard for a considerable distance, alerting any predator to their presence and location that would otherwise remain undetected. The *corb commun* (M) 'brown meagre' (syn. 'corb', 'sea raven', 'ombre') is also nocturnal, and the male also attracts a female by emitting a sound compressing its swimming bladder. For these fish, the adaptation to 'nocturnal' feeding that offers considerable protection is counteracted by one that places it at risk. These examples call to mind nocturnal 'rails' and 'crakes', birds whose continuous loud call pinpoints their location (see Chapter 4). These creatures are all denoted by masculine nouns that might otherwise have been feminine.

The 'nocturnal' *omble de fontaine* (M) 'brook trout', native to North America, is limited to clean cold freshwater habitats and does not tolerate any variation (<www.encyclopedeche.com>, 2007). Its inability to adapt to warmer or brackish habitats prevents it from spreading. It can be contrasted with *carpe* (F) 'carp' whose ability to adapt to changes in habitat is unsurpassed, and these different capacities to adapt to changes in habitat may be associated with differences in their gender assignments. However, as with other 'trout', it is able to leap clear of the water.

'Nocturnal' sharks in this set, *ange de mer* and *requin-tapis* bury their bodies on the sea floor and lie in wait for prey to pass by, thereby wasting the opportunity offered by their nocturnal habit and an camouflage colourations that could greatly enhance their potential to obtain food.

The *bar commun* (M) 'sea bass', feeds nocturnally but only in winter and thus is not truly 'nocturnal', nor is *mérou (noir)* (M) 'dusky grouper', that is more a twilight feeder since it preys on crustaceans that emerge at this time. All three 'eels' are 'nocturnal', and they are also typically bottom feeders – either burrowing in sand, or lurking in crevices as they wait to capture their prey. However, two nouns are feminine while the third is masculine. These three eels are examined below as a related set.

Descriptions of some fish vary, such as the freshwater *sandre* (M) 'pikeperch' (aka 'zander'). One source describes it as *plutôt nocturne* 'somewhat nocturnal' (<[www.pecheaquariophilie.com](http://www.pecheaquariophilie.com)>, 2005). Another source suggests that it feeds towards the evening or early in the morning but may also undertake nocturnal feeding since its eyesight is adapted to low light conditions (<[www.pikezander.co.uk](http://www.pikezander.co.uk)>, 2005), an adaptation that seems to be related to its preference for murky conditions. This fish also requires high levels of oxygenation found in flowing waters, and while the prevalence of these conditions in northern Europe has enabled it to spread widely once introduced, it suffers in higher temperatures and cannot tolerate waters low in oxygen content and is thus restricted from spreading further.

#### 5.5.4.2 Related fish, different gender assignments

The term *rascasse* is the generic term for a number of closely-related fish known as 'scorpionfish', including 'lionfish', 'scorpionfish' and 'stonefish'. Despite quite extraordinary body, fin and colouration camouflage, scorpionfish are nocturnal and remain nearly immobile to fish *à l'affût*, that is, keeping a look-out for passing prey (<[doris.ffessm.fr](http://doris.ffessm.fr)>, 2005) – although 'lionfish' may hunt in packs.

However, different terms apply to specific members of this set. These closely related fish include the *petite rascasse rouge* of the Mediterranean and Atlantic, and the *poisson-pierre*

(*Synanceja verrucosa*), widely distributed around coral reefs of the northern Australian and Indian coastlines, that buries itself in mud or sand. While the venomous spines of the Mediterranean/ Atlantic *rascasse* can produce an extremely painful result, those of the Australian *poisson-pierre* can be fatal (<www.aims.gov.au>, 2005). However, the *rascasse* uses venomous spines solely for defence against bottom-feeding sharks and rays. Being confident in their disguise, the *petite rascasse rouge* allows humans to approach close by without moving. It has been found that stonefish can live out of water for many hours.

One of these attributes (fishing à l'affût) might have suggested masculine gender assignment for both fish, while 'nocturnal' and 'defensive mechanisms' might well suggest feminine gender assignment for both. Allowing humans to come close without fleeing might have suggested masculine gender for the European *rascasse* while the ability to live for many hours out of the water might have suggested feminine gender for the Australian *poisson-pierre*. However, in the food-rich grounds of the Mediterranean and Atlantic littoral remaining immobile or fishing à l'affût are less crucial than spines – venomous or not – that provide considerable defence against bottom-feeding predators such as rays and sharks since they can pierce their tough skin. For the Australian *poisson-pierre* a more crucial element is that, while its venomous spines can kill, its preference for shallow waters in tidal areas makes it easy for it to be stepped on and crushed. Masculine gender for the *poisson-pierre* offers another advantage in that it is consistent with another crucial attribute for this Australian fish – venomous spines may be similar to European scorpionfish but the form is quite different.

#### 5.5.5 Schooling fish

Many fish find protection in schools since the mass can change direction in a moment to deflect any attack. It is possible that this attribute may be associated with their classification of denoting nouns. Schooling fish are listed below in Table 5.13.

Table 5.13: Fish that form schools

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Masculine gender assignment

<i>anchois</i>	M	'anchovy'	silvery fish, forms large schools
<i>comète saumon</i>	M	'rainbow runner'	silvery fish, forms large schools

<i>corb commun</i>	M	'brown meagre'	travels in small shoals
<i>corégone</i>	M	'whitefish'	silvery fish, forms schools
<i>coryphène</i>	M	'common dolphinfish'	silvery fish, forms schools
<i>exocet aux ailes</i>	M	'blackwing flyfish'	silvery fish, forms schools
<i>germon</i>	M	'albacore (tunny)	silvery fish, forms schools
<i>hareng</i>	M	'herring'	silvery fish, forms large schools
<i>sandre</i>	M	'pikeperch/zander'	forms schools that hunt together while young, solitary in maturity

#### Feminine gender assignment

<i>ablette</i>	F	'bleak'	shiny, silvery, lives in great schools; mouthpart adapted for surface feeding without having to surface
<i>anthérine</i>	F	'hardy silverside'	silvery fish, forms large schools
<i>auxide</i>	F	'frigate tuna'	forms schools; extraordinary turn of speed
<i>bogue</i>	F	'bogue', 'porgy'	hermaphrodite; nocturnal; schooling
<i>bonite</i>	F	'bonito'	nocturnal fish, able to leap; forms large schools
<i>capucette</i>	F	'Atlantic silverside'	congregates in schools of same- sized individuals; spawns abundantly
<i>clupéonelle</i>	F	'Black Sea sprat'	forms schools; freshwater fish that tolerates daily changes in salinity
<i>sérieole</i>	F	'amberjack'	travels in large schools; able to leap out of the water (weighs 80 kg.)
<i>sardine</i>	F	'sardine'	schools; 'deciduous scales'; 'nocturnal'
<i>vandoise</i>	F	'dace'	small fish, forms large schools
<i>thonine</i>	F	'little tunny'	forms schools; consumes anything

Schooling in some cases may offer considerable danger particularly for species where adults are cannibalistic, eg. *gardon* (M) 'roach', or species that school while young only to become solitary in maturity, eg. *blageon* (M) 'vairone', *sandre* (M) 'pikeperch/zander', *baliste* (M) 'triggerfish', *brochet* (M) 'pike'. The combination of these factors and the lack of any regularity between masculine or feminine gender assignments suggest that 'schooling' is unlikely to play any part in gender assignment of the various species.

#### 5.5.5 Summary relating to attributes

Analysis of certain attributes shows that some appear to be associated with masculine gender:

- 'elongated' form, eg. *saumon* (M) 'salmon', *brochet* (M) 'pike', *hareng* (M) 'herring'

- 'upright' orientation, eg. *hippocampe* (M) 'sea-horse', *tacaud* (M) 'pouting', *rotengle* (M) 'rudd'
- response to threat that is disabling, eg. *porc-épic* (M) 'porcupinefish'
- fishing *à l'affût*, eg. *poisson-pierre* (M) 'stonefish', a technique that reaps no benefit from its extensive camouflage in obtaining a more abundant and regular food supply.

Other attributes appear to be associated with feminine gender:

- ability to spread across the aquatic landscape, eg. freshwater fish *brême* (F) 'bream', *carpe* (F) 'carp', *perche* (F) 'perch'
- turn of speed combined with changes in direction, eg. *auxide* (F) 'frigate tuna', *vandoise* (F) 'dace'
- ability to grip, eg. *baudroie* (F) 'anglerfish' (tentacles around mouth), *lamproie* (F) 'lamprey' (suckers around mouth), *targie naine* (F) 'Norwegian topknot' (fins)
- flat form, eg. *raie* (F) 'ray'
- adaptation that can save life, eg. *blennie* (F) 'blenny' which uses its fins to 'walk' back to the water, turn of speed for *auxide* (F) 'auxide', mouthpart adapted for safer surface feeding for *ablette* (F) 'bleak', darting movement for *vandoise* (F) 'dace'
- ability to leap out of the water in an unpredictable way, eg. *truite* (F) 'trout', *orphie* (F) 'garfish' and *bonite* (F) 'bonito', *sérieole* (F) 'amberjack'
- adaptations that turn predators away, eg. *perche* (F) 'perch' with its unpalatable eggs, *vive* (F) 'weever' and *rascasse* (F) 'scorpionfish' with their sharp venomous fins
- ability to tolerate constant changes in salinity, eg. *clupéonelle* (F) 'Black Sea sprat'.

Two other potential attributes, nocturnal activity, eg. *sardine* (F) 'sardine', *bonite* (F) 'bonito', *daurade* (F) 'seabream'/snapper', and extraordinary fertility, eg. *morue* (F) 'cod', are also suggested. These various adaptations associated with feminine gender assignment appear to be related towards survival by enhancing their opportunity to live to the fullest extent of lifespan possible – particularly through increasing the likelihood of finding food, or protecting itself from predators, or enriching the opportunity for a species to survive since danger that occurs in one habitat does not threaten extinction of the species. However, for some fish the enhanced benefits of an attribute associated with feminine, eg. 'nocturnal' habit, are cancelled by other

attributes that are endangering, such as the response to threat of the *porc-épic* which loses any manoeuvrability, or *sar* which lives in rocky areas that provide shelter but in storms these terrains are dangerous, or *poisson-pierre* whose stone-like appearance mirrors stone-like behaviour. In these cases, feminine gender cannot become salient, and nouns are masculine.

The nature of 'schooling' in relation to classifications, and the lack of any regularity in the classification amongst these nouns, suggests that 'schooling' does not play any role in gender assignment. Rather, gender assignment focuses more on the safety or danger in relation to any one fish, such as *hareng* whose sound gives its otherwise invisible presence away. Different gender assignments among related fish, particularly 'eels', 'flatfish', 'billfish' and 'wrasse' also require explanation and they are examined below.

### 5.6 Comparison of species in related sets

This section covers the various nouns denoting fish in related sets which vary in their gender assignments and/or word-final pronunciation patterns. The five sets of fish discussed below cover eels, flatfish, sharks, billfish and needlefish, and wrasse.

#### 5.6.1 Eels

The database contains three nouns denoting European 'eels'. While all eels are 'nocturnal', two nouns are feminine and one is masculine, suggesting that different gender assignments relate to different attributes. Descriptions of the three eels are provided in Table 5.14 below.

Table 5.14: Nouns denoting 'eel'

<i>congre</i>	M	'European sea eel', 'conger eel'	nocturnal saltwater fish, cannot tolerate freshwater habitats; slimy skin, sharp teeth; remains alive for long periods out of water
<i>anguille</i>	F	'eel'; 'European freshwater eel';	nocturnal, long body, <i>peau lisse</i> 'smooth skin'
<i>murène de la Méditerranée</i>	F	'Mediterranean moray eel'	nocturnal reef fish bred in saltwater with large canine teeth; protected by toxic mucus; displays co-operative hunting; eats carrion; dangerous, aggressive if threatened

Both *congre* and *murène* spend their entire lives in marine waters yet they have contrasting masculine and feminine gender assignments. The feminine term *anguille* applies specifically to

European freshwater eels spawned in the Atlantic Ocean. By the time they make their way to freshwater European rivers they develop sufficient adaptability to cope with changes in salinity until they return to the ocean when its time comes to breed. This capacity to adapt gives it a freedom of movement not shared by most other fish, nor by *congre* which is constrained to a specific habitat, in a way that is not unlike *biset* (M) 'rock dove'. These notions – 'free' associated with feminine gender assignment for *anguille*, and its contrast with 'constrained', associated with contrasting masculine gender assignment for *congre* – are consistent with examples identified in the analysis of birds (see Chapter 4, Birds).

However, these contrasting attributes cannot account for feminine gender assignment of *murène* which is also 'constrained' to a saltwater environment. On the other hand, the *murène* has a plethora of other distinctive attributes – toxic mucus that protects it from predators, fang-like teeth that enable it to grip onto prey, an adaptable diet, and an aggressive behaviour such that the only predators of a *murène* are other *murènes*. Any one of these life-saving attributes would, in all likelihood, be associated with feminine gender. It is not surprising that the extent of such life-saving attributes would be associated with feminine gender assignment for *murène*. In addition, recently obtained knowledge of the *murène* shows that it is unique in having a second set of jaws in its throat, 'pharyngeal jaws' with teeth (<[www.sciencedaily.com](http://www.sciencedaily.com)>, 2007). When it feeds these jaws are launched into the oral cavity to grasp hold of prey struggling to free itself and transport it down the oesophagus for swallowing. Although this attribute is only recently discovered and could not have been expected play any part in its classification, nonetheless feminine gender assignment is consistent with other 'unique' creatures identified in the analysis of birds, eg. *frigate superbe* (F) 'frigatebird' (Chapter 4).

The use of the feminine term *anguille* as the unmarked case can be argued to relate to some more general habit, one shared by all eels. While 'nocturnal' is a possible candidate, another possible attribute is a voracious appetite and an adaptable diet that enables them to reach their considerable size.



The three nouns denoting eels, *anguille*, *congre* and *murène*, are all consonant-final and it can be argued to be associated with the 'smooth' outer layer of these scaleless, slime-covered fish – consistent with the consonant-final *sabre* (M) 'scabbard fish', another 'smooth' scaleless fish.

### 5.6.2 Flatfish

While flatfish seemingly present the same 'flattened' appearance as the *raie* (F) 'ray' and *flotte* (F) 'skate', their bodies are formed entirely differently, being extremely vertically compressed and orienting themselves horizontally in the water. 'Flatfish' are extremely laterally compressed, a form that typically assumes a vertical or 'upright' orientation while flatfish assume a side-on or recumbent orientation, and they undergo an extraordinary transformation in order to achieve this outcome. When hatched, their bodies are symmetrical, their eyes are on different sides of their heads as for other fish, and they swim upright with the dorsal (back) fin upwards. During the early stages of their development the dorsal fin grows forward onto the head, and changes in jaw structure, pelvic fins and anatomy also occur. One eye begins to 'migrate' across the skull to position itself close to the other eye, and corresponding changes result in the 'eyeless' side remaining flat while the upper side becomes slightly rounded and develops pigment cells that can expand and contract to match the surface below; the blind side is usually white. Finally the young 'upright' fish drops to the sea floor and begins to swim on the flat, eyeless side. Their recumbent swimming orientation and camouflage on the upper side make these fish perfectly adapted for hovering over the sea bed where their prey is found, but this loss of bilateral symmetry sets the flatfishes apart from all others.

While one might consider such a result as 'unique', this attribute is associated with feminine gender and the generic term, *poisson plat* (M) 'flatfish', is masculine. However, some nouns denoting various flatfish are masculine and others are feminine, which suggests the presence of other attributes. The various nouns denoting 'flatfish' are set out in Table 5.15 below.

Table 5.15: Nouns denoting 'flatfish'

Masculine nouns			
<i>flet</i>	M	'flounder'	flatfish, oval body with lozenge-shaped fringe; rough-skinned; waits hidden in sand for prey to pass by (known as 'ambush' predator)

<i>flétan</i>	M	'halibut'	left-eyed flatfish of extraordinary dimension; rhomboid-shaped; slimy; highly migratory
<i>targeur</i>	M	'common topknot'	left-eyed flatfish, oval; dark colour with marbling; scales have fine spiny outgrowths 'furry' to touch; relies on total immobility to avoid detection
<i>turbot</i>	M	'turbot' (syn. 'Greenland halibut', 'lesser halibut')	flatfish of Northern latitudes, with rhomboid-shaped fins; scaleless but rough skinned
Feminine vowel-final nouns			
<i>barbue</i>	F	'brill'	flatfish, lozenge-shaped, thinner than 'turbot', able to change colouration with habitat; frilled appearance,
<i>plie commune</i> syn. <i>carrelet</i> (M)	F	'European plaice'	'nocturnal' flatfish, diamond-shaped body; right-eyed; smooth scales (unlike 'flounder')
Feminine consonant-final nouns			
<i>cardine</i> <i>chevelue</i>	F	'common topknot'	flatfish, asymmetrically oval, able to 'stick' to the surface of caves
<i>cardine</i> <i>franche</i> syn. <i>limandier</i>	F	'megrim'	flatfish, oval, translucent; related to 'turbot' family; colour varies with environment for camouflage
<i>feuille</i> syn. <i>cithare</i>	F	'Atlantic spotted flounder'	flatfish, oval shaped; spotted
<i>limande</i>	F	'dab'	similar in shape to 'plaice' and 'flounder' but no bony tubercles on its skin; pigmented side capable of remarkable changes in colouration to match seabed
<i>limande sole</i>	F	'lemon sole'	flatfish, right-eyed, oval-shaped; fleshier body than 'dab'; mottled colour; smoother, slimmer than 'dab'
<i>sole</i>	F	'Dover sole'	'nocturnal' flatfish, oval-shaped; lives on muddy seabeds; covered with small scales, rough to touch
<i>sole-perdrix</i>	F	'thickback sole'	flatfish, oval-shaped, inhabits mud or sand floor
<i>sole velue</i> syn. <i>séteau</i>	F	'whiskered sole'	flatfish, oval-shaped, 'whiskered' appearance
<i>targie naine</i>	F	'Norwegian topknot'	left-eyed flatfish, oval in shape, more slender and smaller than other topknots; uses its fringed fin to cling to surfaces

The extent of feminine gender assignment among 'flatfish' that swim in this side-on 'recumbent' position suggests that they may be related, but the basis for this classification is not clear.

We know that living fish typically swim upright – only when they die do their bodies assume a side-on position. It is possible that, for 'flatfish', feminine gender is associated with 'alive' or 'living' in relation to an orientation that might otherwise imply 'dead'. There is no previous evidence of these notions, but in a lexical field covering living things it is not surprising that they might become salient from time to time. The association between 'alive/living' and feminine gender assignment is also of interest and is possibly linked to birth and regeneration, notions physically and stereotypically more closely associated with 'female' than with 'male'. This is not to say that masculine gender for 'upright' fish could possibly be associated with 'dead'; rather, for 'upright' fish the notions 'alive' or 'living' can be taken as a given.

This explanation with regard to 'flatfish' cannot apply to *raie* (F) 'ray' and *flotte* (F) 'skate' since they are 'flattened' in form rather than 'recumbent' in orientation. Both nouns are feminine, suggesting that there may be some association between 'flat' and feminine gender assignment although the basis for this classification is unclear.

#### Flat in other lexical fields

The salience of this attribute 'flat' also appears to be crucial in the meanings of nouns in other lexical fields, as in Table 5.16 below.

Table 5.16: 'Flat' in relation to objects in other lexical fields

<i>assiette</i>	F	'plate'	flat	dish
<i>carte</i>	F	'card', 'playing card', 'map', 'ticket'	flat	paper
<i>feuille</i>	F	'leaf'	flat	vegetable matter
<i>paume</i>	F	'palm' (of hand)	flat	underside of hand
<i>planche</i>	F	'plank'	flat	wood
<i>plante</i>	F	'sole' (of foot)	flat	area underneath the foot
<i>spatule</i>	F	'spatula'	flat	kitchen implement
<i>table</i>	F	'table'	flat	furniture

Further examples can be added, footwear such as *sandale* (F) 'sandal' and the loan word *thong* (F) 'thong'/'flip-flop' (in the form of a flat sole), foodstuff having in a flat form such as *crêpe* (F) 'pancake', *galette* (F) 'flat round cake' indeed any *surface plane* 'flat surface' such as *glace* (F) 'ice (sheet)'. Flat-bottomed boats such as *plate* (F) 'small light boat', *gondole* (F) 'gondola',

*péniche* (F) 'lighter', and *barge* (F) 'barge', are feminine and can be contrasted with keeled boats, eg. *canoë* (M) 'canoe', *yacht* (M) 'yacht', *ketch* (M) 'ketch', *baleinier* (M) 'whaler', which are denoted by masculine nouns. The feminine *main* (F) 'hand' applies to the 'flattened' part of the extremity of the arm, and open-handed slaps given with the 'flat' of the hand include *tape* (F) 'slap', *baffe* (F) 'slap/box (across the ears)', *claque* (F) 'slap', *gifle* (F) 'slap' (with flat or back of the hand). There seems to be some opposition with 'closed' in nouns such as *poing* (M) 'fist' and *coup de poing* (M) 'punch', and it may be that 'flat' has some semantic link with 'open', as for contrasts in English expressions such as 'open-handed' and 'close-fisted'. It is possible that 'flat' may be better understood in relation to a more fundamental binary opposition between 'open' and 'closed'.

'Flat' also appears to be salient in other languages, eg. German (*die Karte* (F) 'card', *die Platte* (F) 'plate', *die Sandale* (F) 'sandal'), and Latin (*charta* (F) 'card', *tabula* (F) 'slate', *solea* (F) 'sandal'). These examples demonstrate a remarkable degree of consistency between the attribute 'flat' and feminine gender assignment across different lexical fields and different languages. Adams (1986:252-3) shows that 'flat' is also salient in Austroasiatic languages in relation to 'leaf, paper, fields, blankets and logs' (the latter suggesting 'recumbent'), as well as '... a great variety of flat things including flat animals like fish ...'. In Japanese and Chinese, flat/thin objects have their own classifiers – *mai* in Japanese (Downing, 1986:347), and *zhang* in Chinese (Erbaugh, 1986:404). Thus, while its manifestation may differ, in each of these languages 'flat' is salient in the classification process.

In relation to fish, it can be argued that 'flat' and 'upright' form some kind of horizontal opposition rather than the more common but more problematic gradable oppositions 'short' and 'tall'. However, still unaccounted for are several masculine nouns denoting 'flatfish'.

#### Masculine counter-examples

Masculine gender assignment for the *turbot* has been argued to relate to its restriction to northern European latitudes since it is unable to adapt to warmer waters, and for the *flétan* to its enormous size – not only in comparison with other 'flatfish', but with fish in general.

Still to be accounted for are two other masculine nouns, *targeur* and *flet*, both of which can blend in with their surrounds in a remarkable way since scales can change colour to match changes in their habitat. However, this extraordinary adaptation is of little benefit to either. The *targeur* relies on total immobility to avoid detection rather than seeking safety in its rocky habitats where its ability to adhere makes it almost impossible for any predator to dislodge. The *flet* lies on the sea floor and waits in the sand for prey to pass by, a 'fishing' technique known as *pêche à l'affût* identified above for the *poisson-pierre* (M) 'stonefish', and in the previous chapter in relation to herons that 'stand and wait' and also have masculine gender assignment (see 'herons', Chapter 4). While the *plie* is often found lightly covered with sand, it merely rests in this position before ascending to the surface at night in search of abundant food available at warmer levels. These examples suggest that fishing *à l'affût* and freezing into immobility in the face of danger are associated with masculine gender assignment – for fish as well as for birds.

#### 5.6.2.1 Synonyms with different gender assignments

While in some cases 'apparent' synonyms with different gender assignments in fact identify slightly different entities, the *sole velue* (F) 'whiskered sole' (*Monochirus hispidus*) has a masculine synonym, *séteau*, which denotes the same entity. This flatfish resembles the *sole commune* (F) 'common/Dover sole' and is found in similar environments, but where the *sole commune* grows to approximately 60 cm., the maximum size for the *sole velue* is 18 cm. (<pagesperso-orange.fr>, 2005). This comparison shows that the *sole velue* is tiny. However, another sole-like fish found in similar environments is even smaller, the *petite sole jaune* (aka *sole jaune*) (F) 'solenette' (*Monochirus hispidus*) which grows to 15 cm. This tiny flatfish has no masculine synonym, and it is difficult to argue that the notion 'tiny' in comparison might be salient for one but not the other.

The term *séteau* is found in an earlier compound noun *sole séteau* (<www.archive.org>, 2005) but has proved to be less apt than *sole velue*. Soles are typically covered in tiny ciliate scales that are rough to touch (www.archive.org>, 2005). The scales of the *sole velue*/ 'whiskered sole' are also rough – texture described as *comme du crin* 'like horsehair' (<www.marseille-sympa.com>, 2005). This attribute is acknowledged in both English and current French

vernacular terms since the adjective *velue* translates as 'hairy' or 'whiskered'. From these attributes it can be argued that the feminine synonym *sole velue* may relate to its similarity to other fish denoted by *sole*, while the masculine *séteau* responds to what makes it distinctive from other soles – the horsehair-like texture of its scales.

The notion 'distinctive' is semantically linked to 'different' and both attributes are consistent in their association with masculine gender assignment. The notion 'similar' is not previously identified and while on the one hand it forms an opposition with 'different', these attributes are not necessarily mutually exclusive. They remain of interest. Further, this explanation suggests that the salient features motivating masculine gender assignment stem not from the 'horsehair scales' themselves, but from a comparison with and difference from scales of other soles. Vowel-final pronunciation for *séteau* can be related to this 'horsehair' texture and is consistent with other examples identified as having a 'textured' or 'rough' outer layer.

The common term *plie* (F) 'European plaice' has a masculine synonym *carrelet* (M). In addition to its 'flat' form, the 'European plaice' has other obvious attributes – an angular 'diamond-shaped' body, and the ability to change its colouration to match that of its environment in the same way as most other 'flatfish'. It is noted that *cardine franche* (F), *flet* (M) *limande* (F), *targie* (F) and *turbot* (M) have the same ability to alter their pigmentation, but the different gender assignments amongst these nouns suggests that this attribute is not salient in relation to gender assignment of flatfish.

The derivation of the synonymous term in the stem *carre*- 'square' is also found in other nouns, eg. *carré* (M) '(math.) square quadrangle', *carreau* (M) 'square lozenge' and in the adjective *carré*, *-ée* 'square'. While the precise nature of its association with masculine is not yet established, it is noted that other geometrical forms also have masculine gender assignment, eg. *triangle* (M) 'triangle', *cercle* (M) 'circle', *rhombe* (M) 'rhombus', *rectangle* (M) 'rectangle', which are all closed forms. Even *angle* (M) 'angle' concerns a closed space, one that results from the point of a change in direction. These 'closed' geometric forms contrast with 'open' geometric forms such as *ligne* (F) 'line', *parabole* (F) 'parabola' (an open curve), even *courbe*

(F) 'curve', and they suggest a semantic opposition between 'closed' and 'open', associated with contrasting masculine and feminine gender assignments respectively. These notions are similar to notions 'open' and 'closed' discussed in the previous chapter (§4.5.1.3). It can be argued that feminine gender assignment for *plie* is associated with a 'living' form, while the masculine synonym *carrelet* is associated with an angular 'closed' geometric form.

These examples suggest that synonyms with different gender assignments (*pliel/carré*, *cardinellimandier*, *sole/séteau*) arise when different crucial attributes associated with contrasting gender assignments compete for saliency.

#### 5.6.2.2 Word-final pronunciation

Variations in word-final pronunciation occur amongst the various nouns denoting 'flatfish', some having consonant-final pronunciation, eg. *limande* (F), *targeur* (M), *sole* (F), etc. and others vowel-final pronunciation, eg. *barbue* (F), *flet* (M), *turbot* (M). Again these examples reveal a lack of regularity between word-final pronunciation patterns and gender assignments. Vowel-final pronunciation for *flétan* is argued above to relate to its comparative difference in size against all other 'flatfish', and for *turbot* it can be associated with the 'rough' leathery outer layer it has, despite being 'scaleless'. Word-final pronunciations for other nouns are not yet accounted for and are explored further below.

A number of 'flatfish' are described as 'oval-shaped', eg. *targeur*, *cardine*, *feuille*, *limande-sole*, *sole*, *sole-perdrix*. Each of these nouns has consonant-final pronunciation, and it is possible that there may be some association between them, particularly given the similarity between 'oval' and 'rounded', a shape also associated with consonant-final pronunciation among birds. It is noted that the *sole commune* is covered with tiny pored scales that make it *rugueux* ... 'rough', identified in French as *langue de chat* ([www.opalesurfcasting.net](http://www.opalesurfcasting.net), 2005). It seems for this fish neither its slender form nor rough texture is sufficient to outweigh the oval shape that is so well-known.

However, *targie naine* denotes an oval-shaped 'topknot' but it has vowel-final pronunciation rather than consonant-final pronunciation. This 'topknot' is particularly noted for its slender form, and its vowel-final pronunciation is consistent with other cases where 'slender' is associated with vowel-final pronunciation.

An 'oval' shape could not account for consonant-final pronunciation of *limande* since it is described rectangular, a form similar to that of *plie* and *flet*. However, the surface of the *limande* is described as smoother and slimier than other 'flatfish' and there may some association between this 'smooth' surface and consonant-final pronunciation, particularly since other 'flatfish' noted for their 'rough' surface have vowel-final pronunciation, eg. *barbue*. It is also noted that *limande-sole* is even smoother and slimier than the *limande* and both parts of its compound form have consonant-final pronunciation.

In that *cardine chevelue* is noted for its 'thick' shape in comparison not only with other 'topknots but with other 'flatfish' (<doris.ffessm.fr>, 2005), for many flatfish a semantic opposition between 'slender' and 'robust', 'stocky' or 'thick' body shapes is related to contrast in vowel- and consonant-final pronunciation patterns. It is noted that the *barbue* has a 'slender' body, and it appears that these features 'thick' and 'thin' are associated with contrasting word-final pronunciation patterns.

#### 5.6.2.3 Competition for word-final pronunciation between salient attributes

While some attributes associated with different word-final pronunciations are mutually exclusive, others are not and may present at the same time, when they compete for saliency.

The consonant-final *cithare* (F) 'spotted flounder' has prickly 'rough' scales that are elsewhere associated with vowel-final pronunciation, but it also has a 'rounded' form which, evidence suggests, is associated with consonant-final pronunciation. The *barbue* (F) 'brill' has a slender body, an attribute that is suggested to relate to vowel-final pronunciation. But it also has a smooth surface, an attribute that is associated with consonant-final pronunciation, as shown in various terms for 'eel' identified earlier. Its scientific name, *Scophthalmus rhombus*, suggests a



rhomboid shape not unlike that of *raie* (F) 'ray'. It is not convincing to argue that for the *barbue*, 'slender' or 'rhomboid' are more crucial than 'smooth'. However, it is unlikely that this combination of various features associated with contrasting classifications 'resolves' to vowel-final pronunciation since this process relates to agreements involving adjectives, plurals, etc. The fact that *cithare* has consonant-final pronunciation suggests that 'rounded' is more crucial than 'rough', perhaps because the former is more easily determined – and at a greater distance – than the latter. It is more likely that an attribute related to shape is more crucial in the classification of a fish than an attribute related to touch – suggesting that saliency of shape as against touch or any other area associated with word-final pronunciation would seem to depend not only on the particular lexical field but to narrower distinctions between related entities.

The *targeur* (M) 'common topknot' has regional synonyms, *sole* (*de roche*) and *plie* (*de roche*). These nouns differ in gender assignments and in word-final pronunciation patterns. This thickish-shaped 'topknot' is noted for the *excroissance pileuses* covering the upper surface that feel 'furry' to touch (<doris.ffessm.fr>, 2005), an attribute similar to birds and many other animals. It may be that this 'textured' covering is related to the vowel-final synonym *plie*, and its thickish shape to consonant-final synonyms *targeur* and *sole*.

### 5.6.3 Billfish (swordfish, marlin, sailfish) and needlefish

Fish in this set are typically very much longer than they are wide, a length that is exaggerated by prolonged jaws, but they vary in size and build. Needlefish are slender and light, and billfish are very much heavier, although superbly built for speed. Nouns are set out in Table 5.17.

Table 5.17: Billfish - masculine and feminine nouns

#### Masculine nouns

<i>balaou atlantique</i> (alt. <i>balao</i> )	M	'Atlantic saury'	prolonged jaws, toothed; lives close to the surface; it is easily caught, being attracted to bright lights
<i>empereur</i>	M	'striped marlin'	bill long and rounded in cross-section; lower jaw longer than upper; toothless
<i>espadon</i>	M	'broadbill, swordfish'	long flat bill; aggressive, attacks men, boats, whales; leaps when caught

<i>makaire bleu</i>	M	'Atlanticblue marlin'	solidly built Atlantic fish, females up to 4 m. and much heavier than males; bill forms 20% of length
<i>marlin</i>	M	'(Mediterranean) spearfish'	restricted to Mediterranean Sea; feeds at or near the surface; related to marlin elsewhere
Feminine nouns			
<i>aiguillette verte</i>	F	'Atlantic needlefish	jaws very elongated, armed with teeth; nocturnal; travels between saltwater estuaries and freshwater coastal streams; can spawn in both (<www.enature.com>, 2005)
<i>orphie</i> syn. <i>belone</i> (F)	F	'European garfish'/ 'garpike'	lower jaw slightly longer, needle-shaped, set with numerous teeth; leaps when caught

Needlefish *aiguillette verte* (F) and *orphie* (F) are closely related to *balaou atlantique* (M) but the three nouns vary in their gender assignments. Needlefish are typically able to avoid other predators and fishing nets since their light form can skip across the surface of the water propelled by their tails. This adaptation allows them to flee from danger above the surface of the water, and its unpredictability makes it difficult for predators to anticipate. As with other adaptations that offer escape from harm, feminine gender assignment for *aiguillette verte* and *orphie* is consistent in a way that makes it regular and predictable. Although the *balaou atlantique* is also a needlefish, it spends its day in schools just beneath the water surface at a depth of about 2 m.. It is not only easy to locate, but the *balaou atlantique* does not react to danger in the same way as *aiguillette verte* and *orphie* – it makes no attempt to flee and is easily caught, by aquatic and human predators. The *balaou* is also attracted to bright lights, an instinct that can be used to lure them towards nets at night.

The contrasting gender assignments allow us to observe that those needlefish that have adapted in a way that allows them to avoid capture, which attribute appears to be associated with feminine gender assignment, while needlefish that make no effort to flee from danger have masculine gender assignment.

Billfish ('sailfish', 'marlin', 'swordfish') have thick but well-muscled bodies and rely on extraordinary speed to capture prey. They are large enough and fast enough to have no real aquatic predators. While they are capable of performing spectacular acrobatic leaps, they do so

only after having been caught – when the response that makes them so attractive as gamefish is too late to be of any assistance in saving them. It seems that an ability to 'leap' out of the water is less related to gender assignment than to prolonging life by avoiding capture altogether, particularly given the extraordinary speed of these fish. Since leaping is brought on after capture, it is too late to provide any assurance of survival and is thus not salient for *empereur*, *espadon* and *merlin*.

Descriptions note the aggressive behaviour of the solitary *espadon*, which attacks whatever it perceives as threatening – whales, boats, submersibles, humans – without regard to its own safety (<en.wikipedia.org>, 2005). While this aggressive attacking behaviour is likely to be successful against smaller fish, even humans, it is highly unlikely to be successful against whales, boats, and submersibles. This response suggests that the *espadon* is able to sense threat but does not flee from danger. Only when it has been hooked does it perform the acrobatic leaps that appear to relate to efforts to dislodge the hook and return to safety. It may be that an adaptation such as leaping that is brought on only after capture, or where awareness of danger motivates solitary attack rather than flight is associated with masculine gender assignment for billfish. The solitary attacking response to threat of the *espadon* is similar to the *cygne* (M) 'swan', and these two nouns have the same masculine gender assignment.

The solitary and rare *makaïre bleu* was first described during the early nineteenth century. It is distributed widely around the Atlantic Ocean, usually far from land, where it prefers the warmer waters closer to the surface. Their large size and capacity to produce powerful bursts of speed seem to allow a lack of wariness. It is both diurnal and migratory, and more recent studies have shown that it travels at low speeds for long periods, interspersed with bursts of rapid speed associated with downward descent. While there is some dispute as to whether or not it uses its bill to obtain food, it is legendary for its speed and powerful aerobics after it has been caught, particularly its ability to thrust its body out of the water into the air, but these athletic responses are not employed in fleeing at the first hint of any threat. Rather, they are displayed after having been caught.

These descriptions suggest that gender assignment does not always relate to the most obvious physical attribute of billfish – their sword-like or spear-like jaws. Instead, it seems to be directed more towards a contrast between the presence of a habit that offers more certainty in surviving and another that is endangering, or appears too late to avoid capture altogether.

#### 5.6.4 Wrasse

This large family of gorgeous-coloured marine fish, *labridés*, inhabit coral reefs and rocky shores of Europe and tropical regions. While they are renowned for changes in 'morphology' and colouration according to age and reproductive state, the irregularities in gender assignment and word-final pronunciation patterns suggest that these aspects are not salient in the identification of the various species of wrasse. Nouns denoting the various 'wrasse' in the database are presented in Table 5.18 below.

Table 5.18: Nouns denoting 'wrasse'

<i>labre nettoyeur</i>	M	'cleaner wrasse'	cleans parasites from mouth of predator fish
( <i>labre</i> ) <i>merle</i> ( <i>Labrus merula</i> )	M	'brown wrasse'	hides in rocky and herbaceous terrains
<i>rason</i>	M	'cleaver wrasse', syn. 'pearly razorfish'	dives headfirst into sand if frightened
<i>sublet</i> ( <i>Symphodus rostratus</i> ) wrasse'	M	'long-snouted	tiny (13 cm.); swims and sleeps head-down
Feminine nouns			
<i>coquette</i> syn. <i>labre varié</i> ( <i>Labrus bimaculatus</i> syn. <i>Labrus mixtus</i> )	F	'cuckoo wrasse' syn. 'red wrasse'	all females capable of becoming male; has quick darting movements
<i>girelle</i> ( <i>Choris julis</i> )	F	'rainbow wrasse'	swims in quick darting movements that are difficult to predict
<i>tanche</i> ( <i>Symphodus tincus</i> )	F	'painted wrasse'	changes colour to accord with habitat or when under threat
<i>vieille</i> syn. <i>labre mêlé</i> ( <i>Labrus bergylta</i> , syn. <i>Labrus maculata</i> )	F	'Ballan wrasse'	lives in small harems

Some wrasse live in largish schools where both males and females have equally vivid colours but they are dichromatic in the same way as 'fowl'. As a female becomes male, the various

stages in becoming male can be observed through the various changes in colouration that take place, as for *girelle*, *coquette*.

Other wrasse live in small 'harem' groups of females led by a single male that dominates over submissive females through aggressive behaviour. While fish in these groups share the same colouration, the change from female to male can be observed through changes in behaviour since when the male leader dies, the new female leader begins to display the same aggressive behaviours and within a very short time becomes a fully functioning male, e.g. *vieille*. As a male, the fish can live to 20 or so years.

However, not all hermaphrodite fish are denoted by feminine nouns. The masculine noun *labre nettoyeur* denotes wrasse that lead a symbiotic life alongside large predator fish whom they serve by entering their mouths to clean off parasites, thereby putting their life at risk, '... although, to be fair, few have been seen to be eaten' (<en.wikipedia.org>, 2005). When the *rason* feels threatened, it dives headfirst into the sandy floor, not unlike the *espadon*, but such a move does not assure success since it lives amongst rocky reefs and herbaceous terrains, and shifting sands may hide harder material beneath. While a wariness that inspires immediate flight from danger appears to be associated with feminine gender assignment for birds, masculine gender assignment for *rason* suggests that those that flee by diving headfirst, particularly from liquid into solid matter, or that bury themselves, are habits that may be more life-threatening than life-saving. While vertical orientation of the tiny *sublet* appears at first consistent with the *hippocampe* (M) 'sea-horse', it swims and sleeps head-down unlike the 'upright' *hippocampe* (M) 'sea-horse'. This habit seems inherently dangerous since this orientation does not allow a fish to observe predators approaching from above, and it is possibly associated with masculine gender assignment for the *sublet*. As its name suggests, the *sublet* (13 cm.) is tiny, the smallest of all wrasse. If 'diminutive' is not the salient attribute, its association vowel-final pronunciation of *sublet* is at least consistent with others identified as 'diminutive'.

Given the similar treatment in terms of masculine gender assignment for diving birds such as *plongeon* (M) 'loon', *guillemot* (M) 'guillemot', it is possible that 'diving headfirst' is seen as endangering – as occurs also for the *cygne* (M) 'swan' and *canard* (M) 'duck' – but not the *oie* (F) 'goose', since it has adapted to terrestrial grazing where one amongst the flock can keep a look out for danger. These 'head-down' fish, *rason* and *sublet*, and birds, *cygne*, *canard*, can also be contrasted with the feminine *alouette* (F) 'lark' – the bird that heads upwards into the heavens, singing loudly, whenever danger threatens it or its nest.

Thus, feminine gender assignment appears to be associated not with 'hermaphrodite' – which ensures the greatest possible number of eggs and provides for every possible contingency directed towards continuance of the species – but with the ability of all 'wrasse' to change direction unexpectedly, except in the presence of another attribute that threatens it in some way.

Variations in word-final pronunciation appear to be associated with contrasts between a robust form for some, eg. *vieille*, or oval shape for others, eg. *labre merle*, *coquette*, and slender form of the *rason* hinted at in its English name 'razorfish'. The 'cleaner wrasse' tend to not only to be smaller, but more slender than those that seek prey, molluscs and other small 'seafood' along the sea floor or among reefs.

#### 5.6.5 Further comparison – *saumon* (M) 'salmon' and *truite* (F) 'trout'

Differences in the ways that billfish and needlefish use their out-of-water skills, particularly in response to threat, that can account for contrasting gender assignments of denoting nouns may also be observed for *saumon* (M) 'salmon' and *truite* (F) 'trout'.

The freshwater *truite* (F) 'trout' is renowned for its wariness, and its instinct to leap and jump fascinates us. Previous evidence suggests that these life-enhancing attributes, individually and together, would be associated with feminine gender assignment as they are for *orphie* and *aiguillette verte*, as well as *sépiole* (F) 'amberjack' – each of them fish whose unpredictable movements in and out of the water enhance their capacity to evade capture.

The *saumon* (M) 'salmon' develops in the same freshwater environment as the *truite* and is equally capable of leaping into the air but it is no match for trout, its biggest predator at this early stage. When young salmon are sufficiently mature, they make their way to the ocean where they spend the next few years feeding on the ocean floor, an environment in which leaping is irrelevant. When they return to regain spawning grounds, their leaping ability is of considerable assistance but it cannot ensure success. At this later stage they produce these leaps only after capture. Thus, for the *saumon* the ability to leap offers no protection at any stage. Its inability to exploit an adaptation that is life-enhancing makes masculine gender assignment for *saumon* consistent with masculine gender assignment of *empereur*, *espadon* and *marlin*.

#### 5.6.6 Summary – related sets

Analysis of nouns in various sets helps resolve nouns denoting related creatures that have different gender assignments.

Analysis of different gender assignments amongst members of various sets of related fish reveals that they are associated with a number of different attributes: including 'flat' for feminine nouns *sole*, *cithare*, etc., and for masculine nouns 'different' from others in size for *flétan* and *turbot*, an attributed ('whiskered') associated with 'male' for the masculine *séteau* (a synonym of *sole velue*), and an attribute that fails to take advantage of another ('mimetic' ability) since it lies on the seabed and waits for prey to pass by, as for the masculine *flet*.

Differences in gender assignment for 'eels' can be related to the ability to tolerate changes in salinity, associated with feminine gender for *anguille* (F) 'European eel', and an inability to adapt to changes in salinity, associated with masculine gender for *congre* (M) 'conger eel'. The *murène* (F) 'Moray eel', does not adapt to changes in salinity – but it has a host of other remarkable attributes that protect it (toxic mucus, violent aggression) and ensure a plentiful food supply (adaptable diet, fangs to grip prey) enhancing its chances of survival to maturity. These contrasting abilities to adapt, and increased chances of survival are associated with contrasting

gender assignments, consistent with previous examples observed in the analysis of birds (see Chapter 4).

For both flat fish and flatfish, feminine gender assignment appears to be associated with 'flat', eg. *raie* (F) 'ray' and *flotte* (F) 'skate', *feuille* (F) 'spotted flounder', *sole* (F) 'sole', etc. The association between 'flat' and feminine gender assignment can be contrasted with the association between 'upright' and masculine gender assignment as oppositions along a vertical plane associated with contrasting gender assignments. These absolute qualities allow speakers to avoid the more difficult judgments of scalar oppositions 'tall' and 'short'.

Counter-examples, flatfish, that are masculine are accounted for. The *targeur* (M) 'topknot' has fins that can cling to surfaces in a way that makes it difficult to dislodge, but it freezes into immobility when it senses danger rather than seeking safety among the rocks where it can employ its grip. The *flet* (M) 'halibut' buries itself in the sea floor and waits for prey to pass by, which method is associated with masculine gender assignment of herons. For the 'enormous' *flétan* (M) 'halibut' and the 'smaller' *turbot* (M) 'turbot' masculine gender is argued to relate to their 'comparative' differences in size, 'larger' than all other 'flatfish' for *flétan*, and 'smaller' than the halibut for *turbot*, the flatfish that it most closely resembles (realised in English synonyms for turbot, 'Greenland halibut' and 'lesser halibut').

For synonyms *plie* (F) and *carrelet* (M) 'plaice', differences in gender assignments are argued to relate to crucial attributes associated with contrasting classifications – 'flat' for *plie*, and 'closed' angular geometric shape for *carrelet*. *Séteau*, the masculine synonym for *sole velue* (F) 'whiskered sole', is argued to relate to this attribute that is so strongly identified with 'male'.

For some nouns denoting 'shark', gender assignment is somewhat like the contrasts between birds of prey but occurs along slightly different lines. Where the division for 'birds of prey' is formed by a contrast between 'diurnal' and 'nocturnal', for dogsharks the division is argued to relate to a contrast between 'all-day' hunting, associated with masculine gender assignment as for *aiguillat* (M) 'spotted dogfish', and 'nocturnal' hunting associated with feminine gender



assignment for *petite roussette* (F) 'lesser spotted dogfish', etc. Exceptions to the association between 'nocturnal' and feminine gender are *ange de mer* (M) 'angelshark' and *requin-tapis* (M) 'carpetshark'. Both have extraordinary camouflage colourations which they do not exploit but bury themselves in sand on the sea floor and wait for prey to pass by, a habit that is associated with masculine gender assignment for herons. For the generic *requin* (M) 'shark', and generic term for 'dogfish shark', *squale* (M), masculine gender assignment is argued to relate to the 'elongated' shape typical of sharks.

Amongst 'billfish and 'swordfish', fish whose extremely elongated form gives them great speed, differences in gender assignment relate to differences in their ability to avoid capture. The *aiguillette verte* (F) 'Atlantic needlefish' and *orphie* (F) 'garpike/garfish' are able to skip across the surface of the water, an unpredictable locomotion that makes it difficult for predators to anticipate and capture. 'Billfish' do not flee from danger although they have a tremendous turn of speed. Their efforts to evade capture commence only after they are caught, at which point it is rather too close to the brink to be useful.

These contrasts are reflected elsewhere – in the contrast between *truite* (F) 'trout', which evades capture by moving in unpredictable leaps into the air, and *saumon* (M) 'salmon' where the ability to leap is either fraught with danger or is of little use in removing itself from danger. The *balaou atlantique* lives very close to the surface of the water and is sufficiently 'tame' that it is easy game for predators, including humans since it makes no effort to escape.

'Wrasse' have the ability to change sex and thereby extend their life, which appears to be associated with feminine gender assignment, eg. *vieille*, *coquette*, *girelle*, except in the presence of another attribute that might shorten their life, eg. *labre nettoyeur*. Masculine gender for *rason* and *sublet* is suggested to relate to a 'head-down' instinct.

## 5.7 Word-final pronunciation

There is some evidence in the analysis of nouns in Section 5.4 and among related sets of

fish above to suggest that certain attributes may be associated with specific word-final pronunciations, and that they seem to form sets of binary oppositions, as follows:

- 'slender' contrasting with 'thick/broad/robust/rounded' shapes
- 'dotted' contrasting with 'striped' patterns in colouration
- 'rough' contrasting with 'smooth' in their surface texture.

These attributes in binary oppositions appear to be associated with contrasting word-final pronunciation patterns in each case. However, there is some evidence of an association between consonant-final pronunciation and an agile darting movement through the water. This attribute parallels the agility demonstrated by certain birds through the air and on the ground, which is also associated with consonant-final pronunciation. They add to the 'opposition' suggested by contrasting word-final pronunciation patterns for the vowel-final 'comparative' and consonant-final 'superlative' in some way, most typically according to differences in size.

## 5.8 Summary and conclusion

The phonological analysis provides no useful regularities in relation to gender assignment. The initial exploration of superordinate terms, collective nouns, loan words and derived nouns suggested revealed certain features suggested to be salient, associated with specific gender assignments. Although these areas are limited in the number of examples, the findings are consistent with those found in the analysis of similar terms denoting birds identified in Chapter 4. In turn, these findings suggest that a more detailed analysis of creatures denoted by these nouns might yield promising results.

The more detailed analysis of count nouns denoting fish at the species level shows that differences in gender assignment and word-final pronunciation patterns appear to be associated with small but, for the most part, separate sets of semantic attributes, and that some of these attributes are associated with specific masculine and feminine classifications and others are associated with specific vowel- or consonant-final pronunciation patterns. The salient attributes also appear to be associated with different levels of semantic content between nouns having a very general application and nouns that become increasingly more specific.

## Gender assignment

Living entities that breathe in order to live typically drown in an aquatic environment. However, fish have been able to adapt their breathing in a way that allows them to survive in water. We know that fish are alive if they maintain an upright orientation since they turn on their sides when they die. Evidence from the analysis above suggests that salient attributes in the classification of nouns denoting specific fish appear, to a large extent, to be associated with these notions.

For the most part fish with an 'upright' form appear to be denoted by masculine nouns, eg. *hippocampe* (M) 'sea-horse', as are fish that hold themselves upright, such as 'elongated' fish whose dorsal 'back' fins are uppermost, eg. *requin* (M) 'shark', *bar* (M) 'European sea bass', *chinchard* (M) 'horse mackerel', *sandre* (M) 'zander', *thon* (M) 'tunny/tuna'. For the most part nouns denoting fish that turn on their sides and swim in a recumbent position more commonly associated with 'dead' appear to be associated with feminine gender assignment, eg. *sole* (F) 'Dover sole', *limande* (F) 'dab'.

A very different attribute that also appears to be salient in relation to feminine gender assignment is a 'flat' form, eg. *raie* (F) 'ray' and *lotte* (F) 'skate' flounder'. This attribute appears to be salient for a wide range of entities in other lexical fields and is consistent in its association with feminine gender assignment. It can be argued that these two attributes, 'upright' and 'flat', form some kind of opposition on a vertical plane. These 'oppositions' can attend to other common contrasts in height – 'tall' and 'short' – which notions are easy to apply in the case of entities whose form is fixed but are less so for entities that grow, where relative sizes can change.

Some species of fish have a shape that is so unusual that orientation and form provide no clear indication as to whether they are dead or alive, and these fish appear to be denoted by masculine nouns. It is argued that this classification stems from the fact that they are 'different' from others but not precisely unique, or because they resemble other matter but are different, eg. *trigle* (M) 'gurnard', *poisson-pierre* (M) 'stone fish'.

Among the more general terms, both count noun and collective, masculine gender assignment appears to be associated with the following attributes:

- 'individual' or 'distinctive' form, eg. *poisson* (M) 'fish', the most general count noun that can apply to any species
- 'unknown' in kind or relatedness, eg. *banc* (M) 'shoal'/'school', a collective term.

Notions such as 'indefinite', 'unknown', and 'unlike' any other' also appear to be associated with masculine gender assignment, eg. *poisson-pierre* (M) 'stonefish', *sabre* (M) 'scabbard fish'.

These notions offer a potential default mechanism.

For particular species, the above conditions associated with specific gender assignments can be challenged by a range of attributes associated with contrasting gender assignments. Attributes associated with feminine gender that can become more salient than those associated with masculine, particularly 'upright' orientation, include:

- 'unique', eg. *allache* (F) 'sardinella' (deciduous scales), *môle* (F) 'sunfish' (tallest fish)
- an adaptability that is life-saving for the individual, eg. *blennie* (F) 'blenny' that can can 'walk' back to the water
- an adaptability that is life-saving for the species, eg. *carpe* (F) 'carp', *anguille* (F) 'European freshwater eel' (spawned in saltwater and returns to spawn) since they can survive regardless of changes in diet, water salinity and temperature
- able to survive for some time out of the water, eg. *brème* (F) 'bream' (freshwater), *daurade* (F) 'dorado'/'snapper/sea-bream'.

There is evidence that the ability to leap into the air is also associated with feminine gender assignment, eg. *sardine* (F) 'sardine', *sépiole* (F) 'amberjack', *truite* (F) 'trout', particularly when it is used to escape from aquatic predators – as is the ability to change direction suddenly, eg. *vandoise* (F) 'dace' and the various 'wrasse', or to move in an entirely unpredictable way, eg. *orphie* (F) 'garfish'. The potential association between 'nocturnal' or 'schooling' and feminine gender assignment finds more compelling evidence in other attributes associated with feminine.

Among species that are similar, some attributes associated with masculine gender assignment

are able to become more salient than those above otherwise associated with feminine gender assignment. They include:

- an inability to adapt where similar fish are adaptable, eg. *congre* (M) 'conger eel'
- restriction to a specific environment, eg. *turbot* (M) 'turbot' (aka Greenland halibut/lesser halibut), a 'flatfish' that prefers the coldest waters of the north Atlantic preventing them from extending their domain
- an attribute associated with 'male', eg. *séteau* (syn. for *sole velue* (F) 'whiskered sole'), a 'flatfish'
- an attribute that is endangering, eg. *hareng* (M) 'herring', nocturnal schooling fish that announces its presence by loud thumping, *flet* (M) 'flounder', which fishes *à l'affût*, and other fish that have an attribute that endangers them, eg. *rason* (M) 'cleaver wrasse' that dives headfirst into the sandy sea-floor when threatened, and *sublet* (M) 'long-snouted wrasse' that swims and sleeps head-down
- 'different' in size compared with other similar fish, eg. *flétan* (M) 'halibut', largest of all 'flatfish', *beluga/sturgeon* (M) 'sturgeon', the largest river/freshwater fish'.

Fish that bury themselves, including *lançon* (M) 'sand-eel', also have masculine gender assignment and it is possible that behaviours such as burying oneself, or diving head-first, may be considered endangering.

These examples show that where an adaptation that would otherwise enhance the opportunity for survival is offset by an attribute that is endangering, or is wasted by another adaptation that is either not deployed to its fullest extent or best advantage, we find masculine gender assignment. Such examples include *porc-épic* (M) 'porcupinefish', which can deploy extraordinary defensive quills but at the same time it becomes almost stationary in the water, or the 'nocturnal' *ange* (M) 'angelshark', *requin-tapis* (M) 'carpetshark', *dragonet* (M) 'dragonet', *flet* (M) 'flounder', whose efforts in developing superb cryptic camouflage colourations are wasted by their habit of burying themselves in the sea bed to await passers-by and thus cannot gain any advantage in food supply that would otherwise be generated. In the case of *gymnote rayé* (M) 'banded knifefish', its potential life-saving adaptation offers little advantage in 'survival' since it does not emerge until death is imminent and is highly unlikely to be reversed.

Many of these attributes reflect similar attributes found for birds and they are consistent in their association with the same specific gender assignments.

### Word-final pronunciation

Attributes that appear to be associated with different word-final pronunciation patterns relate to size, shape and pattern of colouration, in the following ways:

- size, where 'comparative' appears to provide some opposition to 'superlative', which have contrasting vowel- and consonant-final pronunciation patterns respectively
- shape, where 'slender' contrasts with 'rounded/thick/robust', which have contrasting vowel- and consonant-final pronunciation patterns respectively
- colouration, where irregular 'spotted' colouration contrast with regular 'striped' bands, that appear to be associated with contrasting vowel- and -consonant-final pronunciation patterns respectively.

While oppositions in colouration such as 'spotted' and 'striped/barred' have not been observed previously, the basis for their associations with vowel- and consonant-final pronunciations is not well understood. They will continue to be explored.

Since some nouns in the database are not captured in the various sets analysed above, or are not analysed to the same degree as those in family sets, it is possible that further attributes may be salient in the classification of fish beyond those raised above. However, while many of the individual examples might be considered unique, they can be associated with certain semantic attributes that provide considerable overlap with attributes identified in the analysis of birds in Chapter 4 – particularly in their association with the same specific gender assignments and word-final pronunciation patterns, making them regular and predictable in relation to these attributes.

### Antonyms

The antonymous relationships between some of these semantic attributes, eg. contrasts in shape between 'slender/flat/narrow' and 'broad/stocky', contrasts in surface textures between 'scaly/rough' and 'smooth', and in colouration pattern between 'irregular' splotches and 'regular'

stripes, and their association with contrasting classifications raise the possibility of other antonymous attributes. The same degree of opposition cannot be said to exist between 'comparative' and 'superlative', even in their association with contrasting classifications, nor to differences in height between 'upright' and 'flat'. 'Comparative' and 'superlative' size relations provide more stable oppositions since the former can rely very simply on a comparative process rather than measurements one with another more allow easy distinctions to be made and are less difficult to operate than gradable oppositions 'tall' and 'short' since, for the most part, the result is gained simply through the comparative process itself of identifying something in relation to another rather than through gradable oppositions. This area will continue to be of interest in the analysis of remaining lexical fields.

### Ranking of attributes

Evidence from unrelated and related sets of fish suggests that comparative and superlative rank above any other attributes. However, they only become salient under very restricted conditions, that is, between like entities that differ in size.

While an attribute that is life enhancing is associated with feminine gender assignment, the presence of an attribute that reduces any advantage otherwise offered by that attribute appears to be more crucial since in such cases denoting nouns have masculine gender assignment. However, in restricting the application of the more crucial 'life-enhancing' attribute it seems illogical to suggest that an attribute that reduces an advantage ranks higher than one that increases an advantage. Rather, the spheres in which certain attributes become salient will depend on other factors.

Where a fish has different attributes of equal significance that are associated with contrasting classifications, it is common to find them recognised in synonyms that have different classifications in gender assignment and, possibly, word-final pronunciation. Saliency depends less on rank than on the kinds of fish and the environments in which they exist. In relation to word-final pronunciation, saliency of attributes as they relate to shape, colour, movement and touch appear to depend to some extent on attributes that motivate specific gender assignments.

We might expect, though, that characteristics related to shape, colour and movement would be more salient since they can be determined at a distance – while determining which of the three is more salient would surely depend on other related factors, particularly other fish. However, the different classifications amongst synonymous terms provides a foregrounding/backgrounding relationship in which finer and finer distinctions can be made, from family level, to genus, species, and sub-species. At the same time they also allow for more general distinctions upwards, from species level to genus. The different classifications provide a frame through which attributes can be observed, albeit at a subconscious level.

#### Implications for other languages

As noted above, the association between 'flat' and feminine gender assignment identified above across a range of nouns can also be found in Latin amongst nominative forms of nouns with similar meanings, eg. *charta* (F) 'leaf of papyrus paper', *palma* (F) 'palm'/'flat hand', *solea* (F) 'sole'/'sandal', *tabula* (F) 'board'/'writing tablet'/'table'. This small sampling suggests the presence of a similar semantic process for gender assignment in Latin.

The discussion above noted that in Dyirbal, the Australian Aboriginal language most fish are in class I, the class that includes male animates (Dixon, 1972:307), while two – 'stonefish and 'gar fish' – are in Class II, the same class that includes female animates. These two fish, *rascasse* (F) 'stonefish', and synonyms *orphie* (F) and *belone* (F) 'garfish' are also associated with feminine in French. The explanation Dixon provides for these apparent counter-examples in Dyirbal is that they are 'harmful' (1972:309) since class II contains 'harmful' things might otherwise be in different classes. However, findings in this analysis suggest that it may be more closely linked to their ability to protect themselves from predators rather than their harmfulness to potential predators – life-promoting rather than 'harmful'.

In conclusion, findings in the analysis of birds and fish will inform the analysis of the remaining set of living things in the following chapter.



## Chapter 6 Other Living Creatures – Gender Assignment and Word-final Pronunciation

This chapter examines gender assignment in relation to the lexical field of living creatures other than birds and fish, covered in earlier chapters. More specifically, it includes those creatures with potential for voluntary movement, a capacity that distinguishes them from plant life.

Chapter 6 follows the format established in previous chapters. An initial phonological exploration is followed by the analysis of nouns derived from various linguistic processes, and then a more extensive semantic exploration of family sets relating to 'male' and 'female' since the literature review and findings so far suggest that it provides overt evidence of semantically motivated gender assignment. These sections are followed by an analysis of superordinate terms and collective nouns, and a more detailed examination of count nouns and their meanings at the species level which considers environmental, physical and behavioural distinctions that might have some role in gender assignment and word-final pronunciation – particularly ways that they may reflect on earlier findings.

### 6.0 Predictability – frequency based on word-final phonology and gender assignment

The database contains 362 nouns denoting living creatures other than birds and fish. The different distributions in relation to gender assignment and word-final pronunciation patterns are laid out in Table 6.1 below.

Table 6.1: Nouns denoting other living creatures

	Vowel-final	Consonant-final	Total
Masculine	144	109	253 (70%)
Feminine	18	91	109 (30%)
Total	162	200	362

Included here are two nouns with alternative masculine and feminine gender assignments, *un/une angora* 'angora (goat)', and *un/une harpail(le)* 'herd of deer', while *dugong* (M) 'dugong' has alternative vowel-final [ dugō ] and consonant-final [ dugōg ] pronunciations in COFED (1986:174), but is consonant- in LRPT (1994:349).

Of the total of 362 nouns, approximately 70% are masculine and 30% feminine, a similar pattern to that for nouns denoting birds and fish in earlier chapters. Likewise, these distributions provide no real direction or predictability with regard to gender assignment. While the earlier close association between vowel-final pronunciation and masculine gender finds some support in that only 17 of the 161 vowel-final nouns are feminine, eg. *fourmi* (F) 'ant', there is no such support for a relationship between consonant-final pronunciation and feminine gender since nearly half of the consonant-final nouns in this set are masculine, eg. *lézard* (M) 'lizard', *éphémère* (F) 'mayfly'. Conclusions to Chapters 4 and 5 suggest that word-final pronunciation appears to be unrelated to gender assignment – except in a very restricted context linked to comparative and superlative properties, and the figures above provide no evidence that would challenge those previous findings.

Those conclusions also suggested that a number of attributes appear to be associated with masculine and feminine gender assignments at the species level. In addition, certain attributes appear to be associated with vowel-final pronunciations while others are associated with consonant-final pronunciations, and potential associations will continue to be explored in the analysis below.

#### 6.1 Initial exploration – association between linguistic processes and gender assignments

If a phonological association with gender assignment cannot provide a regularity that is of assistance for any one noun, other possible explanations must be explored. This analysis continues the initial exploration of the different distributions of these other members of the animal kingdom.

It is possible that some rule-based explanation may account for gender assignments of nouns according to some aspect of their derivation. A regular process is the use of pre-existing nouns to denote some entity in a new lexical field because of some shared feature. Such examples are found in Table 6.2 below, along with gender assignments of both original meanings and new meanings.

Table 6.2: Pre-existing nouns used extension to denote a living creature

Pre-existing noun			Animal		
<i>bête</i>	F	'beast'	<i>bête à bon Dieu</i>	F	'ladybird beetle'
<i>cousin</i>	M	'cousin'	<i>cousin</i>	M	'gnat'
<i>dauphin</i>	M	'direct heir to the throne'	<i>dauphin</i>	M	'dolphin'
<i>Faune</i>	M	'rural deity <i>du champêtre</i> ' 'of the countryside'	<i>faune</i>	F	'fauna'
<i>cane</i>	M	'dog'	<i>caniche</i>	M	'poodle'
<i>guêpe</i>	F	'wasp'	<i>guépard</i>	M	'cheetah'
<i>tête</i>	F	'head'	<i>têtard</i>	M	'tadpole'

In most cases, the form occurring in the original noun appears also in its extension, eg. *bête*, but for other nouns changes come about through suffixation, eg. *caniche*, *guépard*, *têtard*.

Relationships between the entity in the original meaning and the entity in its extended meaning are obvious for some, but they may also be less direct, and their use in extension may impart some property back to the original noun, eg. *cousin*. LRPT (1994:1191) suggests *vulcain* (M) 'red admiral butterfly' is an extension of the proper noun *Vulcain*, the Roman god of fire and metal-working, drawing on similar colourations of black and brilliant flashes of red.

Two of the original nouns in Table 6.2 are feminine but in their extended meanings they are masculine – *guépard* and *têtard*, albeit with the addition of suffixes. One masculine noun, *Faune*, becomes feminine in its extended meaning. These examples show that gender assignments can vary as meanings vary. They show that it is not possible to predict gender assignment even for nouns derived in this way. Since neither phonological nor morphological systems can provide any explanation, and since meanings in extension denote very different referent entities from those of the original meanings, the answer may lie in some semantic explanation.

The possibility of a potential relationship between gender assignment and nouns derived from other grammatical classes, eg. adjectives, considered in previous chapters is also considered for this lexical field. Some nouns are derived from the masculine form of an adjective – even though a feminine form exists, as in (1):

(1)	<i>amphibien</i>	M	'amphibian'	from Adj. <i>amphibien/-ienne</i>
	<i>animal</i>	M	'animal'	from Adj. <i>animal,-ale</i> 'animal'
	<i>éphémère</i>	M	'mayfly'	from Adj. <i>éphémère</i> 'ephemeral'
	<i>félin</i>	M	'belonging to the genus <i>chat</i> '	from Adj. <i>félin, -ine</i> , 'feline'
	<i>fou</i>	M	'gannet'	from Adj. <i>fou/folle</i> 'scatterbrain'

However, other nouns are derived from feminine forms of adjectives, eg. *brute* (F) 'brute' or 'beast' (from the feminine form of the adjectival pair *brut/-e*), *vive* (F) 'weever' (from the feminine form of the adjectival pair *vif/vive* 'alive'), even *belette* (F) 'weasel' (from the adjectival stem *beau/bel/belle* 'beautiful', and feminine suffix *-ette*).

Word-final pronunciation seems more predictable in that these nouns demonstrate a masculine/vowel-final and feminine/consonant-final pattern. Yet even so, some masculine nouns have consonant-final pronunciation, eg. [ r ] for *guépard* (M) 'cheetah', [ l ] for *animal* (M) 'animal', while the masculine noun *primate* (M) 'primate' bears the suffix *-ate* which typically forms feminine nouns when paired with the masculine alternative form *-at*, as for *avocat/-ate* (M/F) 'lawyer'.

These inconsistencies do not support a relationship between derivational source and gender assignment. They suggest that nouns derived in this way may be subject to the same classification process as nouns coined from pre-existing nouns.

Like *guépard*, other nouns in the database are formed with the suffix *-ard*, meaning 'kind of'.

Table 6.3: Nouns formed with suffix *-ard*

<i>broutard</i>	M	'grass-fed calf'	kind of calf (related to <i>brout</i> (M) 'spring growth'/ <i>brouter</i> 'to graze')
<i>brocard</i>	M	'one-year-old male deer'	kind of young deer ( <i>broc</i> (M) 'pitcher')
<i>clébard</i>	M	'(fam.) dog'	kind of dog ( <i>clebs</i> (M) '(pop.) dog')
<i>guépard</i>	M	'cheetah'	kind of cat (colouration similar to 'black and yellow <i>guèpe</i> (F) 'wasp')
<i>renard</i>	M	'fox'	kind of fox (generic term)
<i>têtard</i>	M	'tadpole'	aquatic larva of amphibians, a long body attached to a large <i>tête</i> (F) 'head'

These nouns all have the masculine suffix *-ard*, even though the feminine alternative *-arde* is

available (LRPT, 1994:1228). All are masculine. This relationship might be argued to be morphologically motivated, but the meaning of *-ard* contributes the notion 'kind of but not same as', which suggests a possible semantic explanation. For each of these entities, extension from another meaning implies a similarity with an entity to which it is essentially unrelated. This notion 'unrelated' and its potential association with masculine gender assignment and the consonant-final masculine suffix *-ard* will continue to be explored.

Some historical background for *renard* makes it an interesting example. The original term for 'fox' was *goupil* (M) 'fox', from the Latin *vulpes* (M) 'fox'. However, in the thirteenth century a play, *Roman de Renart*, became widely known (LRPT, 1994:964) and the central character, a cunning fox, became so popular that *goupil* lost favour and eventually became obsolete, leaving place name *renard* as the generic term for 'fox' – aided, possibly, by the similarity of form between the German word-final *-art* and the French suffix *-ard*.

## 6.2 Initial exploration – semantics associated with family sets

The uncertainty identified above in relation to predictability of gender assignment raises the possibility of some other explanation, and another area is the potential interaction between a semantic system and gender assignment. An initial area of investigation is carried out among family sets of creatures not covered in Chapter 4. This setting, where meanings distinguish between male and female, mature and immature, provides a well-understood semantic framework for gender assignment. Family pairs are set out in Table 6.4.

Table 6.4: Family sets - distinctions between 'male' and 'female' of the same kind

Male		Female	
<i>bélier</i>	'ram'	<i>brebis</i>	'ewe'
<i>buffle</i>	'male buffalo'	<i>bufflonne</i> (also <i>bufflesse</i> )	'female buffalo'
<i>chameau</i>	'male camel'	<i>chamelle</i>	'female camel'
<i>lièvre</i>	'male hare'	<i>hase</i>	'doe-hare'
<i>mulet</i>	'mule' (male)	<i>mule</i>	'female mule'
<i>ours</i>	'male bear'	<i>ourse</i>	'female bear'
<i>rat</i>	'male rat'	<i>rate</i>	'female rat'
<i>singe</i>	'male monkey'	<i>guenon</i>	'female monkey'

<i>taureau</i>	'bull' (male bovine)	<i>vache</i>	'cow' (female bovine)
<i>tigre</i>	'male tiger'	<i>tigresse</i>	'female tiger'
<i>verrat</i>	'breeding boar' (male)	<i>truie</i>	'sow'

Some of these nouns denoting 'male' and 'female' nouns are related in their derivations, eg. *rat/rate*, *tigre/tigresse*, but other pairs are unrelated, eg. *lièvre* (M) 'male hare' and *hase* (F) 'female hare'. Nonetheless, gender assignments for these nouns are consistent with the generalisation that nouns whose semantics identify 'male' are masculine and nouns whose semantics identify 'female' are feminine. Such nouns provide uncomplicated, regular and predictable gender assignment in the same way as occurs also for 'male' or 'female' in nouns denoting birds (see Chapter 4, Birds).

Some of the above nouns in Table 6.4 also show a regular correspondence between gender assignment and word-final pronunciation in that the 'male' *rat* is masculine and vowel-final and the 'female' *rate* is feminine and consonant-final. Other pairs are irregular in that masculine form, eg. *singe* (M) 'male monkey', has consonant-final pronunciation and the feminine form, *guenon* (F) 'female monkey', has vowel-final pronunciation. For one pair, *ours* 'male bear' and female *ourse* (F) 'female bear', there is no phonological distinction word-finally – indeed, both are transcribed in the same way as [ urs ] (COFED, 1985:390).

Some of these related pairs also have masculine and feminine suffixes, eg. the 'male' *chameau* (M) 'camel' has the masculine suffix *-eau* and the 'female' *chamelle* (F) 'camel' has the feminine alternative suffix form *-elle*. In some cases, masculine nouns appear to be formed with a masculine suffix on the feminine stem, eg. *mulet* (M) 'mule' (male) from *mule* (F) 'mule', but in other cases the feminine noun appears to be formed with a feminine suffix on the masculine stem, eg. *tigresse* (F) 'tigress' from *tigre* (M) 'tiger'.

Further examples of 'male' and 'female' in the same family having a shared derivational relationship include:

Table 6.5: Other pairs of 'male' and 'female' related in derivation

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<i>chat</i>	M	'cat' (male)	<i>chatte</i>	F	'cat' (female)
<i>chien</i>	M	'dog' (male)	<i>chienne</i>	F	'dog' (female)

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<i>lapin</i>	M	'rabbit' (male)	<i>lapine</i>	F	'rabbit' (female)
<i>lion</i>	M	'lion' (male)	<i>lionne</i>	F	'lion' (female)
<i>loup</i>	M	'wolf' (male)	<i>louve</i>	F	'wolf' (female)

For these pairs, the masculine noun is vowel-final and the feminine noun is consonant-final. However, taken together, among the various related pairs of 'male' and 'female' there is no regularity or consistency between word-final phonological structure and gender assignment, nor can gender assignment suggest with any certainty the word-final phonological structure. Any explanation must account for these different phonological outcomes.

### 6.2.1 Family sets – lexical distinctions for age and sex

Some family groups demonstrate considerable variation in lexical distinctions for age and sex, as shown in Table 6.6 below.

Table 6.6: Family distinctions according to age and sex

<u>Goat</u>			
<i>bouc</i>	M	'buck'	adult, male
<i>chevreau</i>	M	'kid'	young, male or female
<i>cabri</i>	M	'young goat'	male or female
<i>biquet</i>	M	'young male goat'	young, male
<i>chèvre</i>	F	'goat'; 'nanny-goat'	generic; also female
<i>bique</i>	F	(fam.) 'female goat'	female
<i>biquette</i>	F	'young female goat'	young, female
<u>Horse</u>			
<i>étalon</i>	M	'stallion'	adult, male
<i>jument</i>	F	'mare'	adult, female
<i>cheval</i>	M	'horse'	generic; also male
<i>cavale</i>	F	'female horse'	female
<i>pouliche</i>	F	'filly'	female, under 4 years of age
<i>poulain</i>	M	'foal'	male or female up to 30 months
<u>Pig/boar</u>			
<i>porceau</i>	M	(obs.) 'swine, hog'	adult, male or female
<i>porc</i>	M	'pig'	adult, male, raised for food
<i>cochon</i>	M	'pig'	generic; also male
<i>coche</i>	F	(obs.) 'sow'	female, adult
<i>verrat</i>	M	'breeding boar'	male, adult
<i>truie</i>	F	'sow'	female, adult
<i>goret</i>	M	'young pig'	young, bred for food
<i>porcelet</i>	M	'piglet'	young

### Sheep

<i>mouton</i>	M	'sheep'	generic, adult (bred for wool, food)
<i>bélier</i>	M	'ram'	adult male
<i>brebis</i>	F	'ewe'	adult female
<i>agneau</i>	M	'lamb'	young, male (also lamb meat, sheepskin)
<i>agnelle</i>	F	'lamb'	young, female

### Cattle

<i>taureau</i>	M	'bull'	adult male (for breeding)
<i>bœuf</i>	M	'ox', 'bullock'	generic; adult, male, castrated (bred for food)
<i>vache</i>	F	'cow', 'female ox'	adult female
<i>génisse</i>	F	'heifer'	young female
<i>bouvillon</i>	M	'steer', 'bullock'	adult male, castrated
<i>broutard</i>	M	'calf'	young (grass-fed)
<i>veau</i>	M	'calf'	young (esp. milk-fed, up to 1 yr.)

In each case, where a noun denotes a 'male' it is masculine and where a noun denotes a 'female' it is feminine, regardless of any distinctions for age. Where distinctions for 'male' and 'female' are not present for the 'young' of a kind, nouns are masculine. Many of these family groups identify domesticated animals and such distinctions appear to be central to the necessity for a grammatical if not lexical distinction between male and female, but the set also includes animals that are wild, hunted either for food or sport.

In some cases nouns that appear to be lexically related do not always form precise pairs, eg. *taureau* (M) 'bull' and *taure* (F) 'heifer' (female younger than four years of age). Nonetheless, in terms of gender assignments, the correlations between 'male/masculine' for *taureau* and 'female/feminine' for *taure* are consistent with findings above, and for family sets among birds (Chapter 4).

It is noted that creatures such as *bardot* (M) 'hinny', the sterile offspring of a male horse and female donkey or ass, and *mulet* (M) 'mule', the sterile 'male' offspring of a female horse and male donkey, or female ass and male horse, have masculine gender assignment. However, the noun *mule* (F) 'female offspring of a male donkey and female horse', although generally sterile (LRPT, 1994:750), has feminine gender assignment. The different gender assignments for *bardot* and *mule* suggest that the 'potential to give birth' may be one of those attributes that



contributes to identifying 'female' and 'not able to give birth' to 'male'.

While the current term for 'sow' is *truie* (F), the historical term was *coche* (F) and while gender assignments remain the same, word-final pronunciation of *truie* is now consistent with the vowel-final pronunciation of *laie* (F) 'wild sow' and all but one of the several nouns denoting members of the 'pig' family. In that the analysis of birds found evidence of an association between vowel-final pronunciation and a 'slender' form, it is particularly inapt for creatures that are anything but slender – which thus points to some other attribute, possibly the 'rough' surface related to the bristly hairs covering their skin.

Although gender assignments for 'male' and 'female' are fully predictable, among pairs of 'male' and 'female' of the same kind only one may serve as the unmarked case. For most pairs it is the masculine noun, that which would otherwise denote 'male', eg. *cheval* (M) 'horse', *mouton* (M) 'sheep'. However, for some the unmarked case is feminine, eg. *chèvre* (F) 'goat'. In their unmarked meanings these nouns are examined alongside other count nouns in the corpus.

6.2.2 Other sets of family pairs

Further species in the corpus also have pairs of nouns for 'male' and 'female' and are set out below in Table 6.7.

Table 6.7: Other species with different terms for 'male' and 'female'

Male			Female		
<i>âne</i>	M	'ass'/'donkey' (male)	<i>ânesse</i>	F	'female ass/donkey'
<i>daim</i>	M	'fallow deer' (male)	<i>daine/dine</i>	F	'fallow deer' (female)
<i>cerf</i>	M	'red deer' (male)	<i>biche</i>	F	'female red deer'
<i>singe</i>	M	'ape' (male)	<i>guenon</i>	F	'female ape'

Nouns in the first two pairs of 'male' and 'female' are lexically related while those in the second set are unrelated, but in each case, the noun identifying 'male' has masculine gender assignment and the noun identifying 'female' has feminine gender assignment.

### 6.2.3 Unmarked case amongst family sets

In some cases the female can be identified by an attribute that males do not have, eg. the young at foot/feeding; in some cases the male can be identified by an attribute that the female does not have, such as a shaggy mane of the *lion* (M) 'lion, or horns of the *bélier* (M) 'ram', or the tusks of the *verrat* (M) 'boar'. When these indicators are unavailable, not visible or simply not relevant, we use the unmarked case. Since only one may serve as the unmarked case, how do we know which of the pairs of nouns to use?

Dictionaries identify *bœuf* (M) 'ox', *cerf* (M) 'red deer', *chameau* (M) 'camel', *chien* (M) 'dog', *lièvre* (M) 'hare', *daim* (M) 'fallow deer', *lion* (M) 'lion', *loup* (M) 'wolf', *mouton* (M) 'sheep', *ours* (M) 'bear', *renard* (M) 'fox', *sanglier* (M) 'wild boar', *singe* (M) 'ape', etc., as the unmarked case, and the weight of numbers suggest it is typically the term otherwise identifying the 'male'. However, this is not always so. In the case of 'goat' the unmarked case is *chèvre* (F), the term that would otherwise identify the 'female'. In the lexical field 'birds' there is also a single example of the unmarked case being feminine, *oie* (F) 'goose'. These two examples show that there is no blanket approach to the use of the masculine term over the feminine term. What requires clarification is the motivation that underpins the use of one over the other. These nouns denoting the 'unmarked' case are examined with other count nouns below.

### 6.2.4 Word-final pronunciation patterns among family sets

Variations in word-final pronunciation patterns for nouns in these family sets must also be accounted for. Previous evidence suggests that word-final pronunciation appears to be associated with semantic attributes, and that they are different from those associated with gender assignments.

Many of the creatures in the various family sets above are both 'footed' and 'legged'. Some of these 'footed'/'legged' creatures are particularly noted for their agility, eg. *bouc* (M) 'billy-goat' and *chèvre* (F) 'she-goat'; some are swift, eg. *lièvre* (M) 'hare'.

However, any relationship between 'agile' or 'swift' and consonant-final pronunciation would be

unlikely to account for consonant-final pronunciation of creatures such as *bœuf* (M) 'bull' or *porc* (M) 'pig'. The noun *bœuf* 'ox' applies to creatures whose strength is derived from their enormous frame and bulk which enables them to pull heavy weights. Other 'beasts of burden' required to pull heavy loads also have consonant-final pronunciation, eg. *âne* (M) 'donkey/ass', and *cheval* (M) in its original sense as '(draught-) horse', although today it shares something of both 'strong' and 'speedy' depending on the breed, and a horse is typically one or the other rather than both. More importantly, since both attributes are associated with consonant-final pronunciation, they do not compete. The *porc* 'pig' also denotes an animal with a solid, barrel-like frame and is consonant-final. The association between a 'solid build' and consonant-final pronunciation for these animals is consistent with examples in the analysis of birds and fish, eg. *buse* (F) 'buzzard', *coffre* (M) 'coffer fish', *carpe* (F) 'carp', *cygne* (M) 'swan', *porc-épic* (M) 'porcupine fish', presented in Chapters 4 and 5. In the case of 'bears', these creatures are not only extremely intelligent (a different kind of 'agile') but they have a solid, barrel-like build regardless of their size, both of which are arguably associated with consonant-final pronunciation. As noted above, both 'male' *ours* and 'female' *ourse* share a word-final consonant cluster.

Animals, particularly those identified in Tables 6.5 and 6.6 are able to survive outdoors through all the seasons of the year. Some have developed a thick layer of fur, others a dense layer skin and fat, and we can observe certain specific characteristics of these outer layers – 'bristly' for *cochon* (M) 'pig', *truie* (F) 'sow'; 'shaggy' or 'curly' for the woolly coats of *brebis* (F) 'ewe', *bélier* (M) 'ram', *mouton* (F) 'sheep', and 'shaggy' for the dense fur of the *loup* (M) 'wolf', etc. There may be some association between wiry/curly/hairy as different kinds of a 'textured' appearance, and the 'warp-and-weft' texturing of coats is not unlike the 'warp and weft' plumage of feathers for the *oiseau* (M) 'bird' and scales for the *poisson* (M) 'fish'. All these nouns have vowel-final pronunciation. It is interesting that descriptives such as 'rough' or 'wiry', relate to touch, particularly in their contrast with 'not smooth'. They imply a proximity between animal and human in order to make such distinctions – which would not be unexpected in the case of 'sheep' and 'pig'. Other attributes, particularly shape, can be recognised at a greater distance. One would consider that, in observing carnivorous creatures, and horned terrestrial creatures,

maintaining one's distance would be important and would affect the kinds of properties through which we make distinctions.

Another feature that distinguishes the 'female' from the 'male' is the nurturing role undertaken by the female where the male takes no part, eg. *lionne* (F) 'lioness', *tigresse* (F) 'tigress', *chatte* (F) 'cat'. In some instances the nurturing process can take many months. However, related as it is to 'male' and 'female', it is less likely to be associated with variations in word-final pronunciation patterns and more likely to be associated with alternative gender assignments.

It is interesting to note contrasting word-final pronunciations for *taureau* (M) 'bull' and *bœuf* (M) 'bull' (or 'ox'), but they share similar attributes – strength, physical proportions, possibly associated with consonant-final pronunciation for *bœuf*, and shaggy fur possibly associated with vowel-final pronunciation of *taureau*. Contrasting word-final pronunciation patterns for *bœuf* and *taureau* thus acknowledge different attributes, associated with contrasting word-final classifications. They demonstrate that within the set of family members, more than one crucial attribute shared by all can become salient. It is also noted that variations can occur in word-final pronunciations not among various related members, or between 'male' and 'female', but between singular and plural, eg. the singular *bœuf* (M) 'ox' which has consonant-final pronunciation, and plural *bœufs* (M) 'oxen' which has vowel-final pronunciation.

Nouns that denote a 'younger' or 'smaller' member of the family but do not identify 'male' or 'female' all have vowel-final pronunciation, eg. *veau* (M) 'calf', *goret* (M) 'young pig' (bred for food), *porcelet* (M) 'piglet', *poulain* (M) 'foal', *cabri* (M) 'kid'. This finding is consistent with findings for similar creatures in Chapters 4 and 5. However, the example *broutard* denotes a younger animal but has consonant-final pronunciation but, in this case, the 'younger' creature is no longer 'small', being sufficiently developed to eat grass. Its consonant-final pronunciation suggests that a comparison with the 'older/bigger' adult is now not so distinctive.

Further examination of word-final pronunciation patterns amongst lexically related pairs of 'male' and 'female' of the same kind shows that elision of the word-final consonantal phone of

the noun denoting 'female' yields the appropriate word-final pronunciation for the masculine noun, as in the following Table 6.8.

Table 6.8: Word-final pronunciation – elision of final phone

<i>chatte</i>	F	'female cat'	/ʃat/
<i>chat</i>	M	'male cat'	/ʃa/
<i>daine/dine</i>	F	'female fallow deer'	/dɛn/
<i>daim</i>	M	'male fallow deer'	/dɛ̃/
<i>lapine</i>	F	'female rabbit'	/lapin/
<i>lapin</i>	M	'male rabbit'	/lapɛ̃/
<i>lionne</i>	F	'lioness'	/ljɔn/
<i>lion</i>	M	'lion'	/ljɔ̃/
<i>louve</i>	F	'female wolf'	/lʊv/
<i>loup</i>	M	'male wolf'	/lʊ/
<i>ratte</i>	F	'female rat'	/rat/
<i>rat</i>	M	'male rat'	/ra/

In each case, elision of the word-final consonantal phone of the feminine form yields vowel-final pronunciation of the masculine noun. The reverse process, enforcing pronunciation of the word-final orthographic consonant of the masculine noun, might produce the correct feminine form of the noun in the case of *rat/rate* and *chat/chatte*, but not in every case – as, for example, in *loup/louve*, since this process would produce \**loupe* rather than *louve*, or *daim* whose pronunciation provides a range of orthographic variations including *-ein*, *-aing*, *-inct*, *-ingt*, *-aint*, *-ins* (Tucker et al, 1977:110) – none of which would produce a feminine form close to *daine/dine*.

It should also be stated that a phonological analysis of these pairs that places the relevant consonant in the underlying form would account for the same observations – although the level of predictability of the former analysis is more helpful than the latter. Nonetheless, in each case the shorter form is associated with masculine gender and longer form with feminine gender, and these associations are yet to be fully accounted for.

Creatures in Table 6.7 are not only recognisably different from others in their form but through differences in their distinctive coats. They are also either extremely fast, or extremely 'agile', and there is mounting evidence of an association between consonant-final pronunciation and speed or agility. In the case of *chat/-te* (M/F) 'cat', *daim/daine* (M/F) 'fallow deer', *lapin/-ine* (M/F) 'rabbit', and *loup/louve* (M/F) 'wolf', it can be argued that one crucial property (their coats) is associated with vowel-final pronunciation and the other (their speed or agility) is associated with consonant-final pronunciation. That is, each of these creatures displays more than one salient feature associated with contrasting patterns word-finally and they appear to be reflected on nominal pairs linked in some way with alternative masculine and feminine gender assignments.

However, if word-final pronunciation and gender assignment are motivated by different sets of attributes, as is suggested to be the case so far, what is not clear is why one – the shorter vowel-final form – would co-occur with the masculine noun in the case of *chameau*, *chat*, *chien*, *lapin*, *loup*, and the other – longer, consonant-final form – would co-occur with the feminine noun in the case of *chamelle*, *chatte*, *chienne*, *lapine*, *louve*. We can observe that *lion* has an attribute that the *lionne* does not – a mane, that the female does not, and has vowel-final pronunciation, leaving 'agile' and its associated consonant-final pronunciation for the feminine noun *lionne*. But this is not the case for *lapin/lapine*, *rat/ratte*, *chat/-te*, *loup/louve*, where 'male' and 'female' share the same properties equally. This question will continue to be examined.

### 6.3 Semantics of collective nouns, superordinate and general terms, loan words

Collective nouns, superordinate terms and loan words provide small sets appropriate for an initial semantic exploration. Definitions and descriptions of creatures used in the analysis below come from a number of sources (LRPT (1994), <animaldiversity.ummz.umich.edu>, <atilf.atilf.fr>, <en.wikipedia.org>, <www.krugerpark.co.za>, <www.americazoo.com>, etc. 2005-2007). Definitions and descriptions are analysed to identify shared attributes that might be associated with specific gender assignments. Equally significant is gaining an understanding of the principles on which those associations might be based. Differences in word-final pronunciation patterns in these areas are also examined.

### 6.3.1 Collective nouns

The database provides a number of collective terms denoting living creatures. For the most part, such entities are motile – that is, they are capable of spontaneous and independent movement.

Table 6.9 below contains collective terms that are masculine.

Table 6.9: Masculine collective nouns denoting living creatures

<i>attelage</i>	M	'team' of one or several <i>bêtes</i> 'beasts' attached or harnessed together
<i>banc</i>	M	'school' or 'shoal' (of fish)
<i>bétail</i>	M	'livestock', 'farm animals' rather than 'farmyard animals'
<i>cheptel</i>	M	'livestock'
<i>couvain</i>	M	'nest of insect eggs'; 'hatch of bees'
<i>essaim</i>	M	'swarm (of bees, any kind of flying insects)'
<i>gibier</i>	M	'game', wild animals hunted and killed as game
<i>harpail</i>	M/F	'herd of young hinds and deer'
<i>troupeau</i>	M	'herd' of domesticated animals, mammals, raised together
<i>vol</i>	M	'flock', a quantity (of birds, insects) in flight

These masculine collective nouns denote a wide range of creatures – horses, fish, wild and domesticated cattle, deer, flying creatures, unhatched and hatched insects.

Notions 'unknown' kind and 'certain quantity' are among the attributes suggested in Chapter 5 that may be associated with masculine gender assignment of the collective term *banc* (M) 'school' (of fish). One of these attributes, 'unknown', may apply in the case of 'flying' creatures denoted by *vol* (M) 'flock' but it does not apply in the case of *essaim* in that it denotes a quantity of *insectes en vol ou posés* 'insects in flight or settled down' in reference to a habit of bees and wasps (although *essaim* can also apply to a *groupe nombreux d'écoliers qui se déplacent* 'a large group of schoolchildren on the move' (LRPT, 1994:416) – a quantity moving as a mass composed of tiny individuals constantly in the process of rearranging their positions. Where *banc* and *vol* suggest an 'uncertain' or 'indefinite' kind, applications of the three nouns *essaim*, *vol* and *banc* suggest a quantity of (tiny) individuals and not an indivisible mass. The potential association of these attributes with masculine gender assignment will continue to be explored.

Definitions of collective terms *troupeau*, *bétail* and *cheptel* show that they apply to 'diverse'

kinds of 'domesticated' animals raised together in a captive state. There is a consistency between 'domesticated/captive' and masculine gender for these collective terms as for the count noun *volatile* (M) 'farmyard bird'. The notion 'diverse' also appears to be associated with masculine gender assignment. It may also apply to a certain number and it is thus difficult to determine which is salient for these three nouns.

*Troupeau* can also apply to *un troupeau d'éléphants* (LRPT, 1994:1143) a context that cannot include 'domesticated'. On the other hand, a herd of elephants is typically smallish in number since they typically contain a matriarch, several other mature females, immature males and little ones as the large requirement for food and its grazing habit can only sustain a certain number. The possibility of some association between a 'quantifiable' number and masculine gender assignment again appears to be significant and there is a consistency in its association with masculine gender, although the basis of the association with masculine rather than feminine is unclear.

The collective noun *couvain* has two meanings, 'nest of insect eggs', a stage at which no identification of 'kind' is possible, and 'hatchlings', denoting new-born creatures. It may be that 'quantity' is also significant here, but other notions such as 'undefined' (in kind), 'constrained' (to the nest) may be associated with masculine gender assignment. In addition, they are undeniably 'new-born' whether this attribute is associated with the classification of collective nouns in the same way as for count nouns, masculine gender and vowel-final pronunciation for *couvain* are consistent with count nouns denoting the new-born or very young. The various notions suggested above will continue to be of interest in lexical categories not yet examined.

The composition of the collective *attelage* 'team' (of cattle) denotes .. *une ou plusieurs bêtes* '... one or several beasts' (LRPT, 1994:72) yoked together. It is difficult to consider 'one' in a collective noun since it is typically a feature of count nouns. Its application to a collective noun is somewhat surprising. However, it may well be that the animal and the attendant equipment and paraphernalia of a yoke – heavy collar, wooden frame, ties – form a work unit of otherwise separate and unrelated items, as for 'horse and cart'. For *attelage*, the animal and equipment



may be considered as an aggregate composed of 'diverse' elements. It is also possible that *attelage*, in the sense of *une ou plusieurs*, suggests a 'certain quantity' and its masculine gender is consistent with other collectives that also imply 'a certain quantity' such as *essaim* (M) 'swarm' and *vol* (M) 'flock'.

The collective noun *gibier* denotes *animaux sauvages à chair comestible que l'on prend à la chasse* (LRPT, 1994:520) 'wild animals with edible flesh killed in a hunt'. While this definition identifies the plural 'animals' we do not know anything about their kind nor about number, and the only certain attribute of this collective is that it is composed of animals once 'wild' that are now 'dead'. (Presumably while the *chasse* is on-going, and until they are caught and killed, animals would be called by the usual denoting term for the living creature.) Since the notion 'wild' is suggested to be associated with feminine gender and *gibier* is masculine, a more likely explanation is that it relates to 'dead'. There is already some evidence of an association between 'dead' and masculine gender, and it is supported by its binary opposition with 'living/alive', attributes associated with contrasting feminine gender assignment.

Alternative masculine and feminine gender assignments for *harpail/-aille* are still to be accounted for and they are considered further below, as is the masculine term *vol* in relation to the feminine term *volée*.

The database contains a number of feminine collective terms and they are set out in Table 6.10.

Table 6.10: Feminine collective nouns denoting living creatures

<i>bande</i>	F	'pack' (of wolves), 'pod' (of whales)
<i>couvée</i>	F	'covey', small flock of grouse; partridges; brood of young birds
<i>faune</i>	F	'fauna', all animal life of a given place or time
<i>harde</i>	F	'herd', group of wild animals (eg. deer) living together
<i>harpaille</i>	F/M	'herd of young hinds and deer'
<i>meute</i>	F	'pack' of hounds trained for hunting
<i>nichée</i>	F	'brood', 'nestlings', <i>les oiseau d'une même couvée</i> birds of the same brood, still in the nest (LRPT, 1994:766)
<i>troupe</i>	F	'pride', group of the same kinds of animals living together
<i>vermine</i>	F	'parasitic insects'
<i>volaille</i>	F	'poultry', domestic farmyard birds raised for food, eggs

Meanings of five of these nouns, *bande*, *harde*, *troupe*, *vermine* and *volée*, also denote a quantity of animals but these nouns are feminine. The term *bande* (F) in its application to a 'pod' of whales denotes members that arrive together, remain together and then travel on together in the same direction – which has an interesting parallel in the human world with *caravane* (F) 'caravan', a collective term that applies to a group (of people and animals) travelling together in the same direction. These examples provide a certain contrast with *essaim* (M) 'swarm', but it can be argued that what is salient for *essaim* is 'quantity', where for *bande* and *caravane* there is a continuous togetherness as they move in the same direction. The feminine collective term *volée* (F) 'flock' seems to apply to a 'single' kind, particularly on taking off or in travelling together in flight. Again there is some similarity with *caravane* and *bande*.

However, in the use of *troupe* rather than *troupeau*, it seems that the different saliencies of 'same' kind, associated with feminine gender, and 'a certain number', associated with masculine gender, may also be valid. Interestingly, word-final pronunciation patterns for *vol* (M) and *volée* (F) are irregular in terms of frequencies established in distributions in the various chapters, and the basis for these contrasting word-final pronunciation patterns is yet to be identified.

For *harpaill-aïlle* (M/F) 'deer', it is possible that masculine gender may be associated with its use in contexts involving 'farmed' or 'domesticated' deer, and feminine gender in contexts involving 'wild' deer, those free to roam or in their wild state. However, a 'wild' state cannot account for the feminine noun *meute* (F) 'hounds trained for hunting', nor is there any implication that the pack is made up of a single kind, the 'same' breed. The only attributes we can be certain about for *meute* are 'dogs', and 'trained to follow together in pursuit'. While common intent or same purpose are not previously identified, this is not surprising given the nature of creatures examined so far. But in comparison with *cabale* (F) 'cabal', a collective of human beings not necessarily having the same backgrounds, whose only *raison d'être* is a shared purpose or intent which is also has feminine, one can observe a similar semantic

connection and shared feminine gender assignment across different collective nouns.

The noun *niché* is discussed earlier (see Chapter 4), but it is also relevant amongst collectives of animals. The earlier analysis suggested that there may be some association between 'same generation' and 'same parentage', particularly since the 'same parentage' for members of the same brood – blood relations – are taken as a given and makes understandable the shock of finding a 'cuckoo' in the nest. These various notions, 'blood relative', 'departing to travel together', 'same kind', and 'same purpose' and their potential association with feminine gender will continue to be of interest in the analysis of other collectives, particularly collective nouns denoting human beings.

Feminine gender for *faune* (F) 'fauna' applies to the totality of animal life of a region or a given place (LRPT, 1994:475, CED, 1986:554). This noun is feminine, and has consonant-final pronunciation and they may possibly be associated with these two crucial notions – 'life', that which is 'alive' or 'living', and 'totality' or 'whole'. There is some evidence to suggest that notions 'alive/living' are associated with feminine gender. Notions 'totality' and 'whole' have not previously emerged in the analysis of collective nouns. Their potential link with consonant-final pronunciation will continue to be explored below and in other lexical categories still to be analysed.

While various notions raised here are shown to find certain connections elsewhere, these findings are based on a very limited number of examples that cannot be added to. The validity of these notions depends, then, on additional support from collective terms in the remaining lexical domains covered in this thesis.

#### 6.3.1.1 Closely-related collective and count nouns

Not yet accounted for is the feminine noun *volaille* (F) 'poultry' or 'fowl', and this feminine collective term can be contrasted with the masculine count noun *volatile* (M) 'farmyard bird', although both pertain to 'domesticated' birds. The definition of *volaille* includes ... *ensembles des oiseaux qu'on élève pour les œufs ou leur chair* 'groups of birds raised for their eggs or flesh'

(LRPT, 1994:1186). Perhaps a collective restricted to 'birds' may be seen as 'alike' where the masculine *troupeau* can incorporate 'mixed' farm animals. Entities within such a collective also serve a common purpose, the feeding of humans – which is not necessarily so for *troupeau* since some may end up as food, others may become breeding stock, or be sold off for income. Thus, while contrasting gender assignments of *volaille* and *troupeau* suggest an opposition between kinds that are 'alike' and those that are 'diverse', there is some potential for a contrast between 'like' in purpose' and 'diverse' in purposes – even if their precise interaction with gender assignment is not quite clear these different meanings are not difficult to apply.

It is noted that 'like' is also crucial in the application of feminine nouns *dizaine* (F) 'ten' and *douzaine* (F) 'dozen' – but only for items that are 'like' in kind. Differences between 'same'/'like' and 'diverse/different' also find distinctions in duals. *Paire* (F) 'pair' denotes a collective of two humans of 'like' sex, or to entities 'alike' in appearance, or that are typically found together, eg *paire de sciseaux* 'pair of scissors'. *Couple* (M) 'couple' applies to humans where one is male and the other female, thus 'unlike'. LRPT (1994:249) also notes regional and older usages of *couple* as feminine in expressions such as *une couple d'heures* 'a couple of hours', or *une couple d'œufs* 'two eggs'; it may also apply to two of the same kind not male or female, such as *une couple de pigeons* 'pigeon pair'. These different contexts allow us to exploit semantic distinctions between 'like'/'alike'/'same' and 'different' for duals in French not only in lexical differentiation between *paire* and *couple* but through their contrasting feminine and masculine classifications.

This relationship between feminine gender assignment for duals that are 'alike' in kind finds a parallel association in other languages such as Arabic (Kaye, 1990:678) and Hebrew (Hetzron, 1990:699) in relation to body parts that occur in like pairs (although paired body parts in French are mostly masculine, and all are count rather than collective nouns). Nonetheless, such examples suggest that gender assignment for objects in Arabic – and in Hebrew (considered 'arbitrary' by Hetzron, 699) – might also be underpinned or motivated by semantic principles in a similar way as appears to be the case for French.

6.3.1.2 Word-final pronunciation - collective nouns

Word-final pronunciations of collective nouns in Tables 6.9 and 6.10 vary in that six masculine nouns have vowel-final pronunciation and three have consonant-final pronunciation, *attelage* (M) 'team', *bétail* (M) 'herd', and *harpail* (M) 'herd of deer'. Eight of the eleven feminine nouns in Table 6.10 have consonant-final pronunciation, but three, *couvée* (F) 'covey', *nichée* (F) 'brood', *volée* (F) 'flock of birds', have vowel-final pronunciation. The basis of these distributions for *vol* and *volée* may relate to the 'feathered' covering for *volée* since its use identifies its application to birds, while for *vol* consonant-final pronunciation may relate to 'motile', a flock on the move. These notions and others will continue to be explored in relation to word-final pronunciation.

6.3.2 Superordinate terms

Nouns set out in Table 6.11 below are able to apply at a very general level to any living creature.

Table 6.11: Superordinate terms denoting a living creature

<u>Masculine nouns</u>			
<i>animal</i>	M	'animate being', 'animal'	<i>être vivant organisé</i> 'structured living body, gifted w. sense organs and, generally, power of locomotion (opp. <i>végétaux</i> 'vegetable matter') (LRPT, 1994:42)
<i>être</i>	M	'being', 'living thing'	<i>ce qui est vivant et animé</i> 'that which is living and animate' (LRPT, 1994:426)
<u>Feminine nouns</u>			
<i>bestiole</i>	F	'tiny insect'	<i>petite bête</i> 'tiny living thing', esp, insect (LRPT, 1994:107)
<i>bête</i>	F	'beast'	<i>tout être animé</i> 'every living body' with the exception of humans, except when dominated by their instincts (LRPT, 1994:107)
<i>brute</i>	F	'brute'	animal considered in its distance from humans; in extension to a rough or gross individual, or someone brutal and violent (LRPT, 1994:137)
<i>créature</i>	F	'creature'	created through birth <i>tiré de néant</i> 'out of nothing' (LRPT, 1994:256)

Each of these six nouns applies to a single, separate body that is 'living' and 'motile'. These two attributes cannot account for their different gender assignments although there may be some association with the shared consonant-final pronunciation patterns.

### 6.3.2.1 Gender assignments

As the most general superordinate term denoting some kind of living entity, the core attribute for the feminine noun *créature* in its definition as something born, brought into existence that previously did not exist rather than a re-working of pre-existing matter – 'an entity created from nothing'. The possibility of some association between notions 'existing' and 'created' and feminine gender will continue to be explored. Although its definition also includes *être*, *créature* does not overtly entail 'living/alive' as a necessary condition in its meaning (as is the case for *bête* and other nouns above) which allows it to apply to animate and inanimate entities (<atilf.atilf.fr>, 2005). Its application to human beings may have some pejorative sense, eg. *Cette espèce bizarre de créatures qu'on appelle le genre humain* 'that bizarre species of creatures called 'the human race' (LRPT, 1994:257).

Another term that is almost as broad in its application is *être* (M) since it applies to *ce qui existe* 'anything that exists'. Its definition includes *ce qu'il est* 'that which is', (LRPT, 1994:427) while it is translated as 'existence', 'being', 'living creature' (COFED, 1985:208). Beyond the attributes 'existing' and 'living', *être* entails no specifications. It implies every possible configuration and any mode of existence in relation to a single entity, extending to *les êtres humains* as well as *l'Être suprême* (LRPT, 1994:427) – that is, something in existence in the natural world as well as in the supernatural world (although this provides a certain challenge to 'existing'). However, these narrower applications can only be obtained with additional lexical/semantic detail as compound forms. Since 'living/alive' is suggested in previous evidence to be associated with feminine gender assignment, masculine gender assignment for *être* would very likely relate to some other attribute. Thus, although any form remains 'indefinite', it is sufficiently distinctive to be regarded as 'different'. The potential association between these attributes 'indefinite' and 'distinctive/different' and their association with masculine gender assignment will continue to be explored to clarify which is salient.

The term *animal* is identified as *être*, 'organised, capable (in general) of moving and gifted with sensory function' (LRPT, 1994:42). While we know this very precise information we know nothing at all of the form to which it can apply – indeed we are often not sure exactly what

constitutes an *animal*. While it 'exists' in the same way as *être* – with the additional capacity for movement and sensation – only in the contrast between *animal*, *végétal* and *minéral* can we be certain. What we do know of this indefinite entity is that the capacity to move and feel is independent of any other – it relates to a single entity. The implication for every other single noun would not make for a particularly effective system that seems to be built on a means of distinguishing one or some from any other/s. It is, however, 'quantifiable' because its form can be distinguished from any other/s that are also capable of moving and feeling. It is possible that 'distinctive' may also be salient in relation to its masculine gender assignment.

While *bestiole* also applies to a distinct individual, its definition as a 'tiny living beast' offers both 'tiny' and 'living' as more crucial attributes. There is considerable support for an association between 'tiny' and vowel-final pronunciation but this noun is consonant-final. Such an attribute would not be expected at the same time to account for feminine gender assignment. *Bestiole* typically applies to a tiny insect, particularly where tiny size might otherwise suggest a speck of dirt, something inanimate. Previous evidence suggests that 'living' is associated with feminine gender assignment, and this association is supported by two nouns, *corps* (M) and *cadavre* (M) both of which denote 'corpse', a 'dead' body, oppositional meanings to 'living' that have contrasting masculine gender assignment.

The feminine noun *bête* applies to any living creature 'other than humans' but, under particular circumstances, humans dominated by their instincts, it can extend to include human beings (LRPT, 1994:107). This corollary implies that *bête* more generally relates to creatures whose instincts are 'wild', 'untamed'. Another feminine superordinate term *brute* (F) is used as a literary term to denote 'animal, beast' (COFED, 1985:72). For both *bête* and *brute*, there is a sense that the 'wild' side of their nature remains dominant, unrestrained by education, taming, etc. This 'unrestrained' or 'wild' nature may possibly associated with feminine gender assignments of both, particularly given the logical semantic link between 'wild' and 'unrestrained' for these nouns, and 'free' and 'unrestrained' in their application to *aigle* 'eagle' as a bird *déchaîné* 'unchained', as well as birds whose instinct for migration remains 'untamed', eg. *caille* (F) 'quail' whose instinct for migration cannot be bred out (Buffon, Chapter 4, Birds) each of

has feminine gender assignment. These examples can be contrasted with birds that are easily tamed, or have become domesticated, or have lost their instinct for freedom, eg. *biset* (M) 'rock pigeon', *canari* (M) 'canary', *volatile* (M) 'farmyard bird', which nouns have contrasting masculine gender assignment.

#### 6.3.2.2 Possible counter-example - *fauve* (M) 'wild animal'

The noun *fauve* (M) 'wild animal' is masculine although the notion 'wild' – where instincts remain ungoverned – is suggested above to be associated with feminine, eg. *bête* (F) 'beast', a creature unable to govern its instincts. This masculine noun *fauve* (M) 'wild animal' is derived from the adjective *fauve* 'wild' and applies to large ferocious mammals such as the 'wild cats'. With 'wild' made clear in its semantics, the nature of any referent is left unclear – its form or kind not only 'undefined' but absent. This example will continue to be of interest.

#### 6.3.2.3 Other superordinate terms

Another area where superordinate terms can be found are scientific or zoological terms, such as *mollusque* (M) 'mollusc', and *camélidé* (M) 'camel-like animal'. The definition of *mollusque* identifies an invertebrate with a soft (*mou/mol/molle* adj. 'soft') unsegmented body that may or may not have a shell. Some molluscs such as snails and slugs can move, while bivalves such as clams, oysters and mussels that, although fixed to a support structure, are able to open and shut independently, which movements are designed to trap food. Thus, the extent of creatures to which this term can apply tells us something about their movement even for entities that are quite unrelated. In that notions related to 'movement' appear to be associated with consonant-final pronunciation, the potential saliency of 'unrelated' in kind to masculine gender assignment will continue to be explored.

The zoological term *camélidés* denotes a family of camel-like animals, creatures capable of surviving for long periods without food or water particularly in desert conditions. It includes *chameau* (M) 'camel', a tall Bactrian (Asian) ruminant with two humps and long slender legs, *dromadaire* (M) 'dromedary' or 'Arabian camel' with a single hump bred that is bred for racing and riding, and *llama* (M) 'llama' which has no hump at all, even though its derivation suggests



the presence of a hump. It does not include other ruminants that have a hump, such as the horned *bison* (M) 'bison', and tall ruminants that do not have a hump such as *girafe* (M) 'giraffe'. Thus, apart from four-footed – which is more about movement – and hairy, which relates to texture and is suggested in the analysis of fish (Chapter 5) to be associated with vowel-final pronunciation, the creatures that can be included in this term are otherwise quite unrelated in form. In itself this is not surprising since its application is determined by the ability to tolerate difficult environmental conditions.

While the term *camélidé* appears to identify a particular prototype, *camél-*, it can still apply to very different creatures, while there is no such prototypical model for *mollusque*. The undefined nature regarding kind or form is what enables these superordinate terms based on artificial constructs to apply to otherwise unrelated creatures. There may be some association between 'unrelated' as to kind or form and masculine gender assignment for *camélidés* and *mollusque*, despite differences in their singular or plural nature. Certainly, their word-final pronunciations differ.

Another superordinate term is the Turkish loan word *angora* 'angora', and beyond the presence of long hair there is no detail regarding lexical referents. The dictionary entry for *angora* (LRPT, 1994:41) identifies it as both adjective and noun, but includes no gender – simply showing it as *un, une angora*, and thus both are acceptable. However, in practice alternative gender assignments for this noun are not arbitrary. When *angora* denotes a *lapin* (M) 'rabbit' or *chat* (M) 'cat', it is *un angora*, masculine gender relating to the masculine referent. When *angora* denotes a *chèvre* (F) 'goat', it is *une angora*, feminine gender relating to the feminine referent. Thus, alternative gender assignments are determined in a predictable way in relation to the real-world referent animal. This example is of considerable interest since alternative gender assignments for this noun relate to the gender, not the biological sex, of the real-world referent.

#### 6.3.2.4 Word-final pronunciation - superordinate terms

Word-final pronunciation for these superordinate terms is not yet accounted for. The definition of *créature* (F) 'creature' suggests something existing, having a physical reality. We can

observe a difference in meaning between this noun, which suggests a concrete, tangible presence, and a noun such as *idée*, which relates to something created but 'intangible'. It is possible that these contrasting attributes, 'concrete', existing in reality, and 'intangible', existing in an abstract way, may be associated with differences in word-final pronunciation between the consonant-final *créature* and *bestiole*, and the vowel-final *idée*.

For other superordinate nouns – *animal*, *bestiole*, *bête* and *être*, the most crucial notions identified in definitions are *vivant et animé* 'living and moving', although the definition of *animal* places rather more emphasis on the 'potential for movement' – 'motility' – than 'mobility', the capacity for movement. It may be that 'motile' is associated with consonant-final pronunciation for three of the four nouns, but for *être* no physical form is established that makes 'motile' possible to establish, nor is there evidence of any concrete form that might account for consonant-final pronunciation. A potential attribute is the notion 'whole' or 'entire' of itself and not a part of anything else, and the possibility of its association with consonant-final pronunciation will depend on evidence from other examples. The noun *brute* suggests the 'most primitive state' and possibly something 'concrete' may apply here rather than 'motile'.

However, the basis for an association between contrasting attributes 'abstract/concrete' as well as 'motile' and 'whole' with word-final pronunciation rather than gender assignment is unclear. If they are crucial features in the semantic system, we would expect to find them reflected in word-final pronunciation patterns elsewhere in the lexicon. They will continue to be of interest in the exploration of other lexical fields.

### 6.3.3 Loan words

Many loan words for animals from other European and non-European countries are found in the database, and they are presented in the following Table 6.12.

Table 6.12: Masculine loan words

<i>anaconda</i>	M	'anaconda', giant boa constrictor	Sinhalese
<i>alligator</i>	M	'alligator' (Americas)	English, from Spanish
<i>babiroussa</i>	M	'babiroussa, Malaysian wild boar'	Malay
<i>barzoi</i>	M	'borzoi' (long-haired dog)	Russian

<i>cachalot</i>	M	'sperm whale'	Spanish, from Portuguese
<i>caret</i>	M	'hawksbill turtle' (marine)	Caribbean Indian
<i>chacal</i>	M	'jackal'	Turkish, from Persian
<i>cobaye</i>	M	'guinea-pig'	Tupi
<i>cobra</i>	M	'cobra', hooded venomous snake	Portuguese ( <i>colubra de capello</i> 'hooded snake')
<i>coyote</i>	M	'coyote'	Spanish, from Nahuatl
<i>couguar/cougouar</i>	M	'puma'	Tupi
<i>hamster</i>	M	'hamster'	German
<i>impala</i>	M	'impala', S.W. African antelope	Zulu
<i>kangourou</i>	M	'kangaroo'	Indigenous Australian
<i>koala</i>	M	'koala'	Indigenous Australian
<i>lama</i>	M	'llama'	Quechua via Spanish
<i>lemming</i>	M	'lemming' (rodent)	Norwegian
<i>maringouin</i>	M	'mosquito'	Tupi
<i>méhari</i>	M	'kind of dromedary' (racing camel)	Arabic
<i>ocelot</i>	M	'ocelot' (feline)	Nahuatl
<i>okapi</i>	M	'okapi', member of giraffe family	Central African language
<i>opossum</i>	M	'black and white opossum'	Algonquin
<i>oustiti</i>	M	'marmoset'	African
<i>naja</i>	M	'cobra', hooded venomous snake	Hindi (Ceylon)
<i>panda</i>	M	'panda'	Nepalese
<i>puma</i>	M	'puma'	Quechuan
<i>ratel</i>	M	'ratel' (musteline mammal)	Afrikaans
<i>saïga</i>	M	'saïga', small Eurasian antelope	Russian
<i>springbok</i>	M	'springbok'	Dutch S. African
<i>tapir</i>	M	'tapir' (boar-like mammal)	Tupi
<i>wombat</i>	M	'wombat' (marsupial)	Indigenous Australian
<i>zèbre</i>	M	'zebra' (that once roamed Iberian peninsula)	Spanish, from Portuguese

Each of these loan words is masculine even though some have come from feminine nouns in gendered languages, eg. *cobra* (Portuguese). Some loan words are imported into the French lexicon without change, and some may have small changes, such as diacritics related to stress or phonetic value, or small phonological or orthographic changes. Other changes are more extreme, particularly those that affect word-final pronunciation. For instance, in its original Australian language the noun '*wombat*' has consonant-final pronunciation, but the transcription of *wombat* as a French noun [ *wõmba* ] (COFED, 1985:594) shows that the final <ɒ> is not pronounced.

Most of these creatures are restricted or limited to a single mode of existence – terrestrial for mammals such as *babiroussa*, *barzoï*, *koala*, *panda*, *zèbre*, and snakes such as *anaconda*,

*cobra* and *naja*. Others lead a purely 'aquatic' existence, eg. *cachalot*. But some can alternate between terrestrial and aquatic environments – *caret*, and *alligator* which presents a log-like form lying on the surface of the water, but is capable of *une effrayante rapidité* 'lightening speed' (<atilf.atilf.fr>, 2005) in the water and on land, despite appearances to the otherwise. Thus, different environments do not appear to account for masculine gender assignment for these loan words.

The database contains very few feminine loan words denoting birds (§4.2.1, Birds), and none at all for fish (§5.3.3, Fish). Only three feminine loan words in the corpus denote other kinds of creatures, and they are set out in Table 6.13 below.

Table 6.13: Feminine loan words

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<i>caouan(n)e</i>	F	'loggerhead turtle'	Caribbean Indian
<i>tarentule</i>	F	'tarantula'	Italian
<i>tsé-tsé</i>	F	'tsetse fly'	Afrikaans, from Tswana

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The nouns *tsé-tsé* applies to a flying insect that, like *mouche* (F) 'fly' has feminine gender assignment. These examples suggest that there may be some association between 'winged' (able to fly) and feminine gender assignment for insects. This will continue to be explored. The *tarentule* is able to inflict a venomous bite when threatened but more importantly, it can spin a slender silk-like thread as it falls that is strong enough to support its weight and it is free to launch itself into space. Since both are free to take to the air, neither is 'constrained' in the same way as other 'legged' or 'footed' creatures. These associations will also continue to be explored. However, they are irrelevant for *caouan(n)e*, and it is examined below with other feminine nouns.

Any association between 'flying' and feminine gender assignment for *tsé-tsé* leaves the masculine *maringouin* (M) 'mosquito' unaccounted for. This noun is used in the tropics and in Canada to designate a mosquito that differs from other mosquitos in its larger size than those in more temperate climates – and these attributes 'different' and 'larger' may account for masculine gender assignment vowel-final pronunciation of this noun. However, it is noted that *maringouin* has the same fragile thread-like form as *moustique* (M) 'mosquito', which is also

masculine, as is *fauchoux* (M) 'daddy long-legs'. The possibility that a thread-like form may be associated with masculine gender will continue to be explored.

Some vowel-final loan words are masculine, eg. *koala*, *wombat*, and others are feminine, eg. *tsé-tsé*, while some consonant-final loan words are masculine, eg. *springbok*, *chacal*, and others are feminine, eg. *tarantule*. These variations suggest that word-final pronunciations appear to be independent of gender assignment. It is noted, however, that the *koala* is better identified by its soft dense hair as it sits immobile amongst the gum tree boughs, and vowel-final pronunciation is consistent in relation to its 'textured' coat. Other mammals also have a 'textured' coat, eg. *kangourou*, *méhari*, *okapi*, *panda*, *saïga*, and *wombat* and these nouns, like *koala*, are also vowel-final. The *babiroussa* has almost hairless skin but it is wrinkled, possibly providing another kind of 'textured' appearance, and its potential association with vowel-final pronunciation will continue to be explored.

It is noted that the pronunciation of *barzoï*, while vowel-final in English, is consonant-final /barzɔj/ in French. Other consonant-final loan words include fleet-footed creatures *barzoï*, *chacal*, *couguar*, *springbok* and *zèbre*, and consonant-final pronunciation may relate to their ability to move swiftly. The *alligator* is equally swift, but consonant-final pronunciation more likely relates to its solidly-built, powerful body. Vowel-final pronunciation does not suggest a lesser mobility, particularly for felines such as *ocelot* and *puma*, since they are equally noted for speed; instead, it may serve to emphasise the more crucial nature of a distinctive coat that distinguishes them from others.

In the same way, any relationship between 'motile' and consonant-final pronunciation would seem less appropriate for heavy-built rodents, smaller creatures, whose bodies present a stockier, well-built appearance, eg. *cobaye*, *hamster*, *ratel* and *tapir*. While their hairy coats which might otherwise suggest vowel-final pronunciation, consonant-final pronunciation suggests that their 'stocky' appearance is more crucial.

In terms of word-final pronunciation, two feminine consonant-final nouns, *couane* and

*tarantule*, may have been vowel-final in their original languages but other loan words clearly reveal a change in word-final pronunciation from their original form in that the word-final phone, or phones, are elided. Such examples include consonant-final nouns that were formerly vowel-final, eg. *iguane* and *zèbre*, and the now vowel-final but formerly consonant-final *wombat* (noted previously in §3.1.3). It is possible that attributes associated with the original word-final pronunciations are either less relevant, or irrelevant while some other attribute, associated with a different word-final pronunciation is more crucial. These changes in word-final pronunciation are brought about by a process of eliding the final phone of the noun in its original form. This interaction between the semantic and phonological systems appears to be similar to interaction between the semantic system and gender assignment.

**6.3.4 Summary - related sets, collective nouns, superordinate & general terms, loan words**  
The phonological analysis and initial exploration of gender assignments for nouns denoting a range of living creatures provides no clear predictability in relation to either gender assignments or word-final pronunciation patterns.

The possibility of some association between gender assignments of nouns and their derivational background considered above shows no consistency. For nouns used in extension to denote animals, some retain the original gender assignments, eg. *bête* (F), *cané/caniche* (M), but others do not, eg. *tête* (F) 'head' which is feminine, while *têtard* (M) 'tadpole' is masculine. There is a single example of an adjective, *éphémère*, forming a noun which, in this case, is masculine.

In contrast, the analysis of nouns in family sets shows that gender assignments for nouns denoting 'male' and 'female' of a kind are fully predictable and regular, consistent with the generalisation that nouns whose semantics identify 'male' are masculine, and nouns whose semantics identify female are feminine. Within these family sets denoting the 'young' of each kind, gender assignments are also consistent with this generalisation where sex-specific detail is provided – young that are 'male' are masculine and young that are 'female' are feminine. In the absence of any information regarding specific sex of young animals, nouns are masculine, the same gender assigned to the 'young' of birds and fish (see Chapters 4 and 5).

While collective nouns, superordinate terms and loan words are analysed in separate sets, results suggest that, to some extent, semantic oppositions between attributes is associated with and can account for contrasting gender assignments, as follows:

- 'domesticated/constrained : wild/untamed' where masculine gender assignment for the domesticated *harpail* (M) 'farmed deer', *volatile* (M) 'farmyard bird', contrasts with 'wild' associated with feminine gender assignment for *harpaille* (F) 'wild deer', *harde* (F) 'herd/flock of wild animals', *bête* (F) 'beast' (wild creature whose instincts are untamed)
- 'different' : 'same' in kind, the masculine *bétail* (M) 'livestock' contrasting with the feminine *troupe* (F) as it applies to a 'pride', a group of the same kind living together, and *vermine* (F) 'parasitic insects'
- 'unlike' : 'like' in purpose, eg. the masculine *troupeau* (M) 'herd', where the purpose can vary between farm animals used for work, or for food contrasting with the feminine collective *volaille* (F) 'poultry' (raised for their flesh or their eggs), *meute* (F) 'pack of dogs trained for hunting'
- 'dead : living/alive', the masculine *gibier* (M) 'game' contrasting with feminine nouns *faune* (F) 'fauna', and *bestiole* (F) 'wee beastie', a living creature.

While the above notion 'different' relates to 'kind' within a collective, for count nouns we find the notion 'distinctive' – a slight variation in the meaning of 'different' – for *être* (M) 'being' and *animal* (M) 'animal', and these nouns have the same masculine gender assignment. Among collective nouns, a further attribute potentially associated with masculine gender is a 'quantity' rather than mass, eg. *essaim* (M) 'swarm', *troupeau (d'éléphants)* (M) 'herd' (of elephants), *vol* (M) 'flock' of birds, *banc* (M) 'shoal' or 'school' of fish. A further attribute associated with feminine gender for one collective noun is 'blood relatives', eg. *niché* (F) 'nestlings'.

Among morphologically derived terms we find additional contrasts between the inability/ability to protect oneself from threat, danger or imminent death, eg. the masculine *éphémère* (M) 'mayfly', an insect whose wings are unable to extend its life, and the feminine *caouanne* (F) 'loggerhead turtle' and *tarentule* (F) 'tarantula', whose adaptations protect it from harm, which are feminine. The extent to which such adaptations apply more broadly in relation to gender

assignment will be further assessed below. For the masculine term *fauve* (M) 'wild animal', derived from the adjective *fauve* 'wild', the absence or undefined nature of any form or kind is what allows it to apply to any kind, although the precise nature of these attributes and their potential association with masculine gender is not yet fully explained.

Another notion suggested to be associated with feminine gender is the notion 'same' in relation to purpose, eg. *meute* (F) 'pack of dogs trained to hunt'. In this it is not unlike 'same' in relation to *niché* (F) 'birds of the same brood', and both nouns are feminine. 'Same' and 'different' form binary semantic oppositions, and they appear to account for contrasting gender assignments.

Among loan words, the attribute 'different' also appears to be associated with masculine gender, particularly where an entity is otherwise similar to but different in comparative size with another or others, eg. *maringouin* (M) 'mosquito' (larger than those in temperate regions), *poulain* (M) 'foal' (smaller than a mature size). A creature with a highly unusual form also appears to be associated with masculine gender assignment – perhaps because it is 'distinct' or 'different' from others, eg. *kangourou* (M) 'kangaroo', *alligator* (M) 'alligator', *tapir* (M) 'tapir', *wombat* (M) 'wombat' – except where can be considered unique. Perhaps masculine gender for *fauve* (M) 'wild beast' also relates to one that is 'distinct' or 'different' from others.

For artificial constructs suggested by two other superordinate terms – *camelidés* (M) 'members of the «camel» family' that are different since they are not related to the presence of a hump, and *mollusque* (M) 'mollusc' which are unrelated in kind, this unrelatedness is the key to their broad application. Both nouns are masculine and, together with *animal* (M) 'animal', they suggest that 'unrelated' in form or kind may be associated with masculine gender assignment. In a lexical field such as 'living things', the requirement for such terms is perhaps to be expected where it would not be in narrower fields of 'birds' and 'fish'. However, there is another significant implication – that distributions relating to form and kind are tied to gender assignment rather than to word-final pronunciation, a result that provides further support for the suggestion that gender assignment and word-final pronunciation appear to function as independent systems.



In the case of *angora* 'angora', alternative gender assignments are regular and predictable in relation to the gender of the referent (animal). No explanation is offered for many of the loan words that denote specific animals, and they are examined below with other count nouns.

Despite the few numbers, support for associations of certain attributes with specific gender assignments comes from a consistency and regularity across the various categories. However, some attributes are identified for the first time, 'unrelated' in form for *mollusque* (M 'mollusc' and *animal* (M) 'animal', but all notions raised above will continue to be explored in the analysis of nouns in the corpus below and in lexical fields to follow.

Two crucial aspects of findings above are, firstly, that an attribute that is salient at one level of meaning may become a given at the next level of meaning, at which point a new attribute can become salient. Secondly, an entity may have more than one attribute associated with the same gender assignment, eg. *essaim* (M) 'swarm', *troupeau* (M) 'herd', since different meanings emerge in the different contexts in which they are used, and an attribute that is salient in one context is not that which appears to be salient in another.

Variations in word-final pronunciation patterns amongst nouns in family sets is suggested to relate to certain attributes associated with specific word-final pronunciation patterns. Coats or outer coverings that are 'stiff', 'wiry' or 'shaggy', etc. are associated with vowel-final pronunciation, eg. 'shaggy' *loup* (M) 'male wolf', 'bristly' *cochon* (M) 'pig' and *trueie* (F) 'sow', etc., 'curly' fleece of the *bélier* (M) 'ram' and *brebis* (M) 'sheep', and mane of the *lion*. The superordinate term *camélidés* (M) 'members of a camel-like family' also denotes creatures with 'hairy' coats. Vowel-final pronunciation occurs alongside masculine gender for nouns denoting the immature 'young' of a kind, eg. *biquet* (M) 'kid', *porcelet* (M) 'piglet', *chiot* (M) 'puppy'.

Consonant-final pronunciation appears to be associated with 'motile' particularly as creatures that exhibit an agility or turn of speed, as for the agile *bouc* (M) 'buck' and *chèvre* (F) 'nanny-goat', agile and speedy *cerf* (M) 'buck (red deer) and *biche* (F) 'hind (red deer), sure-footed *chèvre* (F) 'goat', *cheval* (M) 'horse' or *louve* (F) 'she-wolf'. For the superordinate term

*mollusque* (M) 'mollusc', consonant-final pronunciation may also relates either to a capacity for independent movement or, for molluscs that are fixed and cannot move (bivalves), a 'touch-sensitive' ability that allows them to open and shut so quickly that they can trap prey within. It also appears to be associated with nouns denoting creatures with a 'bulky' or 'thickset' body, eg. *bœuf* (M) 'bull', *vache* (F) 'cow', *ours* (M) 'male bear' all of which are consonant-final. These findings with regard to certain attributes and their association with specific word-final pronunciations are consistent with findings in the analysis of birds (in Chapter 4) and fish (in Chapter 5). At a more abstract level of meaning, it is possible that a concrete physical form of *créature* (F) 'creature' and *être* (M) 'being' may also be associated with consonant-final pronunciation – particularly in its contrast with the vowel-final *idée* (F) 'idea', which denotes something also 'created' but in an abstract way and has vowel-final pronunciation.

For collective nouns, particularly *bande* (F) 'pod of whales', notions raised in discussion include the different movements of collectives. One can observe a contrast between free-wheeling/vowel-final, eg. *volée* (*de moineaux*) 'flock of starlings' and *banc* (M) 'schoal/school' of fish' and forward momentum/consonant-final for other collectives such as *bande* (F) 'pod of whales' and *vol* (M) 'flock' of birds as they take off and fly together.

For some creatures, attributes identified above that are related to specific word-final pronunciation patterns may co-occur, both being salient. Where both are associated with consonant-final pronunciation, eg. *tigre* (M) 'tiger' which is both 'striped' and 'solidly built', we find a word-final consonant cluster. Among related pairs we find different word-final sequences, eg. the single consonant-final phone for *bouc* (M) 'buck' and consonant cluster for *chèvre* (F) 'nanny-goat'. In other cases co-occurring attributes associated with different word-final pronunciations may compete for saliency, eg. 'agile' movement, associated with consonant-final pronunciation, and 'textured' coat, associated with vowel-final pronunciation. These competing attributes are suggested to account for variations in word-final pronunciation patterns of members in the same family set, eg. the vowel-final *loup* (M) 'he-wolf' and consonant-final *louve* (F) 'she-wolf', the vowel-final *lapin* and consonant-final *lapine*. Equally interesting is the way alternative pronunciations relate to masculine/male and feminine/female – particularly since

certain evidence suggests that the two systems seem to be unrelated while other evidence (see Conclusion, Ch. 4) suggests that gender may have some influence on word-final pronunciation.

These results provide further evidence that gender assignments and word-final pronunciation patterns seem to be regular and consistent in relation to certain semantic notions. They add further weight to the possibility that they are semantically motivated. The various notions raised above, and their association with certain classifications, will continue to be explored in the analysis below of other count nouns in the corpus.

### 6.4 Semantic analysis – count nouns

The absence of any phonological or morphological explanation for gender assignment, and evidence of a semantic association in the sets above in combination suggest that an analysis of remaining count nouns in the corpus may uncover further semantic relations among them.

#### 6.4.1 Masculine count nouns

The following masculine count nouns in the corpus that not yet discussed denote a wide range of living things, from invertebrate to vertebrate, reptiles to mammals.

Table 6.14: Masculine count nouns denoting living creatures (excl. birds, fish)

<u>Invertebrates:</u>		
• Cell-structured objects		
<i>gamète</i>	M	'gamete'
<i>infusoire</i>	M	'protozoa'
<i>leucocyte</i>	M	'white blood cell'
• Worms:		
<i>ver</i>	M	'worm'
• Arachnids		
<i>faucheux</i>	M	'daddy long-legs'
<i>scorpion</i>	M	'scorpion'
• Marine or aquatic creatures		
<i>amphibie</i>	M	'amphibian'
<i>caret</i>	M	'hawksbill turtle' (smallish tropical turtle)
<i>corail</i>	M	'coral' (marine animal)
<i>méduse</i>	M	'jellyfish'
<i>oursin</i>	M	'sea-urchin', 'sea-hedgehog'
<i>poulpe</i>	M	'octopus'
<i>têtard</i>	M	'tadpole'
<i>tripang</i>	M	'sea-cucumber' (any of the larger oriental sea-cucumbers)

• Molluscs (crustaceans incl. snails)

<i>buccin</i>	M	'whelk' (snail-like marine mollusc)
<i>cloporte</i>	M	'woodlouse' (terrestrial crustacean with hard carapace)
<i>colimaçon</i>	M	'snail'
<i>escargot</i>	M	'snail'
<i>limaçon</i>	M	'snail'

• Arthropod (invertebrate, incl. insects, arachnids, etc.)

<i>aôûtat</i>	M	'larva of trombidion', 'harvest-bug'
<i>bourdon</i>	M	'bumble-bee'
<i>bruche</i>	M	'weevil' (beetle)
<i>cafard</i>	M	'cockroach', 'black-beetle'
<i>cousin</i>	M	'gnat'
<i>grillon</i>	M	'cricket' (black or green insect that jumps)
<i>lampyre</i>	M	'glow-worm' (beetle with luminescent organs)
<i>lepisme</i>	M	'silver-fish'
<i>noctiluque</i>	M	'firefly' (beetle)
<i>pou</i>	M	'louse' (parasitic insect which burrows under skin)
<i>scorpion</i>	M	'scorpion'
<i>termite</i>	M	'termite'
<i>trombidion</i>	M	'trombidion', 'harvest-bug'

• winged insects

<i>éphémère</i>	M	'mayfly'
<i>frelon</i>	M	'hornet' (wasp)
<i>maringoin</i>	M	'mosquito' (Tupi)
<i>moustique</i>	M	'mosquito'

• butterflies

<i>argynne</i>	M	'fritillary' (butterfly)
<i>citron</i>	M	'yellow-coloured butterfly'
<i>bombyx</i>	M	'butterfly' (especially mulberry tree butterfly, caterpillars being silkworms)
<i>papillon</i>	M	'butterfly'
<i>soucis</i>	M	'butterfly with marigold colouring'
<i>vulcain</i>	M	'red-admiral butterfly'

Vertebrates:

• Reptiles

<i>caret</i>	M	'hawksbill turtle' (marine turtle)
<i>crocodile</i>	M	'crocodile'
<i>gecko</i>	M	'gecko' (climbing lizard)
<i>lézard</i>	M	'lizard'
<i>mamba</i>	M	'mamba' (African venomous snake)
<i>scinque</i>	M	'skink' (scaled lizard)
<i>serpent</i>	M	'snake'
<i>tupinambis</i>	M	'tupinambis' (lizard)
<i>varan</i>	M	'varan', 'monitor lizard' (eg. 'goanna')

• Amphibians

<i>crapaud</i>	M	'toad'
<i>triton</i>	M	'newt', 'eft'

Extinct animals

<i>aurochs</i>	M	'aurochs' (extinct European cattle tribe)
<i>dinothérium</i>	M	'Deinotherium' (extinct beast)
<i>tarpan</i>	M	'tarpan' (prehistoric breed of horse native to Europe, now extinct)

## Mammals

### • Aquatic mammals

<i>dauphin</i>	M	'dolphin'
<i>dugong</i>	M	'dugong' (whale-like marine mammal)
<i>lamantin</i>	M	'manatee' (whale-like marine mammal)
<i>marsouin</i>	M	'porpoise'
<i>rorqual</i>	M	'rorqual whale'

### • Amphibious mammals

<i>bièvre</i>	M	'(obs.) beaver'
<i>castor</i>	M	'beaver'
<i>morse</i>	M	'walrus'
<i>ornithorhynque</i>	M	'platypus'
<i>phoque</i>	M	'seal'
<i>hippopotame</i>	M	'hippopotamus' (semi-aquatic terrestrial grazing mammal, male and female tusked)
<i>vison</i>	M	'European mink'

### • Anteaters

<i>echidné</i>	M	'echidna', 'spiny anteater'
<i>pangolin</i>	M	'scaly anteater'
<i>tamandua</i>	M	'tamandua' (anteater)

### • Primates and arboreal mammals

<i>ai</i> (syn. <i>unau</i> )	M	'sloth' (arboreal mammal that holds itself upside down using its arms)
<i>babouin</i>	M	'baboon'
<i>drill</i>	M	'drill' (W. African monkey)
<i>écureuil</i>	M	'squirrel'
<i>gibbon</i>	M	'gibbon'
<i>gorille</i>	M	'gorilla'
<i>hamadryas</i>	M	'hamadryad' (Abyssinian baboon)
<i>macaque</i>	M	'macaque'
<i>maki</i>	M	'(Madagascan) lemur'
<i>mandrille</i>	M	'mandrill' (Old World monkey with short tail)
<i>nasique</i>	M	'proboscis monkey' (with elongated bulbous nose)
<i>orang</i>	M	'orang-utan'
<i>oustiti</i>	M	'marmoset' (S. American monkey)'
<i>sagouin</i>	M	'squirrel-monkey'
<i>sapajou</i>	M	'sapajou' (S. American monkey)
<i>singe</i>	M	'monkey', 'ape' (tail short or absent)
<i>tarsier</i>	M	'tarsier' (nocturnal arboreal prosimian primate)

### • Feline mammals

<i>caracal</i>	M	'caracal' (lynx-like N. African feline)
<i>chat</i>	M	'cat', small domesticated feline; 'male' of cat species
<i>jaguar</i>	M	'jaguar'
<i>léopard</i>	M	'leopard'
<i>lion</i>	M	'lion'; 'male' of the species
<i>ocelot</i>	M	'ocelot'
<i>puma</i>	M	'puma'
<i>tigre</i>	M	'tiger'; 'male' of the species

### • Canine mammals

<i>braque</i>	M	'hound'
<i>caniche</i>	M	'poodle'
<i>chien</i>	M	'dog'; 'male' of species of dog
<i>dogue</i>	M	'mastiff'
<i>isatis</i>	M	'blue fox', 'Arctic fox'

<i>king-charles</i>	M	'King Charles spaniel'
<i>leu</i>	M	'(obs.) wolf'
<i>loup</i>	M	'wolf'
<i>mastiff</i>	M	'mastiff'
<i>mâtin</i>	M	'large guard-dog'
<i>molosse</i>	M	'huge dog'
• Goats		
<i>bouc</i>	M	'male' goat of any species
<i>biquet</i>	M	'young male goat'
<i>chamois</i>	M	'chamois' (Alpine antelope-goat)
<i>isard</i>	M	'izard' (Pyrenean antelope-goat)
• Horse family		
<i>barbe</i>	M	'barb' (breed of horse), 'barbary horse'
<i>bardot</i>	M	'hinny' (sterile offspring of male horse and female donkey)
<i>cheval</i>	M	'horse', domesticated equine species
<i>genet</i>	M	'jennet' (small Spanish riding horse)
<i>tarpan</i>	M	'tarpan' (wild horse)
<i>zèbre</i>	M	'zebra'
• Rodents		
<i>campagnol</i>	M	'field-mouse'
<i>cobaye</i>	M	'guinea-pig'
<i>écureuil</i>	M	'squirrel'
<i>lerot</i>	M	'garden dormouse'
<i>loir</i>	M	'dormouse'
<i>muscardin</i>	M	'small dormouse'
<i>porc-épic</i>	M	'porcupine'
• Mustelines (predatory mammals, incl. badgers, otters, skunks, etc.)		
<i>blaireau</i>	M	'badger' (stocky large burrowing animal with black and white stripe on head)
<i>ferret</i>	M	'ferret' (domesticated albino polecat)
<i>putois</i>	M	'polecat' (nocturnal, with nauseating odour)
<i>ratel</i>	M	'honey-badger' (feeds on larvae of bees)
<i>vison</i>	M	'mink' (large semi-aquatic, related to polecat)
• Bovid mammals and other grazing mammals		
<i>bison</i>	M	'bison' ( <i>d'Europe</i> 'wisent', <i>d'Amérique</i> 'buffalo', distantly related to <i>buffle</i> (M) 'water buffalo')
<i>bœuf</i>	M	'ox', large domesticated beast, typically horned
<i>buffle</i>	M	'water buffalo', African 'buffalo'
<i>chameau</i>	M	'camel', typically humped
<i>éléphant</i>	M	'elephant', largest terrestrial mammal, tusked
<i>girafe</i>	M	'giraffe', tallest of all mammals
<i>gnou</i>	M	'gnu', 'wildebeest' (horned, maned, bearded)
<i>nyala</i>	M	'nyala' (member of the antelope family, only males have spiral-shaped horns)
<i>rhinocéros</i>	M	'rhinoceros'

These 130 nouns form nearly half of the masculine nouns found in the database (the full list is provided at Appendix X).

While a constraint to a certain environment might be crucial for nouns at a more general level of meaning, for nouns that deal with very specific creatures we could expect finer distinctions for the same reason that a blanket distinction for 'nocturnal' would deliver – 'constrained' would not reveal distinctions among the enormous range of creatures found in the same environment.

Some nouns in the above set have synonyms, and while some may have the same gender assignments, others can differ, eg. masculine *tripang* (M) and *holothurie* (F) 'sea-cucumber', or *clafard* (M) and *blatte* (F) 'cockroach'. It is also recognised that, while some nouns may appear to be synonymous they can apply in very different ways, eg. two nouns that both designate 'leopard', the masculine *léopard* (M) 'leopard' and feminine term *panthère* (F) '(black) panther'. The first term applies to leopards that develop the typical tawny yellow coat with black rosette-like spots, while *panthère* applies to leopards that develop a totally black coat, a change in pigmentation that results from a very rare congenital condition (similar to but the converse of albinism). This congenital condition is unique to leopards – it does not occur in any other species of large felines, even those having black stripes or darker splotches. Thus, while these terms apply to animals of the same genus, they do not convey synonymous meanings nor do they denote synonyms referents. This condition is not merely different, but 'unique' – an attribute is shown elsewhere to be associated with feminine nouns and account for feminine gender in relation to *panthère*.

Some of the creatures listed in Table 6.14 have neither feet nor legs but they nonetheless have a capacity for movement according to adaptations developed in and constrained by their environment, eg. *infusoire* (M) 'protozoa', *méduse* (M) 'jellyfish', *aolûtat* (M) 'larva (of harvest bug)', *dauphin* (M) 'dolphin', *bruche* (M) 'weevil', *serpent* (M) 'snake', *têtard* (M) 'tadpole', *ver* (M) 'worm', and other nouns denoting 'snake', particularly venomous snakes, eg. *cobra* (M) 'cobra', *aspic* (M) 'asp', *crotale* (M) 'rattle-snake', *naja* (M) 'cobra', all of which are masculine. Such bodies are 'constrained' to moving around on solid ground or in water, and the possibility of some association between this notion and masculine gender assignment should be considered. The *cloporte* (M) 'woodlouse' is described as having a flattened body, although 'flat' is elsewhere suggested to be associated with feminine gender assignment. However, the

*cloporte* requires a damp environment and its constraint to such habitats prevents it from spreading and colonising more widely. This apparent association between 'constrained' and masculine gender cannot account for *termite* (M) 'termite', a winged creature, and other winged insects that can fly and are also masculine, eg. *papillon* (M) 'butterfly'. Masculine gender for these creatures is yet to be accounted for. While the typical shape associated with *ver* is 'elongated', worms exhibit an extraordinary variety of forms. This noun is discussed further below with related terms.

Other creatures in this set are 'legged' or 'footed' which adaptations suggest movement across solid ground, or in a combination of solid ground and water. Those in the former set include *hérisson* (M) 'hedgehog', *ratel* (M) 'honey badger', and *escargot* (M) 'snail' (which is footed in a slightly different way) and reptiles such as *lézard* (M) 'lizard', and *gecko* (M) 'gecko'. Those in the latter set include *caret* (M) 'hawks bill turtle', *morse* (M) 'walrus', *crocodile* (M) 'crocodile', *ornithorhynque* (M) 'platypus' and *hippopotame* (M) 'hippopotamus', which spends its day cooling off in the water and emerges to graze in the cool of the dusk. Some of the creatures constrained to a terrestrial existence have developed longer 'limbs' that allow them to move their bodies more quickly across solid ground, in some cases at high speed, eg. *lièvre* (M) 'hare', *guépard* (M) 'cheetah', *cheval* (M) 'horse', but in other cases at less than walking pace, eg. *crapaud* (M) 'toad', *ratel* (M) 'honey badger'. The list includes a number of 'winged' insects such as *frelon* (M) 'hornet', *papillon* (M) 'butterfly', and a winged mammal, *chauve-souris* (M) 'bat' but these examples show that 'winged' and the ability to fly are not sufficient to motivate feminine gender assignment.

Differences in locomotion do appear to be significant. Despite their weight, some of these creatures can generate sufficient power in hindquarters to enable them to become airborne for a moment until they return to the ground. By repeating these leap-and-bound movements they can propel themselves forward often at considerable speed, eg. *kangourou* (M) 'kangaroo', *impala* (M) 'impala'. One could have expected these unpredictable movements to be associated with feminine gender assignment in the same way as fish that dart unexpectedly in a different direction, eg. *vandoise* (F) 'dace', or leap out of the water into the air, eg. *truite* (F) 'trout'.



However, denoting nouns are masculine.

Amongst this set of regular masculine and vowel-final nouns are some that denote the 'young' of various species not discussed earlier, eg. *ourson* (M) 'bear cub', *levraut* (M) 'leveret' (baby hare), *faon* (M) 'fawn (young deer)'. Other creatures in this set are recognisably different in their smaller size than is typical of their kind, as in (2):

- (2) • *caret* (M) 'hawks bill turtle', a tropical turtle very much smaller than others in its vicinity, such as *couane* (F) 'loggerhead turtle'
- *genet* (M) 'jennet', a Spanish equine species smaller than the standard size for horses
- *marsouin* (M) 'porpoise', a whale-like creature (cetane) but much smaller than other cetanes (whales).

Some meanings of nouns in Table 6.14 include both 'smaller' and 'younger than', eg. *daguet* (M) 'young deer (with its first growth of antlers)'. It is both 'younger' in age and 'smaller' in size than an adult. These notions 'young' and 'smaller' are obtained by the same comparative process in which an entity is judged against a standard model provided either by the adult, and/or by an approximation set by a range of exemplars – and is found to be 'different' in size or maturity/age. Nouns in both sets have the same masculine gender assignment and vowel-final pronunciation as for similar sets revealed in previous chapters.

While 'smaller' for these creatures is appropriate, it seems less fitting for *dauphin* (M) 'dolphin', a member of the 'whale' family that can grow up to 12 ft. This not inconsiderable dimension suggests that some other explanation is required to account for its masculine gender and vowel-final pronunciation. It is discussed with other members of the 'whale' family below.

Other creatures in this set are noted for their size. The unusual form of the *éléphant* is instantly recognisable as is its enormous size, particularly in comparison with other animals within its natural environments in Africa and Asia. These notions, an 'unusual' form, or 'difference' in its dimension, are both associated with masculine gender assignment. The enormous size of the *bison d'Europe* once made it instantly recognisable in comparison with other European horned grazing mammals, and it shares the same masculine gender assignment as *éléphant*.

In the analysis of birds, 'owls' described as 'horned' are masculine where their nocturnal habit is otherwise associated with feminine gender, possibly since 'horned' appears to be stereotypically closely-linked to 'male' in the animal world, as are other attributes, such as 'maned' and 'bearded'. Amongst creatures in Table 6.14 are some that are also horned, eg. *bœuf* (M) 'ox', *rhinocéros* (M) 'rhinoceros'. The *hippopotame* (M) 'hippopotamus' is highly unusual in its barrel-shaped form, huge mouth and enormous size. It cools its body by submerging it in tropical lakes and rivers to avoid the heat of the day, emerging at dusk to graze. It is possible that this habit of submerging its head (and body) under the water may be associated with masculine gender assignment, as appears to be the case for *cygne* (M) 'swan', *canard* (M) 'duck' and many diving and aquatic birds. It may also account for masculine gender of other amphibious reptiles such as *crocodile* (M) 'crocodile', *alligator* (M) 'alligator', and amphibious mammals such as *ornithorhynque* (M) 'platypus', etc.

Amongst other terrestrial creatures is the *putois* (M) 'polecat', a small carnivorous mammal. This native European species can repel predators by producing a nauseating odour, and amongst the various creatures with the same ability it is recognisably the largest. It may be that its difference in relative size is the more compelling, the attribute that protects it from harm to be salient being taken as a given since it is part of the shared characteristics of other similar creatures against which its size is compared. The domesticated *furet* (M) 'ferret' is a member of the same family. Its masculine gender is consistent with the 'domesticated' *chien* (M) 'dog', *cheval* (M) 'horse' (as for the Latin *caballus* (M) 'nag, pack-horse, hack' rather than *equus/ecus* (M) 'horse', 'steed', 'charger') (ELD, 1966:99), and 'domesticated' creatures identified in earlier chapters such as *volatile* (M) 'farmyard bird' (see Chapter 4). Both of these attributes – 'different in relative size', and 'domesticated' – are associated with masculine gender assignment in a regular and consistent way.

The definition of *chat* (M) 'cat' includes ... *petit mammifère familier* 'small domesticated mammal' and (LRPT, 1994:178) and 'wild carnivorous mammals'. As a generic term *chat* must apply to equally to 'tiger' and a range of wild cats that may be larger than human beings as to 'domesticated' (if not tame) cats kept as household pets. Thus, while masculine gender

assignment sits comfortably with 'domesticated', it is less comfortable with 'wild', and the 'comparative' *petit* suggests that there is some standard, but it is difficult to identify precisely what that standard is. This noun is considered further below.

Table 6.14 also includes a number of creatures that live a semi-arboreal existence since they have claws that allow them to grip, eg. *écureuil* (M) 'squirrel', even *chat* (M) 'cat' with its protractable claws. Some are fully 'arboreal', but modes of existence differ according to different adaptations. Some have strong arms for embracing and claws that allow them to climb and crawl, eg. *koala* (M) 'koala', the small tail-less Australian marsupial. Some have prehensile digits that enable them to grip or cling while they leap from branch to branch, eg. primates such as the diminutive, tail-less, nocturnal *loris* (M) 'slender loris' and *aï* or *unau* (M) 'sloth'. This primate that has little inclination to move since its vegetarian diet provides insufficient sustenance for a more active lifestyle. Instead, it rests by hanging upside down from curved nails at the tips of its long arms (a habit recognised in its synonym,  *paresseux* (M) 'the lazy one'). Some 'arboreal' animals have long tails which provide additional balance, eg. *écureuil* (M) 'squirrel', *babouin* (M) 'baboon'. In the previous chapter, fish able to grip onto their prey or to a surface are feminine, eg. *lamproie* (F) 'lamprey', *targie naine* (F) 'Norwegian topknot', but denoting nouns for these arboreal creatures that can grip are masculine. The basis for this different outcome needs to be resolved.

It is noted that creatures denoted by masculine nouns *écureuil* 'squirrel' and *chat* 'cat' scamper headfirst down tree trunks. The *koala* is not wary of humans, while the *loris* freezes into immobility when it senses danger. The tail-less *gibbon* (M) 'gibbon' inhabits enormously high treetop canopies of Asia, and swings and leaps from branch to branch at such high speeds that it can catch a bird mid-flight. This speed comes from swinging hand over fist because of its unique ball-and-socket joint at the wrist rather than the shoulder joint – which is also extremely energy efficient. However, the *gibbon* has no tail and its grip depend on prehensile hands. When branches break, or the gap across the canopy is misjudged, falls from such heights are more dangerous, and are more likely to result in death than for creatures that have prehensile tails to act as a third hand with a strength that can support their body weight. It is possible that

these kinds of 'endangering' attributes may operate more widely in relation to masculine gender assignment. Furthermore, if we compare the feminine *panthère* and masculine *gibbon* – both of which are unique in some way – we find that it is not simply a case of having some unique attribute, but that the unique attribute remains salient only where it is not mitigated by the lack of some attribute offered to other like creatures, as a consequence placing its life at greater risk. It is noted that a cat's fondness for heights is made less dangerous by a righting ability but this attribute can make it over-confident, resulting in injury if not death.

Three nouns denote 'extinct' species of creatures, eg. *aurochs* (M) 'extinct tribe of cattle', *dinotherium* (M) 'dinother', an extinct elephant-like mammal, and *tarpan* (M) 'tarpan', a prehistoric breed of horse native to Europe now extinct. They have the same masculine gender assignment as *pigeon migrateur* (M) 'passenger pigeon', the masculine noun that replaced the former feminine *tourtre* (F) following its extinction the last century (see Chapter 4, Birds).

Some 'legged' creatures are winged, eg. *moustique* (M) 'mosquito', *frelon* (M) 'hornet', and *papillon* (M) 'butterfly', yet they are masculine. The *éphémère* (M) 'mayfly' lives only for twenty-four hours after which it dies, and the *termite* (M) 'termite' burrows into wood, so for these two creatures wings are of little use in escaping from any threat and neither *éphémère* nor *termite* is able to exploit the advantage that wings otherwise offer it. This inability to exploit an adaptation may be associated masculine gender assignment, but it leaves masculine gender of *frelon*, *moustique*, and *papillon* to be accounted for. These nouns are discussed further below.

For other creatures some aspect of their appearance raises the possibility of other attributes, such as 'long', eg. *serpent* (M) 'snake', or 'rigid' for *oursin* (M) 'sea-urchin' and *corail* (M) 'coral'. While the typical shape of *ver* (M) 'worm' is long, this is not always the case. However, more particularly, none of these creatures is either 'footed' nor 'legged' and, while habitats vary, the absence of legs and limbs and an inability to grip in any way constrains them more severely than better equipped terrestrial and aquatic creatures in their specific environments, even those that are parasitic.

Creatures such as *fauchoux* (M) 'daddy long-legs', the 'winged' *moustique* (M) 'mosquito' and *cousin* (M) 'gnat' (related to *moustique*) are not only tiny but they have a thread-like fragile form, although intuitively, an association between 'fragile' and masculine gender would seem unlikely. In addition, 'fragile' has previously been mentioned in its association with vowel-final pronunciation. There is some association between other entities with a thread-like form and masculine gender, eg. *brin* (M) 'blade' (of grass), *cheveu* (M) a '(human) hair', *fil* (M) 'thread', although the basis for this association is unclear. In Roget's (1972) Thesaurus, however, 'filament' (#205) seems to present some kind of contrast with 'layer' (#204). The possible association between these oppositional attributes and contrasting masculine and feminine gender assignments will continue to be explored.

The congenital condition that makes *panthère* 'unique' not only amongst leopards but amongst all large felines can also occur for sheep, but here it is rather less 'unique' and more 'out of the ordinary'. However, as a human referent, 'black sheep' is given as *brebis galeuse* (F), a feminine term employing *brebis* (F) 'ewe' rather than the generic but masculine *mouton* (M) 'sheep'. This sense is further discussed in Chapter 8, Human Beings.

While all nouns in the various groups above are masculine, no group is exceptionless since each also finds feminine counter-examples, eg. invertebrates such as *pieuvre* (F) 'octopus', *palourde* (F) 'clam', insects such as *punaise* (F) 'bug'/'bed bug', *teigne* (F) 'moth' and *mouche* (F) 'fly', the amphibian *grenouille* (F) 'frog' and *salamandre* (F) 'salamander', reptiles such as *tortue* (F) 'tortoise', 'turtle', rodents such as *souris* (F) 'mouse', mammals including *antilope* (F) 'antelope', *hyène* (F) 'hyena' and *gazelle* (F) 'gazelle'. While two species of goats are masculine, the generic noun *chèvre* (F) 'goat' is feminine.

#### 6.4.2 Feminine count nouns

Many feminine count nouns in the database are yet to be accounted for. In some cases feminine nouns are less 'regular' in that they are vowel-final, and they are discussed initially, followed by the more 'regular' feminine nouns that are consonant-final. Some of these feminine nouns have masculine synonyms, and they are also discussed.

#### 6.4.2.1 Irregular feminine nouns – vowel-final

The small group of irregular feminine vowel-final nouns denoting a 'living creature' (other than a bird or fish) are presented in Table 6.15 and discussed below.

Table 6.15: Feminine vowel-final nouns denoting a 'living creature'

<i>araignée</i>	F	'spider'	arachnid with four pairs of legs which has venomous hooks and glands producing strands strong enough to support its weight in space
<i>brebis</i>	F	'ewe'	female bovid, horned grazing animal covered with thick crinkled hair, having edible flesh
<i>fourmi</i>	F	'ant'	small long thin insect protected by living in huge colonies and protected by formic acid which is poisonous to others
<i>guenon</i>	F	'monkey'	primate with long prehensile tail adapted for grasping; now 'female' of any species
<i>holothurie</i>	F	'holothurian', 'sea-cucumber'	leathery elongated body with ring of tentacles around mouth; retractile papillae on back
<i>jument</i>	F	'mare'	female horse, hooved mammal densely covered with short hair
<i>laie</i>	F	'sow'	female 'wild boar' (opp. <i>sanglier</i> )
<i>sangsue</i>	F	'leech'	tiny worm equipped with sucker at each end
<i>souris</i>	F	'mouse'	common name for any small round long-tailed nocturnal rodent and prolific breeder
<i>tortue</i>	F	'tortoise', 'turtle'	four-footed reptile with short legs, body enclosed in a rounded dome-shaped, or flattened carapace; flipper-like limbs adapted for water and land
<i>truie</i>	F	'sow'	female 'pig' or 'boar' (opp. <i>porc</i> , <i>verrat</i> ), bulky; thick bristle-covered skin; has movable snout, delicious flesh
<i>tsé-tsé</i>	F	'tse-tse fly'	winged insect that can fly

Five of these twelve nouns denote a creature that is the 'female' of the species, eg. *brebis* (F) 'ewe', *jument* (F) 'mare', *laie* (F) 'female wild boar', *truie* (F) 'sow' and *guenon* (F) 'female primate' (originally 'monkey with prehensile tail') and for these nouns feminine gender assignment is regular and predictable.

Among the seven nouns remaining, the *araignée* is able to move through space without endangering its life since it can produce instantaneously a silk-like thread that may seem incredibly fine but is strong enough to support its weight. The *tsé-tsé*, a winged insect, is capable of flight where most insects are not winged, and it has the same feminine gender

assignment, perhaps associated with the freedom of movement this adaptation offers.

Another noun, *souris*, also denotes a 'nocturnal' creature. While it may be distinguished from the more 'diurnal' *rat* (M) 'rat', the different gender assignments might suggest that rats are not active nocturnally, which is untrue. While the *souris* is able to change shape by flattening its body which allows it to escape between spaces and evade pursuit where larger bodied predators cannot follow, even more crucial is its ability to reproduce abundantly. A female mouse is able to commence breeding not long after its own birth, producing multiple offspring within a single season that can also produce offspring within the same season and in its association with female, it is not surprising to find feminine gender assignment for *souris*. There is considerable evidence in other lexical fields of an association between 'abundant' and feminine gender assignment, as in (3) below.

(3)	<i>ampleur</i>	F	'abundance'
	<i>abondance</i>	F	'plenty'
	<i>bombance</i>	F	'feast' ( <i>repas excellent/abondant</i> ) (LRPT, 1994:118)
	<i>charmarrure</i>	F	'excessive ornamentation'
	<i>extravagance</i>	F	'extravagance'
	<i>fécondité</i>	F	'fruitfulness'
	<i>fête</i>	F	'fête/fiesta'
	<i>fleuraison</i>	F	'blossoming'
	<i>foison</i>	F	'(lit.) plenty/abundance'
	<i>froidure</i>	F	'big burst of cold winter weather'
	<i>générosité</i>	F	'generosity'
	<i>inondation</i>	F	'deluge', 'flood', 'overflow' (COFED, 1985:291)
	<i>largesse</i>	F	'bounty'
	<i>luxé</i>	F	'luxury/sumptuousness' (COFED, 1985:322)
	<i>masse</i>	F	'enormous quantity'
	<i>nuée</i>	F	'huge cloud mass'
	<i>profusion</i>	F	'profusion/lavishness'
	<i>verse</i>	F	'pouring torrent of rain' ( <i>qui tombe en abondance</i> ) (LRPT, 1994:1169)

While certain terms that signify 'abundant' are masculine, such as *torrent* (M) 'torrent' and *débordement* (M) 'overflowing', 'flooding', additional support comes from the many English words terminating in -ful that are feminine in French, eg. *bouchée* (F) 'mouthful' (the most that will fill the mouth in one go) (LRPT, 1994:122), *gorgée* (F) 'gulp/mouthful', *goulée* (F) 'big mouthful', *sachée* (F) 'sackful', *ventrée* (F) 'bellyful'. The extent of feminine gender assignment adds weight to a potential semantic link between 'abundant' or 'full' and feminine gender.

Creatures denoted by *rat* (M) 'rat' are closely related to those denoted by *souris* (F) 'mouse' and

have the same attributes, but *rat* is masculine. Its description identifies it as medium-sized, bigger than mice to the extent that, even today, any large muroid that is discovered includes the term 'rat' in its common name where small muroids include 'mouse' (<en.wikipedia.org>, 2005). The use of the masculine form *rat* as the generic term is consistent with other masculine nouns denoting creatures that differ from others in their relative (augmentative) size, discussed above, while the feminine *souris* is not. The question as to why *rat* should be identified as that which is different in its larger size than the mouse, rather than the other way round, needs to be addressed. We can readily identify that both *rat* and *souris* are already small in comparison with other 'footed/legged' mammals and, in this context, 'even smaller' seems less convincing since it does not really differentiate one from the other where 'larger' does.

For the *tortue*, flipper-like limbs act as paddles that enable this reptile to move between its aquatic environment and solid ground in order to breed. It has a dome-shaped, thick, hard carapace which it carries on its back as a shield. While the turtle shell itself is very heavy and impedes speed, it provides extraordinary protection since immediately the animal senses a threat, it simply withdraws its head, and this impenetrable shield can protect its body against all predators – except humans.

Other creatures are also able to protect themselves from predators, eg. *fourmi*, an insect in which formic acid occurs naturally and provides not only a measure of protection against predators that would eat it, but for some ants it can disable potential predators and prey. The venomous hooks of the *araignée* can also harm those that would prey on it and may disable potential prey but more importantly, like the *tarantule* (F) 'tarantula', it can launch itself into space with safety since it produces on demand a silk-like thread that is strong enough to support its weight. This ability gives it a freedom to move between land and space that most other wingless creatures do not have.

These various abilities of creatures in Table 6.15 above – in freeing themselves from the constraints of a single environment and remaining safe, in obtaining prey, in protecting themselves against harm in a way that does not threaten their own existence, and a prolific



reproduction to ensure future generations, are suggested in the analysis of fish and birds to be associated with feminine gender assignment.

Three creatures in the above set have the ability to grip with body parts other than hands and feet, eg. *guenon*, *holothurie* and *sangsue*. The history of the term *guenon* is interesting in that it once applied to any monkey having a long prehensile tail, but today it more commonly applies to any 'female' primate. In this sense, feminine gender assignment is regular and predictable. In its former application to monkeys with prehensile tails, it would have formed a contrast not only with tail-less primates such as *singe* (M) 'ape', *babouin* (M) 'baboon', *lemurien* (M) 'lemur', *oustiti* (M) 'marmoset', but also with other more 'arboreal' creatures such as *écureuil* (M) 'squirrel', *chat* (M) 'cat' that have tails that are not prehensile – which may be related to masculine gender assignments of denoting nouns. The burrowing *holothurie* has a cluster of tentacles at the oral end that assist it in burrowing into solid ground to escape from predators but, more particularly, they allow it to grip onto prey. Since the *holothurie* rests on the sea bed, it is in no danger from falling, and burrowing headfirst possibly increases its opportunity to find safety. The *sangsue* has suckers at both ends that allow it to grip where other worms cannot. There is some similarity between *holothurie* and *sangsue*, and a fish, *lamproie* (F) 'lamprey', which also has a mouth in the form of a sucker that enables it to grip onto its prey; it, too, has feminine gender assignment (see Chapter 5, Fish).

Feminine gender assignment for these nouns appears to be associated with an adaptation that provides either a 'third' hand or additional implement with which to grip or find safety, in habitats where falling offers a constant source of danger, or where underwater currents and swells may make it difficult to consume prey without the risk of losing hold.

The associations found here between feminine gender assignment and life-enhancing attributes (prehensile tail, tentacles, suckers) that increase the ability to grip or obtain food, or allow abundant regeneration, greatly increase chances of survival – for the individual, or for the species – also occur in other lexical fields.

#### 6.4.2.2 Regular feminine nouns (consonant-final)

Some of the 72 nouns in the database with feminine gender assignment and consonant-final pronunciation have been discussed earlier in family sets. Table 6.16 below contains 59 of these regular feminine nouns (the full list is found in Appendix X).

Table 6.16 Feminine consonant-final nouns denoting a living creature

<i>abeille</i>	F	'honey bee'	adapted for flight
<i>altise</i>	F	'flea-beetle'	large hind legs adapted for jumping
<i>amibe</i>	F	'amoeba'	minute invertebrate living in soil or water, able to change shape due to movements of cell processes (CED, 1986:48)
<i>antilope</i>	F	'antelope'	moves at high speed in leaping run
<i>baleine</i>	F	'whale'	breathes through blow-hole on head; able to leap out of water
<i>belette</i>	F	'weasel'	nocturnal; runs in bounds; emits foul odour
<i>bête fauve</i>	F	'deer'	wary forest-dwelling mammal, males typically horned
<i>biche</i>	F	'hind'	'female' deer
<i>blatte</i>	F	'cockroach'	flat nocturnal creature, renowned for its capacity to breed, and survive against any threat
<i>cantharide</i>	F	'cantharis'	shiny greeny-gold beetle that emits foul odour
<i>cellule</i>	F	'cell'	fundamental element constituting all living organisms, able to function independently
<i>chatte</i>	F	'female cat'	female of domestic species
<i>cétoine</i>	F	'rose chafer'	beetle whose body colouring adapts to a plant for camouflage
<i>chenille</i>	F	'caterpillar'	worm-like, has numerous sets of legs and powerful biting jaws; able to change shape
<i>chèvre</i>	F	'goat'	agile creature able to leap; 'female' of species
<i>chrysalide</i>	F	'chrysalis'	pupa of moth or butterfly, in the process of developing
<i>cigale</i>	F	'cicada'	adapted for flight
<i>couleuvre</i>	F	'grass snake'	common European non-venomous snake
<i>douve</i>	F	'fluke'	(flatworm) flattened body
<i>gazelle</i>	F	'gazelle'	running style has stiff-legged bounce to intimidate predators
<i>girafe</i>	F	'giraffe'	very long neck, legs; tallest of all mammals
<i>grenouille</i>	F	'frog'	large hind legs adapted for jumping
<i>guêpe</i>	F	'wasp'	adapted for flight; has venomous sting
<i>hase</i>	F	'doe-hare, 'doe-rabbit'	female hare; has long ears and short tail
<i>hermine</i>	F	'stoat'	runs in leaps and bounds, coat changes colour in seasons
<i>hyène</i>	F	'spotted hyena'	long-legged dog-like creature; eats carrion, 'talks' constantly
<i>jubarte</i>	F	'hump-back whale'	aquatic mammal able to leap into the air
<i>larve</i>	F	'larva', 'grub'	legless free-living immature form of animal that changes by metamorphosis
<i>lente</i>	F	'nit'	blood-sucking insect able to cling to flesh
<i>libellule</i>	F	'dragon-fly'	adapted for flight
<i>limace</i>	F	'slug'	flattened body
<i>loutre</i>	F	'otter'	nocturnal freshwater mammal

<i>louve</i>	F	'she-wolf'	'female' of its kind
<i>luciole</i>	F	'firefly'	insect, adult winged and luminous
<i>marmotte</i>	F	'marmotte'	front digits differently adapted for digging and clasp; thumb has nail; emits foul odour
<i>martre</i>	F	'marten'	nocturnal musteline mammal, runs in bounds
<i>mite</i>	F	'tiny moth'	nocturnal
<i>moufette</i>	F	'skunk'	longer front claws to aid digging, repels predators by ejecting evil-smelling fluid
<i>mouche</i>	F	'fly'	adapted for flight
<i>nèpe</i>	F	'water-scorpion'	breathes through long tube projecting from rear of the body
<i>noctuelle</i>	F	'little owl-, owl-moth'	nocturnal
<i>ourse</i>	F	'female bear'	large slow-moving hairy mammal
<i>panthère</i>	F	'panther'	black leopard, rare,
<i>planaire</i>	F	'planarian'	aquatic flatworm
<i>puce</i>	F	'flea'	wingless blood-sucking insect able to jump; can clamp onto prey; strong body
<i>punaise</i>	F	'bed-bug'	nocturnal, can survive a year without feeding
<i>renarde</i>	F	'vixen'	female fox
<i>rainette</i>	F	'tree frog'	able to leap across large distances since toes are furnished with adhesive discs, suckers
<i>roussette</i>	F	'flying fox', 'fruit bat'	nocturnal mammal whose forewings are adapted for flight
<i>salamandre</i>	F	'salamander'	nocturnal; skin contains a corrosive substance that repels predators
<i>sarigue</i>	F	'sarigue'	opossum with prehensile tail
<i>sauterelle</i>	F	'grasshopper'	moves in leaps and bounds
<i>taupe</i>	F	'mole'	digits furnished with nails for digging; highly-developed hearing that compensates for small eyes; emits foul odour
<i>trématode</i>	F	'trematode'	kind of flatworm
<i>teigne</i>	F	'clothes-moth'	nocturnal
<i>tique</i>	F	'tick'	suckers enable them to attach themselves to surface of their prey
<i>vipère</i>	F	'adder', 'viper'	wary snake; has hollow fangs to deliver venom

One can compare adaptations of creatures above with those in the masculine sets. The *sarigue* (F) 'sarigue' is a South American opossum whose tail has developed a sensory and motor function that allows it to grip while other similar creatures have no tails, eg. *loris* (M) 'loris', *singe* (M) 'ape', or have long tails that can only be used for balance, eg. *babouin* (M) 'baboon', *écureuil* (M) 'squirrel', and the typical *chat* (M) 'cat'. Feminine gender assignment for *sarigue* is consistent with the feminine noun *guenon* in its original application to monkeys with a prehensile tail.

The term *hyène* (F) 'hyena' denotes carnivorous dog-like creatures that are more closely related to cats and were once found across most of Europe and Asia but are now limited to Africa,

S.W. Asia, and India. Their front legs are longer than their back legs which gives a limping appearance, but they are extremely agile and can walk, trot and run with ease. Sources (<[www.lioncrusher.com](http://www.lioncrusher.com)>, <[animaldiversity.ummz.umich.edu](http://animaldiversity.ummz.umich.edu)>, <[en.wikipedia.org](http://en.wikipedia.org)>, 2005) identify these animals as unique, forming a family on their own, *Hyaenidae*, of which there are four members each in its own genus. The 'aardwolf' (*Proteles cristata*) is insect-eating (mostly termites) and is consequently very much smaller than the other three – the 'striped hyena' (*Hyaena hyaena*), 'spotted hyena' (*Crocuta crocuta*), and 'brown hyena' (*Hyaena brunnea*) which hunt and scavenge large prey. The 'striped hyena' ekes out an existence in habitats that other predators find too difficult because it can vary both its diet and water intake, being able to survive without water for long periods. The 'spotted hyena' hunts mostly live prey according to abundance, but where prey fluctuates in seasonal migrations it can vary its diet and adjust its consumption by scavenging. The 'brown hyena' closely resembles the 'striped hyena' but the two can be distinguished since the 'striped hyena' lives in the north of Africa and the 'brown hyena' in the south. It inhabits harsh desert regions such as the Namib and Kalahari Deserts as well as savannah plains and grasslands. It feeds mostly on carrion, but also on marine life (fish, crustaceans), insects, birds and their eggs, and small mammals as well as fruits and vegetables, particularly in the dry season. These 'striped', 'brown' and 'spotted' hyenas, unlike any other carnivore, can consume the entire animal, flesh, bones, hooves, and hair because their jaws are strong enough to crunch through the toughest material. Because of its dependence on termites, the 'aardwolf' is primarily nocturnal but it switches to diurnal activity during winter following the pattern of its primary food source, termites. However, it is also able to consume ants as well as *petits mammifères, des oisillons et des charognes* 'small mammals, chicks, and carrion' (<[fr.wikipedia.org](http://fr.wikipedia.org)>, 2005). These descriptions indicate that members of this family are able to survive in particularly difficult environments since they can adapt either by varying their diet, or by varying an instinct (for nocturnal eating) to ensure a more constant food supply. It may be this characteristic that is associated with feminine gender assignment – although feminine gender assignment for *hyène* is consistent with their 'unique' status.

Certain adaptations in some creatures appear to be unique, eg. *baleine* (F) 'whale', the generic term for mammals that have developed a unique breathing system since nostrils have 'migrated'

to the top of the head as blow-holes. Like the *nèpe* (F) 'water scorpion', which has developed a breathing tube that extends from its rear to the water surface, animals that have adapted in a way that is unique appear to have feminine gender assignment.

For *girafe* (F) 'giraffe', the tallest of all extant mammals, we find further evidence of an association between a uniquely superlative form and feminine gender assignment.

Together, these various attributes summed up in (4) can account for almost all nouns in the above set.

- (4)
- 'female' of their kind, eg. *chatte* (F) 'female cat', *louve* (F) 'female wolf', *ourse* (F) 'female bear', *pouliche* (F) 'filly', *renarde* (F) 'vixen'
  - 'winged', or otherwise able to move safely in space, eg. *abeille* (F) 'bee', *cigale* (F) 'cicada', *mouche* (F) 'fly', *sauterelle* (F) 'locust', or able to support their bodies in space in some other way, eg. *sarigue* (F) 'opossum' (prehensile tail), *araignée* (F) 'spider'
  - able to leap, eg. *antilope* (F) 'antelope', *chèvre* (F) 'goat', *fouine* (F) 'beech-marten', *gazelle* (F) 'gazelle', *martre* (F) 'marten', *grenouille* (F) 'frog'
  - able to repel predators when threatened, eg. *marmotte* (F) 'marmot', *moufette* (F) 'skunk', *couleuvre* (F) 'grass-snake', *cantharide* (F) 'cantharide' (foul odour), and *salamandre* (F) 'salamander' (covered in a corrosive substance)
  - additional body part that assists in overcoming a potentially endangering attribute:
    - ability to grip, eg. *chenille* (F) 'caterpillar', *lente* (F) 'nit', *puce* (F) 'flea', *rainette* (F) 'tree frog', *tique* (F) 'tick', *sarigue* (F) 'sarigue'
    - implement for digging, eg. *taupe* (F) 'mole'
  - wary, maintains instinct to flee at any sign of threat, eg. *vipère* (F) 'viper'/'adder' particularly where other similar creatures choose to remain and fight
  - 'flattened' body form, eg. *blatte* (F) 'cockroach', *limace* (F) 'slug', *loche* (F) 'slug'
  - able to vary diet, eg. (in amount) *punaise* (F) 'bug'; (in kind), *chèvre* (F) 'goat', *loutre* (F) 'otter', *hyène* (F) 'hyena'
  - ability to change form, eg. *amibe* (F) 'amœba', *cellule* (F) 'cell', *larve* (F) 'larva', *chenille* (F) 'caterpillar', able to change colour, eg. *hermine* (F) 'ermine'

- abundantly fertile, eg. *souris* (F) 'mouse', *blatte* (F) 'cockroach'
- 'unique' in some way - in colouration, eg. *panthère* (F) 'panther'; in size, eg. *girafe* (F) 'giraffe'; breathing apparatus, eg. *baleine* (F) 'whale', *nèpe* (F) 'water-scorpion'.

Any identification of 'male' and 'female' appears to be restricted to animals with which humans presume to have some relationship – particularly in their domestication for transport, food, leisure sports, and companionship. In such cases gender assignment correlates with sex of the referent, masculine when it relates to 'male', feminine when it relates to 'female'. Terms *mâle* (M) 'male' and *femelle* (F) 'female' are able to add clarification in other cases, such as *éléphant mâle*, *éléphant femelle*, but more unusual constructions are also acceptable in the identification of a female, eg. *éléphante* (F) 'female elephant' (LRPT, 1994:371). This example that will also be of interest in the analysis of nouns denoting a human referent in Chapter 8.

Many of the attributes above are shared by creatures discussed in earlier chapters, and have the same feminine gender assignments, eg. *truite* (F) 'trout', *sérieole* (F) 'amberjack' and *raie* (F) 'raie', fish that leap out from one environment into another to escape threat, or birds that can vary their requirement for food and water, eg *harpie* (F) 'harpy eagle', or flee from predators by hiding, eg. *poule d'eau* (F) 'water hen', *gêlinotte des bois* (F) 'hazel grouse', or whose movement is fast but unpredictable in direction, eg. the darting of *vandoise* (F) 'dace', even *orphie* (F) 'garfish', which can use its tail to propel itself across the surface of the water. One can also compare *nèpe* (F) 'water scorpion' with the *ablette* (F) 'bleak' since both have lengthened body parts – the former for breathing, the latter for eating – that allow them to remain safely below the water surface. The variety of these various adaptations suggest that it not these adaptations per se but the superior advantage they provide, or their uniqueness, that is associated with feminine gender assignment and provides a regularity not otherwise achievable.

The abundant fertility of the *morue* (F) 'cod' and *carpe* (F) 'carp', even the *souris* (F) 'mouse' is challenged by the *blatte* (F) 'cockroach'. A single impregnation allows a cockroach to lay eggs for the rest of its life, over a million eggs in a lifetime. However, any very general awareness of this attribute in the community is highly unlikely, and its 'flat' body provides a more accessible attribute, alongside other creatures with a 'flat' form, including *limace* (F) 'slug'. This

association between a 'flat' form and feminine gender was identified in Chapter 5 (Fish, §5.6.2) in relation to *raie* (F) 'ray', and *flotte* (F) 'skate', as was its crucial nature in many other lexical fields.

None of these adaptations or attributes seem particularly appropriate for *cellule* (F) 'cell'. This living entity exists in a free and independent way and undergoes a continual process of division until it dies, although the rate of division may change. Any of these various notions has the potential to be associated with feminine gender assignment of *cellule*, but only 'free' has been identified elsewhere. At this stage it is not possible to identify more precisely the salient attribute and it will continue to be of interest.

Some creatures are very similar to those in the above set, indeed, may be closely related, but denoting nouns are masculine, eg. the masculine *crapaud* (M) 'toad' and the feminine *grenouille* (F) 'frog', or *vison* (M) 'mink' and the feminine *loutre* (F) 'otter', both 'nocturnal' and often taken for each other. Another pair that have different gender assignments are *papillon* (M) 'butterfly' and the feminine *teigne* (F) 'moth', and an explanation is required for their different gender assignments. These potential counter-examples are discussed below.

While 'younger' is closely associated with masculine gender assignment, the meaning of the feminine noun *pouliche* entails both 'young' and 'female' and its feminine gender assignment suggests that the attribute 'female' is more crucial. It is similar to the example *canette* (F) 'female duckling', which does not form a pair with *caneton* (M) 'duckling', a generic term that can apply to both 'male' and 'female'. For such creatures the notion 'female' ranks above 'young' in age or maturity.

There is some similarity between two creatures, the feminine *chenille* (F) 'caterpillar' and *lente* (F) 'nit' and a fish, *lamproie* (F) 'lamprey', a fish – in that they have neither limbs nor opposable digits but are able to grip using strong mouth parts or additional tentacles or suckers, and though they have contrasting word-final pronunciations, they share the same feminine gender assignment. Creatures in this set have adaptations for gripping beyond that provided by flexible

digits, or claws, such as adhesive disks and suckers of the *rainette* (F) 'tree frog', a frog that leaps up into trees. While leaping into trees might be considered endangering, another adaptation ensures that the *rainette* can land safely above the ground. Moreover, in that these adaptations are not only different but 'unique' amongst frogs, feminine gender for *rainette* is consistent with other creatures that have adapted in a 'unique' way. Unique amongst frogs, *rainette* has the same feminine gender assignment and consonant-final pronunciation as other 'unique' creatures. At the same time, 'unique' cannot account for the same feminine gender assignment and consonant-final pronunciation patterns of the generic term *grenouille* (F) 'frog'. This noun is examined further below..

These examples suggest that nouns denoting creatures that have adapted in a way that enhances their survival also appear to be associated with feminine gender assignment, particularly where others that are similar have not adapted in the same way, and have masculine gender assignment. Other cases still require an explanation, such as the different treatments for the same attribute, and different gender assignments of similar creatures.

### 6.4.3 Similar creatures, different gender assignments

The lists in the various Tables above contain nouns relating to three sets of creatures, worms, amphibians, and tortoises, that differ in gender assignments. They are explored below.

#### 6.4.3.1 Worms

While feminine gender assignment of *sangsue* (F) 'leech', a worm, is accounted for in relation to its ability to grip, the following nouns denote other worms in the database that cannot grip. Some are masculine and others are feminine and differences require an explanation.

Table 6.17: Nouns in the corpus denoting 'worm'

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Masculine nouns

<i>ténia</i>	M	'ténia'	body formed with huge number of rings
<i>ver</i>	M	'worm'	soft body, limbless, multiple forms

Feminine nouns

<i>douve</i>	F	'fluke'	flatworm, parasitic worm, lives in the liver
<i>planaire</i>	F	'planarian'	aquatic flatworm



Worms are neither 'legged' nor 'footed', nonetheless they are able to exist in a range of environments without the benefits of such implements. While the typical body shape of a worm may be said to be long, slender and cylindrical, as in *ver de terre* (M) 'earth-worm', other worms can have a very different form – although precisely how this impacts on gender assignment is unclear. All worms are soft-bodied since they have no protective shield but this would not be expected to be salient, given the different genders of nouns in the above set.

Descriptions of the feminine *douve*, *planaire* and *trématode* include 'flat', and other creatures with a 'flattened' body such as *blatte* (F) 'cockroach', *limace* (F) 'slug', *raie* (F) 'ray', *flotte* (F) 'skate', and in other lexical fields (see Table 5.6, Chapter 5) are also feminine. However, it does not seem to provide any contrast with 'long' or 'tall' since these 'flat' worms may be both. In English the notion 'flat' provides various contrasts on a vertical scale, while 'tall' implies an upright stance (on feet). In French there is no such implication – *long/-ue* is merely *la grande dimension ... par rapport aux autres dimensions* (LRPT, 1994:673) 'the great(est) dimension ... in relation to the other dimensions' – which may explain the use by French (and other Europeans) of the English word 'long' when describing their height, rather than 'tall'. Further, worms that are 'other than flat' come in a variety of forms, indeed, it is possible that masculine gender points to 'different' in relation to form that would not only provide a contrast with 'flat' but would allow the generic term *ver* to apply to encompass 'flat' as well.

#### 6.4.3.2 Amphibians

While the *rainette* (F) 'tree frog' has hind legs adapted for leaping, its feminine gender assignment is suggested to relate to an adaptation in the form of suckers on its hands that can grip and make it unique. Other amphibians in the database do not have this adaptation, but some nouns are masculine and others are feminine. Again, these different gender assignments must be accounted for.

Table 6.18: Nouns in the corpus denoting 'amphibian'

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<i>crapaud</i>	M	'toad'	nocturnal, long hind legs, warty skin; walks rather than running or hopping, larger than a 'frog'
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<i>triton</i>	M	'newt', 'eft'	long slender body and flat tail, short feeble legs
<i>grenouille</i>	F	'frog'	nocturnal, long hind legs, smooth skin; hops rather than walking or running
<i>salamandre</i>	F	'salamander'	nocturnal, more terrestrial than others but returns to the water to breed; with elongated body; secretes corrosive substance

These amphibious creatures are 'motile' in ways that worms are not since they are 'footed' if not 'legged'. Legs of the masculine *triton* and feminine *salamandre* are short and are insufficiently developed to provide speed in escaping from threat. However, the more terrestrial *salamandre* secretes a corrosive substance that predators are wise enough to avoid – a deterrent as effective as the fearful body odour secreted by the *belette* (F) 'weasel'. It provides further evidence of an association between feminine gender assignment and the capacity to ward off predators.

The *crapaud* is very similar to the feminine *grenouille* (F) 'frog' and both amphibians are 'nocturnal'. This shared attribute cannot, therefore, be salient in their different gender assignments. The *crapaud* and *grenouille* differ from *triton* and *salamandre* in that the former two amphibians have adapted long hind legs that can generate considerable momentum. These strong hindquarters enable the *grenouille* to propel itself around by means of a hopping leap that incorporates unexpected changes in direction. It is a movement that is both confusing and unpredictable to any predator. However, the *crapaud* has developed a larger heavier-bodied frame and it prefers to walk. While moving in 'leaps and bounds' is identified above in relation to feminine gender of *antilope* and other creatures, and the *crapaud* is protected by a similar corrosive substance as the *salamandre*, this noun is masculine. It raises some question as to any fixed ranking of attributes.

It is argued above that for small animals, the one that is 'larger' will be masculine – as is the case for *rat* (M) 'rat' and *souris* (F) 'mouse'. 'Small' creatures identified as *crapaud* and the 'even smaller' *grenouille* display similar differences in size as between *rat* and *souris*. The salience of 'larger' for *crapaud*, and its masculine gender assignment, suggest a regularity in the system and certainty in application that 'even smaller' cannot provide.

### 6.4.3.3 Reptiles - 'turtle', 'tortoise'

The database contains three nouns denoting (sea) turtles. They are set out in Table 6.19 below.

Table 6.19: Masculine and feminine nouns denoting 'turtle', 'tortoise'

<i>caret</i>	M	'hawks bill turtle'	90 cm., 50 kg. sea turtle
<i>caouan(n)e</i>	F	'loggerhead turtle'	90 cm., 180 kg. sea turtle
<i>tortue luth</i>	F	'leatherback turtle'	600 kg. sea turtle

As discussed earlier, the general term *tortue* (F) 'tortoise/turtle' denotes any creature that develops a strong carapace that covers its back. In water it protects against attack from above. On land, in the face of threat they have merely to withdraw heads and the carapace shields their bodies from any predator except humans. This adaptation is argued to be associated with and account for its feminine gender assignment.

All three of the turtles in Table 6.19 have this hardened carapace. It is the masculine counter-example, *caret* (M) 'hawks bill turtle', that requires explanation. This French noun is a regional (Caribbean, Réunion) term for a tropical sea turtle described in one definition (LRPT, 1994:156) as ... *grande tortue* 'large turtle'. Its dimensions may be large when considered against 'terrestrial' (freshwater) terrapins of mainland France but, compared with other tropical sea turtles such as *caouane* (F) 'loggerhead turtle' that is three times heavier, and the largest living turtle, the 700 kg. *tortue luth* (F) 'leatherback turtle' (<[www.ecofac.org](http://www.ecofac.org)>, 2007), for anyone living in the tropics it would be obvious that its 'smaller' size differentiates the *caret* from other sea turtles. There is considerable evidence of an association between 'different' and masculine gender assignment, and between 'comparatively smaller' and vowel-final pronunciation. For those who consider the *caret* to be distinctive in its 'larger' size than terrapins, those attributes are equally consistent in their association with masculine gender and vowel-final pronunciation.

### 6.4.4 Word-final pronunciations – count nouns

Some masculine nouns in Table 6.14 have vowel-final pronunciation while others have consonant-final pronunciation. Feminine nouns in Tables 6.15 are vowel-final while those in

Table 6.16 are consonant-final. These variations are discussed below.

#### 6.4.4.1 Vowel-final nouns

Evidence in earlier chapters suggests that vowel-final pronunciation may relate to the outer surface or layer of creatures, particularly any kind of surface that might be considered 'rough' or 'textured' in some way. Similarities can be found amongst this set of living things, eg. 'warty' for *crapaud* (M) 'toad', 'bristly' for *cochon* (M) 'pig' and *laie* (F) 'sow', 'ridged' for the *tortue* (F) 'tortoise', 'rough' for *holothurie* (F) 'sea-cucumber', 'scaly' for *serpent* (M) 'snake', 'woolly' for *bélier* (M) 'ram', 'spiked' for *échidné* (M) 'echidna', 'hairy' for *chien* (M) 'dog' and *chat* (M) 'cat', 'shaggy' not only for the coat of the *loup* (M) 'wolf' and mane of the *lion* (M) 'lion', but also for the *ai* (M) 'sloth', *babouin* (M) 'baboon' and *guenon* (F) 'long-tailed primate'. The compound noun *chauve-souris* (M) 'bat' is made up of one consonant-final component and one vowel-final component. However, each of the various sub species of *chauve-souris* genus has a furry outer layer, an attribute that is associated with vowel-final pronunciation.

These different ways that surfaces are 'not smooth' – 'hairy', 'rough', 'bumpy', 'scaly', etc. – can be linked to a single semantic notion, 'textured'. The various masculine and feminine nouns in this set suggest that 'textured' outer coverings become salient as a distinguishing property and appear to be associated with vowel-final pronunciation. This conditioning environment may also to extend to nouns denoting birds, even the generic *oiseau* (F) 'bird' since its feathered outer layer distinguishes it from any other creature.

Vowel-final pronunciation also appears to be associated with certain shapes or outlines, particularly those that are 'slender', eg. *fourmi* (F) 'ant', or 'slight', eg. *faucheux* (M) 'daddy long-legs', *tsé-tsé* (F) 'tse-tse fly', or 'irregular', eg. *sangsue* (F) 'leech', which swells up as it feeds. For *araignée* (F) 'spinning spider', the body must be light since it would not otherwise be supported in space on such fine thread. These attributes 'slight' and 'light' contrast with 'heavily-built', a form that is associated with contrasting consonant-final pronunciation for some birds, eg. *cygne* (M) 'swan', and *guignard* (M) 'dotterel', renowned for its *corps trapu* 'thickset body' and *colombe* (F) 'dove', a bird whose outsized body is not in proportion to the size of its head. The

potential association between vowel-final pronunciation and both 'slender' and 'irregular' shapes will continue to be explored.

Some creatures are instantly recognisable by the pattern rather than colouration of their coats. The splotched patterns, *tacheté de brun* (LRPT, 1994:782), on the coat of the *ocelot* (M) 'ocelot' may be regarded as not unlike spotted or splodged camouflage colourations of fish such as *morue* (F) 'cod', *anoli de mer* (M) 'brushtooth lizardfish', and *aiguillat* (M) 'spotted/spiny dogfish', that also have vowel-final pronunciation. A potential counter-example, the consonant-final *léopard* (M) 'leopard' which has spotted colourations, are considered below.

#### 6.4.4.2 Consonant-final pronunciation

The 'striped' pattern of colouration suggested to be associated with consonant-final pronunciation in the analysis of fish may account for consonant-final pronunciations of two iconic 'striped' animals, *zèbre* (M) 'zebra' and *tigre* (M) 'tiger'. They maintain the contrast with 'spotted' and its association with vowel-final pronunciation.

Descriptions of many creatures listed in the above Tables specify certain capacities related to independent movement made by 'legged' or 'footed' creatures – particularly in regard to speed or agility, eg. *lièvre* (M) 'hare', *braque* (M) 'hound', *cheval* (M) 'horse', *chèvre* (F) 'goat', *écureuil* (M) 'squirrel', *gazelle* (F) 'gazelle', *guépard* (M) 'cheetah', *jaguar* (M) 'jaguar', *rainette* (F) 'tree frog', *springbok* (M) 'springbok' and *tigre* (M) 'tiger'. The agility and wiliness of the *renard* (M) 'fox' is matched by both the *léopard* (M) 'leopard' and *hyène* (F) hyena, and they share the same consonant-final pronunciation patterns. It is not just that such creatures are 'motile', as for *animal* (M) 'animal', but that they demonstrate great speed or agility, as for *mollusque* (M) 'mollusc'. Both the *léopard* (M) 'leopard' and *panthère* are noted for their agility, as are animals denoted by the term *hyène* (F) 'hyena' family, and these nouns are consonant-final.

It is also possible that a semantic contrast to 'agile/fast' – 'ungainly' – may be associated with vowel-final pronunciation for creatures such as *araignée* (F) 'spinning spider', that look so uncomfortable in their scampering, and *tortue* (F) 'tortoise/turtle' whose thick flippers make

such heavy weather of dragging its body across solid ground, or primates such as *ai'unau* (M) 'sloth and *loris* (M) 'loris' that move as little as possible or are slow-moving (although they also have thick furry coats). The *lièvre* (M) 'hare' and the *tortue* (F) 'tortoise' are sensitive to the very same attributes in the fable, and these same contrasts occur also in Latin between the consonant-final *lepus* (M) 'hare' and vowel-final *testudo* (F) 'tortoise') (Latin Dictionary & Grammar Aid @ <[www.nd.edu](http://www.nd.edu)>, 2005).

For 'legless' living matter such as *amibe* (F) 'amoeba', and *cellule* (F) 'cell', the constant subdividing is not particularly agile or fast. Another potential attribute is 'concrete', also mentioned earlier in its potential associated with consonant-final pronunciation, as a contrast with 'abstract' in its association with vowel-final pronunciation for *idée* (F) 'idea'.

For entities such as *morse* (M) 'walrus', *phoque* (M) 'seal' consonant-final pronunciation may relate to a 'solid' or 'bulky' build. Many of the 'legged' and 'footed' creatures can also be described as 'bulky' or 'heavy-set', eg. *porc-épic* (M) 'porcupine', *ours* (M) 'male bear' and *ourse* (F) 'female bear', as well as the massive frames of *hippopotame* (M) 'hippopotamus' and *rhinocéros* (M) 'rhinoceros', which nouns are all consonant-final. The compound noun *chauve-souris* (M) 'bat' denotes a mammal that can fly despite its solid build and the first part of this compound noun is consonant-final. Both *lente* and *puce* typically have a 'rounded' or 'oval-shaped' shape, as does *méduse* (F) 'jelly-fish'. For *girafe* (F) 'giraffe', a creature 'superlative' in its size, consonant-final pronunciation seems to form a contrast with vowel-final pronunciation and 'comparative' in size. These various notions with regard to dimension, eg. 'superlative', or to shape, eg. 'rounded', 'oval', or to structure/build, eg. 'concrete', 'bulky', 'heavy', 'massive', offer possible explanations for consonant-final pronunciation. – particularly since the slow, lumbering gait typical of some of these consonant-final creatures is unlikely to be confused with 'motile', even in irony.

The contrast between related creatures such as the vowel-final *crapaud* (M) 'toad' and consonant-final *grenouille* (F) 'frog' is interesting as a number of alternatives can be offered to accounting for this contrast. The notion 'motile' is valid in connection with *grenouille*, but this

association might suggest that *crapaud* is not, which is not the case. However, the *grenouille* is described as having *peau lisse* (LRPT, 1994:535), 'smooth skin', while the *crapaud* is renowned for the 'rough', 'warty' texture of its skin. Thus, while vowel-final pronunciation for *crapaud* may be argued to relate to its comparatively larger size, it is equally consistent in its association with 'rough'. These notions 'rough' and 'smooth' form semantic oppositions that appear to be associated with contrasting classifications – 'rough' with vowel-final pronunciation and 'smooth' with consonant-final pronunciation. These distributions are interesting in that, intuitively, one would more likely link 'smooth' with feminine and 'rough' with masculine, even in an indirect way. They suggest that attributes may be associated with differences in the human condition, if not the human form, particularly in contrasts that can be found. Comparisons and contrasts appear to play an equally significant role in the classificatory process for word-final pronunciation.

Descriptions of some of these creatures include other attributes, eg. 'shiny' as for *cétoine* (F) 'rose-chaffer beetle', *cigale* (F) 'cicada', 'bright' for *luciole* (F) 'firefly', 'glowing', eg. *lampeyre* (M) 'glow-worm', *noctiluque* (M) 'firefly'. In each case nouns have consonant-final pronunciation. The possibility that these attributes may be salient in relation to word-final pronunciation will continue to be explored.

For the masculine *loris* (M) 'loris', a tail-less, slow-moving primate, alternative word-final pronunciations are offered – the vowel-final form /lori/ and consonant-final form /loris/ (<atilf.atilf.fr>, 2005). Vowel-final pronunciation can be argued to relate to a hairiness shared by primates, or to the lack of agility for which it is well-known. Consonant-final pronunciation can be related to its solid build, one that more closely resembles the thickly-built, rounded frames of the *hamster* (M) 'hamster' or *opossum* (M) 'opossum', which also have consonant-final pronunciation. In this example we find that the presence of two equally crucial attributes associated with different classifications word-finally may be expressed in alternative word-final pronunciation patterns – the same process that gives rise to alternative gender assignments.

#### 6.4.5 Summary – count nouns

Masculine gender assignment of nouns in the corpus appear to be associated with:

- 'male' of the species, eg. *lion* (M) 'lion', *ours* (M) 'bear', *loup* (M) 'wolf'
- 'horned', 'maned', 'bearded', attributes stereotypically associated with 'male', eg. *gnou* (M) 'gnu'/'wildebeest' which has horns, a mane and is bearded
- 'unable to exploit an adaptation, eg. *termite* (M) 'termite', *éphémère* (M) 'mayfly'
- 'extinct' species, eg. *tarpan* (M) 'tarpan' (extinct European horse)
- 'domesticated', *fochet* (M) 'ferret', possibly *chat* (M) 'cat', *cheval* (M) 'horse', *chien* (M) 'dog', *bœuf* (M) 'ox/single head of cattle'
- 'irregular' form, eg. *oursin* (M) 'sea-urchin', *crocodile* (M) 'crocodile', or 'diverse' in form, eg. *ver* (M) 'worm'
- 'able to deliver poison, eg. *cobra* (M) 'cobra', *aspic* (M) 'asp', *crotale* (M) 'rattle-snake', *naja* (M) 'cobra'
- 'dangerous existence, including hanging headfirst, eg. *unau/ai* (M) 'sloth', heading into darkness/subterranean terrain, eg. *chauve-souris* (M) 'bat', *lapin* (M) 'rabbit', *wombat* (M) 'wombat'
- 'different' in comparative age or size, eg. *faon* (M) 'fawn' (new-born, young deer), *daguet* (M) 'young deer with first growth of antlers', 'diminutive' size, eg. *caret* (M) 'hawks bill turtle', *genet* (M) 'jennet', or 'augmentative' size, eg. *chameau* (M) 'camel', *éléphant* (M) 'elephant', *kangourou* (M) 'kangaroo', *putois* (M) 'polecat', *rat* (M) 'rat', terrestrial creatures, the amphibious *crapaud* (M) 'toad', and insects such as *frelon* (M) 'hornet', and *maringouin* (M) 'mosquito'.

However, this latter attribute appears not to account for *dauphin* (M) 'dolphin' that may be smaller than other 'whales' but at 12 ft. does not comply with the notion 'small'.

There is some suggestion that 'fragile' may be associated with masculine gender assignment, particularly in relation to a thread-like form, eg. *moustique* (M) 'mosquito', *faucheur* (M) 'daddy longlegs', *phasme* (M) 'stick insect', etc. This attribute 'fragile' is also mentioned above with regard to superordinate terms *insecte* (M) 'insect' where tiny forms are easily damaged or crushed, and *oiseau* (M) 'bird' whose hollow bones and delicate wings are so easily broken.



Indeed, it is possible that 'fragile' may relate to the association between 'new-born' of any kind and masculine classification in both gender assignment and vowel-final pronunciation.

Some 'legged' creatures denoted by masculine nouns are less constrained to a solid surface since they can launch themselves into the air in a series of bounding leaps, eg. *impala* (M) 'impala', *springbok* (M) 'springbok', etc. Some are winged and able to fly but have masculine gender assignments where their 'winged' ability might otherwise suggest feminine gender assignment, eg. *éristale* (M) 'hover-fly', whose habit allows it to be picked off easily, and *éphémère* (M) 'mayfly', which lives only for twenty four hours and then dies, and *termite* (M) 'termite', which buries into in wood. It may be that an inability to exploit or gain advantage from an adaptation that benefits others is associated with masculine gender assignment. This association will continue to be explored.

Some creatures with masculine gender assignment have an attribute suggested elsewhere to be associated with feminine gender assignment, eg. 'nocturnal', for creatures such as *hérisson* (M) 'hedgehog', *blaireau* (M) 'badger', *noctiluque* (M) 'firefly', *loris* (M) 'loris'. Earlier discussion of the *loris* suggested masculine gender assignment might relate to its response to danger since it freezes into immobility and suggested the possibility of a more extensive relationship between masculine gender assignment and some endangering attribute. These various masculine counter-examples are examined further below.

Attributes of creatures that appear to be associated with feminine gender assignment include:

- 'female' of any species, eg. *guenon* (F) 'female primate', *chatte* (F) 'female cat'
- 'adapted for flight', eg. *tsé-tsé* (F) 'tse-tse fly', *sauterelle* (F) 'locust', *abeille* (F) 'bee', *guêpe* (F) 'wasp', *cigale* (F) 'cicada', *éristale* (F) 'hover-fly', *mouche* (F) 'fly', *roussette* (F) 'fruit bat', *luciole* (F) 'firefly'
- unique in some way, eg. *panthère* (F) 'black panther', *baleine* (F) 'whale', *girafe* (F) 'giraffe'
- 'nocturnal', eg. *grenouille* (F) 'frog', *loutre* (F) 'otter', *souris* (F) 'mouse', *blatte* (F) 'cockroach', *noctuelle* (F) 'owl-moth', *teigne* (F) 'moth'

- adaptation that offers protection from harm, eg. *tortue* (F) 'tortoise', *fourmi* (F) 'ant', *salamandre* (F) 'salamander', *belette* (F) 'weasel' and *moufette* (F) 'skunk'
- development of additional parts that aid survival
  - for gripping, eg. *holothurie* (F) 'sea-cucumber', *sangsue* (F) 'leech', *rainette* (F) 'tree frog', *sarigue* (F) 'sarigue', *chenille* (F) 'caterpillar', etc.
- capable of disabling predators/prey, eg. *araignée* (F) 'venomous spider', *vipère* (F) 'viper', *couleuvre* (F) 'grass-snake'
- able to change colour to match surrounds, eg. *cétoine* (F) 'rose chafer beetle', *ermine* (F) 'stoat'
- able to change form, eg. *amibe* (F) 'amoeba', *cellule* (F) 'cell', *chenille* (F) 'caterpillar', *larve* (F) 'larva', or colour, eg. *cétoine* (F) 'rose-chafer beetle', *ermine* (F) 'stoat',
- able to leap into the air, eg. *chèvre* (F) 'goat', *rainette* (F) 'tree-frog', *gazelle* (F) 'gazelle', *sauterelle* (F) 'grasshopper'
- 'flattened', eg. *blatte* (F) 'cockroach', *douve* (F) 'flake', *limace* (F) 'slug', *planaire* (F) 'planarian', *trématode* (F) 'trematode'.

Certain other attributes may also be salient, eg. 'abundant regeneration' for the *souris* (F) 'mouse', consistent with *carpe* (F) 'carpe', a fish that is equally renowned for its ability to multiply in extraordinary abundance (see Chapter 5, Fish). Thus, while specific adaptations differ, they are related semantically in their purpose of aiding the living to give rise to the next generation.

Alternative gender assignments for *angora* (M/F) 'angora' are fully predictable in that it correlates with the referent animal. It is masculine when it denotes a referent that is itself denoted by a masculine noun, eg. *lapin* (M) 'rabbit', *chat* (M) 'cat', and feminine when it denotes a referent that is denoted by a feminine noun, eg. *chèvre* (F) 'goat'. One can imagine that it may also be feminine when denoting *une chatte*, a 'female' cat, and masculine when denoting *un bouc* 'billy-goat'. This example will be important in regard to other cases where gender assignments are predictable in their correlation with the referent.

Most synonyms have the same gender assignments, eg. *escargot* (M), *limaçon* (M) and

*colimaçon* (M) 'snail', potentially in relation to their fragile forms since the shells that cover their soft bodies are so easily crushed. However, some apparent synonyms have different gender assignments, eg. *blatte* (F), *cafard* (M) and *cancrelat* (M) each denoting 'cockroach', and *orque* (F) 'killer whale' and its masculine synonym *épaulard* (M). These contrasting gender assignments require an explanation. It is noted that *antelope* (F) 'antelope' is a generic term that applies to a wide range of four-legged animals some of which are feminine, eg. *gazelle* (F) 'gazelle', while others are not, eg. *gnou* (M) 'gnu, wildebeest'. These nouns are discussed as a set below.

Certain attributes suggested to be associated with a specific gender assignment have a number of counter examples, particularly 'winged' and 'nocturnal'. Many species similar in appearance and habit have different gender assignments. These different treatments require further analysis of specific attributes, as well as analysis of sets of related creatures, eg. 'amphibians', 'whales', 'venomous snakes'.

Although not every noun in the corpus is examined in terms of word-final pronunciation, certain patterns suggest that different treatments relate to contrasting attributes, associated with contrasting classifications, as laid out in (5) below.

(5) Vowel-final	Consonant-final
• 'rough', eg. <i>crapaud</i> (M) 'toad'	• 'smooth', eg. <i>grenouille</i> (F) 'frog'
• 'light', eg. <i>fauchoux</i> (M) 'daddy long-legs'	• 'solid', eg. <i>rhinocéros</i> (M) 'rhinoceros (heavy)'
• 'splodged' ( <i>tacheté</i> ), eg. <i>ocelot</i> (M) 'ocelot', <i>daim</i> (M) 'fallow deer'	• 'striped', eg. <i>tigre</i> (M) 'tiger', <i>zèbre</i> (M) 'zebra', <i>protèle</i> (M) 'aardwolf'

The notion 'solid' may also apply to *amibe* (F) 'amoeba' in relation to its physical state – a different sense than that suggesting 'bulky' or 'thickset' in relation to build.

Other attributes also appear to be associated with specific distributions. There is some suggestion of an association between consonant-final pronunciation and attributes 'shiny', eg. *cétoine* (F) 'rose-chafer beetle', *cigale* (F) 'cicada', or 'bright/glowing', eg. *lamproye* (F) 'glow-worm', *lepisme* (M) 'silverfish' and *noctilue* (M) 'firefly'. 'Motile' appears to be associated

with consonant-final pronunciations for *puce* (M) 'flea', and *méduse* (M) 'jelly-fish'. 'Motile' also appears to be salient when it is linked with 'fast' or 'agile' movement across the ground, as, for example, *renne* (M) 'reindeer', *jaguar* (M) 'jaguar', *lepisme* (M) 'silverfish', particularly where it is unpredictable, eg. *chèvre* (F) 'goat', *gazelle* (F) 'gazelle', *springbok* (M) 'springbok', *zèbre* (M) 'zebra', or sudden, eg. insects such as *mante-réligieuse* (F) 'preying mantis' and *phasme* (M) 'stick insect' that appear to be inanimate until they suddenly move. All these examples have consonant-final pronunciation.

The possible association between 'motile' and 'horsepower' is discussed. Since 'motile' can be taken as a given, it may be that the ability to pull or carry a load is more closely linked to 'strong' – particularly in relation to *bœuf* (M) 'ox', *cheval* (M) 'horse', and *âne* (M) 'donkey' as 'beasts of burden', each of which has consonant-final pronunciation. It is noted that the *cheval* is defined as:

(g)rand mammifère ..., domestiqué par l'homme comme animal de trait et de transport  
'large mammal ..., domesticated by humans as an animal for draught work and transport'

LRPT, 1994:192, trans. M. à Beckett

For *chameau* (M) 'camel', which is equally important as a beast of burden, vowel-final pronunciation appears to relate to its comparative (augmentative) size, since it is taller than all other four-legged beasts – except the *girafe* (F) 'giraffe'. And despite its 'superlative' size, the *girafe* can move with a speed and elegance that makes its consonant-final pronunciation consistent with other examples associated with 'motile'.

## 6.5 Attributes and counter-examples

The analysis above suggests that certain attributes are associated with specific gender assignments, eg. 'adapted for flight', 'nocturnal' habit, etc. However, each set produces counter-examples whose contrasting gender assignments require explanation. These various sets are examined below.

### 6.5.1 Adapted for flight

The following nouns in Table 6.20 denote creatures that are winged and can fly.

Table 6.20: Creatures adapted for flight – feminine nouns

<i>abeille</i>	F	'honey bee'	winged, able to fly
<i>bête à bon Dieu</i>	F	'ladybird'	winged, able to fly
<i>cigale</i>	F	'cicada'	winged, able to fly
<i>guêpe</i>	F	'wasp'	winged, able to fly
<i>libellule</i>	F	'dragon-fly'	winged, able to fly
<i>luciole</i>	F	'firefly'	winged, able to fly
<i>mouche</i>	F	'fly'	winged, able to fly
<i>mouche-bleue</i>	F	'bluebottle', blowfly'	winged, able to fly
<i>phalène</i>	F	'phalena' (moth)	winged, able to fly
<i>roussette</i>	F	'fruit bat'	forelimbs adapted for flight
<i>sauterelle</i>	F	'locust'	winged creature that travels in swarms
<i>teigne</i>	F	'moth'	winged, able to fly
<i>(mouche) tsé-tsé</i>	F	'tsetse fly'	winged, able to fly

The extent of feminine gender assignment within a set that includes both insects and a mammal suggests that it may well be associated with 'adapted for flight'. Flight offers a speedy, multi-directional mobility that is of enormous benefit not only in evading harm, but in seeking out and reaching food and water resources in ways that is beyond the means of other creatures.

Without such an adaptation, other creatures are restricted to food and water that can be reached nearby, and are dependent on speed to flee from harm, each of which offers other dangers – particularly for smaller living entities that are easily outpaced.

Although beetles typically are not flying insects, flying beetles in this set, *bête à bon Dieu* 'ladybird' and *luciole* 'firefly' are feminine. The former of the two is also significant in that it is 'diurnal', and its feminine gender assignment cannot therefore be related to a 'nocturnal' existence. It is noted that *mouche-bleue* (F) 'blowfly' is larger than the *mouche* (F) 'common house fly', yet it is feminine. However, the 'comparative' difference in size between these two flies is not great and without that distinction it appears to be less salient than an 'aerial' existence. However, some nouns in the database denote creatures equally well adapted for flight, eg. *papillon* (M) 'butterfly', *éphémère* (M) 'mayfly', but they have masculine gender assignment. These masculine counter-examples require explanation.

### 6.5.1.1 'Flighted' – masculine counter-examples

A number of masculine nouns in the database denote creatures equally well adapted for flight and these potential counter-examples require explanation. They are set out in Table 6.21.

Table 6.21: Creatures adapted for flight - masculine counter-examples

<i>éphémère</i>	M	'mayfly'	winged, able to fly
<i>frelon</i>	M	'hornet' (wasp)	winged, able to fly
<i>maringoin</i>	M	'mosquito' (Tupi)	winged, able to fly
<i>moucheron</i>	M	'midge'	winged, able to fly
<i>moustique</i>	M	'mosquito'	winged, able to fly
<i>papillon</i>	M	'butterfly'	winged, able to fly
<i>termite</i>	M	'termite'	winged, able to fly
<i>vulcain</i>	M	'red-admiral butterfly'	winged, able to fly

For a creature such as *éphémère* (M) 'mayfly', this adaptation cannot extend its life since it lives for only twenty-four hours and must fly until it dies. The *termite* burrows into wood and eats it from the inside out, a habit that makes little use of its adaptation for flight.

The *moustique* (M) 'mosquito', has a body composed of thread-like parts. The association between such a form and masculine gender assignment may not be self-evident, but it occurs also for *fauchoux* (M) 'daddy long-legs', and in other lexical fields such as *fil* (M) 'thread', *filament* (M) 'filament', *toron* (M) 'strand', and *cheveu* (M) 'hair' and *poil* (M) both of which apply to a single strand of 'hair'. While this 'thread-like' form may account for masculine gender assignment of *moustique*, etc., for *papillon* and other nouns that denote a 'butterfly', all of which are masculine, some other property must distinguish it from the closely-related *teigne* (F) 'moth' and other nouns denoting a 'moth' that are all feminine. The different gender assignments of these 'winged' creatures are still to be accounted for and are examined below.

Three of these nouns denote a creature 'comparatively larger' in size than another, as in (6):

- (6) • *bourdon* (M) 'bumblebee', an insect very like but considerably larger than the typical *abeille* (F) 'bee'
- *frelon* (M) 'hornet', an insect very like but considerably larger than the typical *guêpe* (F) 'wasp'

- *taon* (M) 'horse-fly', very like but considerably larger than the typical *mouche* (F) 'fly'.

In that these comparative differences in size concern insects, creatures typically very small in size, it is not surprising to find comparative distinctions for the larger of each pair, since 'larger than tiny' is semantically more feasible than 'smaller than tiny', (as it is for *rat* (M) 'rat' and *crapaud* (M) 'toad'), and nouns share both masculine gender and vowel-final pronunciation. Masculine gender and vowel-final pronunciation may likewise relate to a comparative difference in size between the tiny *moucheron* (M) 'midge' with *mouche* (F) 'fly'.

These differences in 'comparative' size suggest a standard dimension that provides the measure against which others are assessed, both of which are associated with vowel-final pronunciation as it co-occurs with 'different' in relation to masculine gender. 'Comparative' in the case of *crapaud* against *grenouille*, or *frelon* against *guêpe*, can be seen as 'augmentative' but is 'diminutive' in the case of *moucheron* against *mouche*. The principle that sets *grenouille* (F) 'frog', or *guêpe* (F) 'wasp', or *mouche* (M) 'house-fly' as the prototypical standard against which another can be seen as 'different/smaller' or 'different/larger' is not well understood at this stage. The standard may relate to commonplace familiarity (*mouche*), or a number of exemplars that together form a standard (*grenouille*) where perhaps there is greater variation for *crapaud*, or the presence of an attribute so crucial in its association with the feminine gender/consonant-final paradigm that 'different' cannot become salient and size becomes immaterial (*guêpe*). Amongst these nouns we can identify a single adaptation, such as 'moving in leaps and bounds', or 'winged' associated with 'life-saving' in relation to gender assignment, and 'motile in relation to word-final pronunciation. That is, the one property motivates both gender assignment and word-final pronunciation even though they are independent systems.

#### 6.5.1.2 Similar 'aerial' insects – *papillon* (M) 'butterfly', *teigne* (F) 'moth'

Various nouns in the Table 6.22 below denote 'butterfly' while others denote 'moth'.

Table 6.22: Nouns denoting 'butterfly' and 'moth'

##### Butterflies

<i>argynne</i>	M	'fritillary butterfly'	diurnal
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<i>bombyx</i>	M	'butterfly' (especially mulberry tree butterfly)	diurnal
<i>citron</i>	M	'butterfly' (lemon colour)	diurnal
<i>papillon</i>	M	'butterfly', generic term	diurnal
<i>soucis</i>	M	'butterfly' (marigold colour)	diurnal
<i>vulcain</i>	M	'red-admiral butterfly'	diurnal

#### Moths

<i>mite</i>	F	'tiny moth'	nocturnal
<i>noctuelle</i>	F	'little owl-, owl-moth'	nocturnal
<i>phalène</i>	F	'phalaena', any moth	nocturnal
<i>teigne</i>	F	'clothes-moth'	nocturnal

Descriptions of these creatures note their similarity in appearance although small differences emerge in ways they hold their wings at rest and in their relative slenderness or thickness.

From this Table, however, we can see that 'butterflies' are active diurnally, and are denoted by masculine nouns, while 'moths' are active 'nocturnally' and are denoted by feminine nouns. This distribution between 'diurnal', associated with masculine, and 'nocturnal', associated with feminine, reflects the same pattern among birds of prey, where 'diurnal' activity is associated with masculine gender assignment and 'nocturnal' activity with feminine gender assignment (except where they have an attribute associated with 'male', such as 'horns') (see §4.4.1.3, Birds).

'Aerial' and 'winged' are thus not always salient *per se*. These examples show that 'aerial' becomes less salient amongst similar winged creatures where a contrast can be obtained between those that are 'diurnal' and those that are 'nocturnal' – the latter associated with feminine gender, it can be argued, as an adaptation that provides greater protection against predators.

Differences in word-final pronunciation patterns for the vowel-final *papillon* and consonant-final *teigne*, also require explanation. Those creatures identified as *papillon* typically have 'slender' builds while those identified as *teigne* have 'thicker' builds. This association between 'slender' and vowel-final pronunciation, and between 'thick' and consonant-final pronunciation is regular and predictable. Since certain butterflies may be 'larger' than moths, and some 'moths' are much larger than many butterflies, eg. the Eastern Australian 'bogong moth', these distinctions provide a consistency that relative differences in size cannot.



### 6.5.2 Nocturnal habit

The possibility that the relationship between 'nocturnal' and feminine gender assignment may be more widespread in the animal world requires examination. Analysis of nouns in the database in relation to the attribute 'nocturnal' shows that 24 nocturnal creatures are feminine. They include *loutre* (F) 'otter', *moufette* (F) 'skunk', *grenouille* (F) 'frog' and *taupe* (F) 'mole', a nocturnal rodent whose 'nocturnal' activities are exploited in the same figurative way – in French and in English – in its application to 'spy' since their work takes place under cover (associated with darkness).

On the other hand, 23 nocturnal creatures are masculine, eg. *vison* (M) 'mink', *puits* (M) 'polecat', (closely related to the 'skunk'), *crapaud* (M) 'toad', *hérisson* (M) 'hedgehog' and *porc-épic* (M) 'porcupine'.

Given the examples in §6.5.1.2 of contrasting distributions between the 'diurnal' *papillon* (M) 'butterfly' and 'nocturnal' *phalène* (F) 'moth', as well the distributions between 'diurnal' and 'nocturnal' birds of prey, it would seem that 'nocturnal' is unlikely to account more broadly for different gender assignments of 'nocturnal' creatures – possibly because a blanket application of any attribute at this specific level – although easy to operate – is not particularly helpful in distinguishing one or some creatures from any other or others.

#### 6.5.2.1 Other possible explanations among 'nocturnal' creatures

Many of these nocturnal creatures have some extraordinary attribute that is capable of repelling predators, eg. *belette* (F) 'weasel', *moufette* (F) 'skunk', *musaraigne* (F) 'shrew', *marmotte* (F) 'marmot', *salamandre* (F) 'salamander'. Some are 'winged', eg. *roussette* (F) 'fruit bat', or have an adaptation that assists them to move about more safely, eg. *sarigue* (F) 'sarigue', whose long tail is prehensile and offers safer movement than tails of other long-tailed arboreal creatures that assist balance but cannot grip. Some creatures such as *antilope* (F) 'antelope', *gazelle* (F) 'gazelle', *foine* (F) 'stone-marten', *grenouille* (F) 'frog', *puce* (F) 'flea', etc. move in leaps and bounds, and this attribute is examined further below. Those creatures identified as *hyène* (F) 'hyena' are able to vary their diet and water intake or, in the case of the 'aardwolf', its instinct for

nocturnal hunting, which allows them to survive in the harshest conditions.

Many of these adaptations are already identified elsewhere in their association with feminine gender assignment.

#### 6.5.2.2 Similar animals – masculine counter-examples

Other nouns denote creatures similar to those above but are masculine. For instance, some are similarly able to repel predators, eg. *putois* (M) 'polecat', *hérisson* (M) 'hedgehog', *porc-épic* (M) 'porcupine', and *crapaud* (M) 'toad', some also move in leaps and bounds, eg. *lapin* (M) 'rabbit', *lièvre* (M) 'hare', are winged, eg. *chauve-souris* (M) 'bat', while the appetite of the *vison* (M) 'mink' is as voracious and indiscriminate as the feminine *loutre* (F) 'otter' (which it is frequently taken for).

However, amongst these 'nocturnal' creatures are adaptations that threaten their existence, eg.

- *hérisson* (M) 'hedgehog', which must roll into a ball in order to allow its spines to stand out, which immobilises it and prevents any retreating from danger
- *boa* (M) 'boa constrictor', which has non-venomous fangs but is too docile to use them
- *chacal* (M) 'jackal', a solitary hunter that stalks like a pointer dog for 20-30 minutes and then freezes before pouncing to make the kill, which not only presents its prey with the opportunity to escape but places its own life in some danger
- *ratel* (M) 'honey badger', which attacks even lions and hyenas if it feels threatened, without regard for its own safety
- *chat* (M) 'cat', semi-arboreal creatures (both domesticated and wild) that have a preference for heights, whose long tails aid balance but are not prehensile.

For the *porc-épic* quills are very effective in that they are barbed with a backward-facing hook that makes them difficult to extract after they lodge in the flesh of potential predators. This attribute disables rather than destroys. Its belly is unprotected and vulnerable if it is flipped over. More crucially, its defence becomes effective only when it is under direct attack and the situation is dire. This example reflects something of the *gymnote rayé* (M) 'banded knifefish', a fish whose life-saving adaptation emerges only when the situation is dire (see Chapter 5, Fish).

It is also noted that this life-saving adaptation is dependent on something else. Perhaps dependency relationships are themselves endangering, which might account for the only hyena that is masculine, the termite-eating *protèle* (M) 'aardwolf'.

Successful adaptations that allow animals to hunt under the cover of darkness may be offset by other adaptations. For instance, the *grillon* (M) 'cricket' chirps constantly through the night, and *loup* (M) 'wolf' howls at night, whether solitary or in a group setting, advertising their presence and destroying their invisibility. As identified above, the *putois* (M) 'polecat' is distinctive in its relative size from others of its kind, and masculine gender assignment is consistent with others also distinguished by their relative size from other similar creatures.

Some creatures head underground for safety, eg. *lapin* (M) 'rabbit', *renard* (M) 'fox', *wombat* (M) 'wombat'; however, burrows or dens that are large enough to fit their rounded bodies may not exclude all predators. These creatures have no other means of protecting themselves or their families, unlike other burrowing creatures such as *musaraigne* (F) 'shrew', *taupe* (F) 'mole', etc., and in this context masculine gender assignment is not surprising since it is consistent with other similar examples identified in previous chapters.

The masculine term *chauve-souris* 'bat' applies any flying mammals whose forelimbs are adapted for flight and which hang upside down at rest. Previous evidence shows that *sublet* (M) 'long-snouted wrasse' (Ch. 5) and *aï'unau* (M) 'sloth' both hang upside down, and both are masculine. Thus there is a certain consistent among members of the animal world between 'hanging upside down' with masculine gender assignment, perhaps because that physical position offers greater danger than 'head-up'.

However, at a more specific level, some of these creatures are identified by the masculine term *chauve-souris* 'bat', while others are denoted by a feminine term *roussette* 'fruit bat/flying fox'. Since both terms apply to 'nocturnal' creatures that hang upside down, other attributes would appear to become salient at the more specific level. Individual species denoted by *chauve-souris* have tiny eyes and depend on echolocation to find food; thus they cannot feed when it

rains, nor can they tolerate daylight. At the end of their active time they seek darkness in subterranean rocks or caves, hollow logs, even animal burrows. Individual species denoted by *roussette* have larger eyes and are not dependent on echo finding to locate food and feeding is not restricted in the same way. They also tolerate daylight and are able to roost out in the open in treetops. This in turn enables them to watch out for any potential threat, while the height and open nature of their perches means that they can glide to another perch if something should go amiss, where the underground perches for 'bats' offer no such safety net when bats fall from their perches. It is also noted that temperate zone 'bats' tend to hibernate when food becomes scarce during winter, where 'fruit-bats' become migratory and follow the flowering and fruiting of plants on which they feed (<en.wikipedia.org>, <animaldiversity.ummz.umich.edu>, 2005). 'Heading underground/into darkness' is previously associated with masculine gender assignment, eg. for *rason* (M) 'razor fish', and *lapin* (M) 'rabbit', and may possibly be salient for animals that hibernate, eg. *écureuil* (M) 'squirrel', although other attributes are consistent in accounting for its masculine gender. It is thus not surprising to find a masculine term denoting bats that head underground/into darkness. Nor is it surprising to find a feminine term denoting bats that have been able to adapt in a way that enhances its opportunities to survive.

#### 6.5.2.3 Similar 'nocturnal' creatures, different gender assignments

Among 'nocturnal' creatures mentioned above are pairs so similar in habit or in appearance that they may be mistaken for each other. Musteline mammals *vison* (M) 'mink' and the common *loutre* (F) 'otter' are both amphibious, slender-bodied, luxuriantly furred creatures found in similar freshwater habitats (although some otters may tolerate saltwater). They are so similar in appearance and habits that they may be mistaken for each other in the dark. However, out of the water the real size differences are unmistakable – the *vison* is tiny in comparison with the larger *loutre*. Other classifications also appear to relate to a difference in size in comparison with another or others, as in (7):

(7)	<i>blaireau</i>	M	'badger'	similar to <i>ours</i> (M) 'bear' but very much smaller
	<i>putois</i>	M	'polecat'	similar to <i>belette</i> (F) 'weasel' but very much larger
	<i>tarsier</i>	M	'tarsier'	similar to other primates but 'smaller' than most
	<i>oustiti</i>	M	'marmoset',	tiny, hand-sized primate

While today zoologists place *blaireau* with musteline mammals, its similarity to bears – in

overall shape, claws, thick furry coat and short legs – is remarkable. The difference in size between a creature identified as *ours* (M) 'bear' – *de grande taille* 'massive size' (LRPT, 1994:799), and those designated by *blaireau* – *petit mammifère* 'small carnivore' (LRPT, 1994:113) make that comparative distinction as pertinent today as it would once have been.

Speakers appear to be able to distinguish 'larger' and 'smaller' in these narrower sets either according to a standard provided by a single, very common model, or – as 'bear' suggests – through outer limits provided by dimensions of members in a set. In contrasts, 'superlative' size distinguishes one that is unique from all other members of the most general set into which they fit (bird, fish, mammal, etc.).

### 6.5.3 Moving in leaps and bounds

There is some suggestion above that motion involving leaps and bounds may be significant in gender assignment. Feminine nouns denoting creatures that move in this way are set out in Table 6.23 below.

Table 6.23: Animals moving in leaps and bounds - feminine nouns

<i>altise</i>	F	'flea-beetle'	large hind legs adapted for leaping
<i>antilope</i>	F	'antelope'	moves at high speed in a leaping run
<i>bruche</i>	F	'bruchus'	kind of jumping grasshopper
<i>chèvre</i>	F	'goat'	runs in leaps and bounds
<i>fouine</i>	F	'beech-marten'	runs in bounds
<i>gazelle</i>	F	'gazelle'	running style has stiff-legged bounce that makes it difficult for predators to pounce
<i>grenouille</i>	F	'frog'	large hind legs adapted for jumping
<i>gerbille</i>	F	'gerbil'	walks in bounds
<i>gerboise</i>	F	'jerboa'	long hind legs, moves in bounds
<i>martre</i>	F	'marten'	runs in bounds
<i>puce</i>	F	'flea'	tiny, with a considerable capacity to leap
<i>sauterelle</i>	F	'grasshopper'	moves in bounds

These creatures have hind quarters adapted for leaping, such as the longer limbs of the frog, which not only propel lightly-framed bodies into the air as they move forward but allow them to change direction unexpectedly. This 'leaping' movement is unpredictable and confusing for predators and it offers considerable advantage over other responses including speed. Earlier

examples show that adaptations that advantage some over others in relation to safety are associated with feminine gender assignment, eg. birds that respond as a flock to repel any predator, eg. *oie* (F) 'goose', *avocette* (F) 'avocet', or *macreuse* (F) 'common scoter', or diving birds that have developed synchronous diving and surfacing to protect each other and their prey from any predator waiting above the water surface. More closely associated are fish such as *aiguillette verte* (F) 'Atlantic needlefish', and *orphie* (F) 'garfish'/'garpike', that skip across the surface of water propelled by their tails, a movement that is confusing and unpredictable for predators to follow or anticipate – from below or above.

The association between feminine gender assignment and an adaptation, movement in particular, that can assist creatures to evade potential threat, such as 'bounding', is regular and consistent.

The goat, *chèvre* (F), has the same leaping run as the *antilope* (F) 'antelope', and it is not surprising to find that they share the same feminine gender assignment. Goats are also well recognised for eating anything, indeed, almost everything, and are able to survive in an extraordinary variety of habitats including extremely poor, arid, terrains where access to water is not constant. This ability to vary diet and water intake is identified earlier, for *harpie* (F) 'harpy eagle' (see Chapter 4, Birds), and it is not surprising to find the same association with feminine gender assignment, demonstrating a consistency and regularity across different lexical fields.

A number of other nouns denote creatures with a similar bounding run but are masculine. These counter-examples must be accounted for.

#### 6.5.3.1 Masculine counter-examples

Masculine nouns in the database denoting creatures whose hind quarters can propel bodies upwards in a leap are set out in Table 6.24 below.

Table 6.24: Creatures moving in leaps and bound – masculine counter-examples

<i>chamois</i>	M	'goat antelope'	sure-footed Alpine deer
<i>chat</i>	M	'cat'	four-footed semi-arboreal creatures
<i>chevreuil</i>	M	'roe-deer'	small deer with reddish-brown coat, white chest

<i>cerf</i>	M	'red deer'	large mammal, male develops large antlers
<i>cheval</i>	M	'horse'	large mammal domesticated by humans
<i>dik-dik</i>	M	'dik-dik'	small African antelope with stout horns
<i>ferret</i>	M	'ferret'	small domesticated albino variety of polecat
<i>kangourou</i>	M	'kangaroo'	Australian marsupial, many taller than humans
<i>impala</i>	M	'impala'	antelope with leaping run
<i>lapin</i>	M	'rabbit'	nocturnal burrowing creature smaller than 'hare', with bounding run
<i>putois</i>	M	'polecat'	largest of European musteline mammals emits foul odour; larger than weasel
<i>springbok</i>	M	'springbok'	leaps straight into the air

For the various deer, eg. *cerf* (M) 'red deer', *chevreuil* (M) 'roe deer', and others such as *daim* (M) 'fallow deer' and *renne* (M) 'reindeer', and other terrestrial mammals such as horses, eg. the generic *cheval* (M) 'horse', the 'semi-wild' horse *mustang* (M) 'mustang', as well as *zèbre* (M) 'zebra', both hind quarters and forequarters are well-developed for jumping. However, their bodies are heavy in comparison with more lightly-framed creatures, and these slender-legged animals respond to threat by running at high speed. Escaping from danger at high speed over uneven ground is itself endangering, and adaptations that mean outrunning rather than confusing with unpredictable leaps and bounds can be argued to be account for masculine gender assignment in these cases.

As noted in the discussion above regarding 'nocturnal' creatures, when away from its burrow the *lapin* (M) 'rabbit' uses quick, irregular hopping movements; when it senses danger it uses a scampers across the ground to reach its warren burrowed into the earth. This mode of retreat may allow it to evade predators for long enough to reach the safety of its burrow, but underground warrens are wide enough to allow some predators to pursue, from which there is no escape. Also, for a creature that moves by hopping, these burrows are less than appropriate. Thus an attribute that provides an advantage above-ground – the leap and scamper – is accompanied by an instinct to burrow that can lead to death, both for itself and its family. Masculine gender assignment for these creatures is consistent with other creatures that endanger themselves and/or their family, particularly the instinct to burrow or head downwards, observed in the analysis of birds and fish in Chapters 4 and 5, eg. *rason* (M) 'cleaver wrasse'.

The *lièvre* (M) 'hare' is not included in this set since it does not appear to have the same inherent ability to leap as *lapin* (M) 'rabbit'. Nonetheless, its masculine gender fits into the broader scheme in that its response to danger is based on speed and the hope that it can out-run any predator, a confidence that is unwise in the presence of even faster animals that can catch up. It has no other means of escape since it lives in shallow above-ground nests.

The wild polecat *putois* might have been considered to have feminine gender assignment in the same way as other creatures that can repel predators by emitting a foul odour, and it also moves in leaps and bounds. However, amongst European musteline mammals that have these same adaptations, eg *martre* (F) 'marten', *fouine* (F) 'stone-marten', *belette* (F) 'weasel', etc., the *putois* can be distinguished through its size since it is the largest. Masculine gender assignment for this creature is consistent with others differentiated from otherwise similar creatures through a 'larger' size.

For *kangourou*, the ability to bound from a standing start and propel itself forwards in a sequence of leaps and bounds on two legs might have suggested feminine gender assignment. It is described as a *grand marsupial* 'tall marsupial' (LRPT, 1994:643), and contemporary images of this creature at the time of its discovery show it as towering over other animals, even trees. In a landscape full of unique four-limbed creatures, the only distinction would have been a comparative difference in size.

These explanations do not cover the various nouns denoting an 'antilope', and they are examined together as a set below.

### 6.5.3.2 Other masculine counter-examples

The above Table 6.24 does not include two creatures in (8) below that are able to leap; in fact, their environments require them to do so.

(8)	<i>chamois</i>	M	'chamois'	Alpine goat antelope, having characteristics of both; agile and sure-footed, able to leap
	<i>izard</i>	M	'Pyrennean mountain goat'	sure-footed, agile mountain goat



While goats are agile and sure-footed, a propensity to leap in the mountainous environments in which these two goats live offers considerable threat from falling. However, these 'mountain-goats' are also restricted to very specific environments, *chamois* to the Alpine region, *izard* to Pyrenean region, in much the same way as *biset* (M) 'rock dove' is confined to very specific regions of France (see Chapter 4, Birds). While we may not be able to identify which of these attributes is salient, both are associated with masculine gender assignment and there is thus no competition between them.

6.6 'Comparative' – distinctions in some degree

To the extent that some meanings do not precisely reflect 'comparative', or have not been well identified so far, or have alternative word-final pronunciations, further discussion is required.

6.6.1 'Diminutive' in relation to 'young' of any kind

A number of nouns in the database denote the young of a species and not all have been dealt with in earlier discussions, such as the following.

Table 6.25: Nouns denoting the young of a kind

<i>agnelet</i>	M	'lambkin' (small or young lamb, or young goat)
<i>baleineau</i>	M	'baby whale'
<i>cabri</i>	M	'kid', young goat
<i>chamelon</i>	M	'young camel'
<i>chaton</i>	M	'kitten'
<i>couleuvreau</i>	M	'young' of the <i>couleuvre</i> (F) 'green snake'
<i>éléphanteau</i>	M	'baby elephant'
<i>girafon</i>	M	'baby giraffe'
<i>lézardet</i>	M	'young lizard'
<i>levraut</i>	M	'leveret', young rabbit, hare
<i>lionceau</i>	M	'lion-cub'
<i>louveteau</i>	M	'wolf-cub'
<i>marcassin</i>	M	'young wild boar'
<i>ourson</i>	M	'bear-cub'
<i>porcelet</i>	M	'piglet'
<i>poulain</i>	M	'foal' (to age 30 months)
<i>raton</i>	M	'young of rat'
<i>souriceau</i>	M	'young of mouse'

The meaning of *daguet* (M) 'young deer with first growth of antlers' suggests that it should not be included in this set.

These nouns are all masculine. Some nouns are formed from a stem associated with the 'male' of its kind, eg. *porcelet* (M) 'piglet' from *porc* (M) 'pig', while others are formed from a stem provided by the 'female' of its kind, eg. *louveteau* (M) 'wolf cub' from *louve* (F) 'she-wolf', or the general term, eg. *girafon*, from *girafe* (F) 'giraffe', *baleineau* from *baleine* (F) 'whale'. The extensive range of suffixes includes *-ard*, *-et*, *-aut*, *-eau*, *-(a)in*, *-on*, each of which is the masculine form of a suffix having a feminine variant.

Since evidence in the analysis of birds suggests that 'diminutive' as a comparative distinction is associated with vowel-final pronunciation, it is unlikely to account for masculine gender assignment at the same time. The suggestion so far is that a differentiation in age or comparative size suggests either 'different' or 'immature' in relation to the adult. The attribute 'different' is crucial elsewhere in its association with masculine gender assignment, but 'immature', lacking size and shape relative to the adult form, may be more salient here.

### 6.6.2 Affective - another form of 'diminutive'

It is noted that 'diminutive' nouns – informal, 'affective' names for animals – also appear in the database. They are set out in Table 6.26 below.

Table 6.26: 'Diminutive' – terms of affection for animals

<i>dada</i>	M	'horsey'	for <i>cheval</i> (M) 'horse' (LRPT, 1994:273)
<i>mimi</i>	M	'kitty'	for <i>chat</i> (M) 'cat' (COFED, 1986:353)
<i>toutou</i>	M	'doggy'	for <i>chien</i> (M) 'dog' (LRPT, 1994:1124)

Diminutive for these nouns relates to the feelings of the speaker rather than to any comparative distinction in size. Masculine gender assignment for these nouns follows that of the generic term (accounted for above). For two of the three nouns, word-final pronunciations also follow the generic terms where they are vowel-final. However, for *cheval*, there is a change from consonant-final in the generic term to vowel-final for the affective term. This change suggests that affective distinctions may play a semantic role in their association with vowel-final

pronunciation since in no way could the referent be considered as 'younger', 'smaller' or 'bigger' than that denoted by the generic noun. 'Affective' terms for humans will be further considered in Chapter 8.

### 6.6.3 Comparative difference in size – 'smaller than'

The analysis of fish suggests that comparative size, in particular 'smaller', also appears to be salient for creatures very like another or others – such as those set out in Table 6.30.

Table 6.27: Comparatively smaller living creatures other than fish

<i>blaireau</i>	M	'badger'	similar to but smaller than <i>ours</i> (M) 'bear'
<i>dauphin</i>	M	'dolphin'	smaller than other 'whales'
<i>lapin</i>	M	'rabbit'	smaller than <i>lièvre</i> (M) 'hare'
<i>lérot</i>	M	'garden dormouse'	smaller than <i>loir</i> (M) 'dormouse'
<i>loris</i>	M	'loris'	Sri Lankan primate <i>de petite taille</i> 'tiny in size'(<atilf.atilf.fr>, 2005)
<i>muscardin</i>	M	'small dormouse'	derived from Latin <i>mus</i> 'mouse'
<i>moucheron</i>	M	'midge'	smaller than <i>mouche</i> (F) 'fly'
<i>oustiti</i>	M	'marmoset'	tiny New World monkey
<i>saïga</i>	M	'saiga'	small European antelope
<i>tarsier</i>	M	'tarsier'	tiny Philippine primate

We have already observed a number of examples where 'comparatively smaller' size is suggested to account for masculine gender assignment, eg. the much smaller 'nocturnal' *vison* (M) 'mink' contrasting with the commonly-found *loutre* (M) 'otter'. While the *lapin*, a 'nocturnal' mammal, is commonly described as smaller than *lièvre* (M) 'hare', masculine gender assignments for both are argued to relate to attributes that are endangering.

Consideration as 'smaller' is logical for primates such as *loris*, *oustiti* and *tarsier*. The *tarsier*, discovered in 1705, is approximately the size of a large human hand and is not only much smaller than other tailed primates, but is among the smallest of all known primates (<www.bohol.ph>, 2005). The *loris* and *oustiti* are also much smaller in comparison with other primates in their own environments. Where a comparative difference in size, in this case 'smaller', is crucial, we find masculine gender and, it seems, vowel-final pronunciation.

In some cases a common stem shared by the 'comparative' form and 'standard' model hint at the relationship between them, eg. *moucheron*, derived from *mouche* (F) 'fly', and *lérot*, derived from *loir* (M) 'dormouse'. The comparative attribute 'smaller' may be crucial for some of these creatures.

#### 6.6.4 Comparative difference in size – 'larger than'

There is considerable evidence for two distinct applications of 'comparative' in relation to 'diminutive' – 'younger than' (age), and 'smaller than' (size). There is also mounting evidence for an equally crucial difference in relative size, 'augmentative' – 'larger than', suggested in the earlier discussion regarding *maringouin* (M), the large-sized mosquito of Canada and South America over the size typical of the *moustique* (M) 'mosquito' elsewhere. Analysis of descriptions and definitions of animals in the database suggests a number other such examples, and they are set out in Table 6.28 below.

Table 6.28: Comparatively larger size – living creatures other than fish

<i>bison</i>	M	'bison'	member of cattle tribe <i>Bison bison</i> once widespread in Europe, comparatively larger than other similar animals (eg. genus <i>Bos</i> ) (LRPT, 1994:112)
<i>bourdon</i>	M	'bumblebee'	very large kind of bee, prob. onom. (LRPT, 1994:125)
<i>frelon</i>	M	'hornet'	<i>grosse guêpe</i> 'large kind of wasp' (LRPT, 1994:495)
<i>lamantin</i>	M	'sea cow'	<i>plus gros que le phoque</i> 'larger than the seal' (LRPT, 1994:650)
<i>ocelot</i>	M	'ocelot'	nocturnal feline similar in colouration to the 'leopard', but larger
<i>putois</i>	M	'polecat'	dark brown mammal that gives off unpleasant odour, similar to but larger than 'weasel' (CED, 1986:1185)
<i>taon</i>	M	'horse-fly', 'gadfly'	<i>grosse mouche</i> 'large kind of fly' (LRPT, 1994:1091)

In each case creatures described above are noted for their similarity in appearance with another, but larger in size, eg. *putois*, *taon*, or all other comparable animals, eg. *bison*. These examples are consistent with examples suggested in the analysis of birds, eg. *héron* (M) 'heron', largest of all wading birds, and *corbeau* (M) 'raven', the largest of all black corvine (crow-like) birds (see Chapter 4, Birds) and in the analysis of fish, eg. the 'largest' freshwater fish *beluga* (M) 'beluga

sturgeon' that grows to around 2,700 kg. and nearly 6 m. in length, and saltwater fish *flétan* (M) 'halibut' which can weigh up to 320 kg. and reach 3 m. in length (see Chapter 5, Fish).

In each case the comparatively 'larger' sized creature has both masculine gender and vowel-final pronunciation, consistent with other examples. This is particularly apparent for *lamantin*, since vowel-final pronunciation is associated elsewhere with a 'slender' form, or 'hairy' coat, while this creature has a remarkably bulky form and is hairless. Thus, its apparently inconsistent classification suggests some other attribute.

Although the contrast in size between the more common feminine and consonant-final *grenouille* (F) 'frog' and 'larger' amphibious *crapaud* (M) 'toad' may also form part of this paradigm, other features are considered more relevant in distinguishing between them (the contrast between 'rough' and 'smooth'). However, *crapaud*, with its masculine gender assignment and vowel-final pronunciation, is at least consistent with other creatures distinguishable by their 'augmentative' size relative to another, or others.

The *bison d'Europe* (*Bison bonasus*), known as both 'European bison' or 'wisent', is the heaviest surviving land mammal in Europe. It is taller than the American 'bison', having longer legs, but this distinction is perhaps less crucial than its comparison with other European terrestrial grazing animals. Nonetheless, it is consistent in its masculine gender assignment and vowel-final pronunciation with others that are comparatively taller/bigger than other like creatures in their environment.

#### 6.6.5 Vowel-final pronunciation - 'diminutive', 'augmentative', 'affective'

It is noted that across all three sets related to comparative distinctions – 'diminutive', 'augmentative' and 'affective' – vowel-final pronunciation is regular and consistent, particularly in the change from consonant-final pronunciation for the adult form *cheval* in contrast to the 'diminutive/affective' form *dada*. Loan words *oustiti* and *saïga* are particularly interesting in that each offers the potential for consonant-final pronunciation through elision of the final sound but it does not occur for these creatures. They can be contrasted with the noun *wombat*,

where the <ɔ> present in indigenous languages is maintained orthographically in French but is elided in pronunciation (as discussed in an earlier chapter, see §3.1.3). The different outcomes amongst these loan words suggest that while the interacting processes relating to word-final pronunciation may be below the level of consciousness, they are nonetheless sufficiently powerful to bring about changes when necessary.

#### 6.6.6 Consonant-final pronunciation – 'superlative' degree

The set of masculine vowel-final nouns in Table 6.28 above relating to comparative distinctions does not include two feminine consonant-final nouns denoting creatures equally noted for their comparative dimensions – in their case, however, related to their superlative size above all other like creatures.

Table 6.29: Superlative degree – creatures larger than any other of their kind

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<i>girafe</i>	F	'giraffe'	tallest mammal, terrestrial
<i>baleine bleue</i>	F	'blue whale'	largest mammal, aquatic

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This set would also include *autruche* (F) 'ostrich', the largest bird, and *mole* (F) 'sunfish', the 1000 kg. fish that moves upright through water like a gigantic wheel, a plane that would otherwise be associated with masculine gender, but is feminine. It would appear that there is some association between 'superlative' size and consonant-final pronunciation forms – as is the case for examples in other domains, such as the abstract notion *la plupart* (F), described as *la plus grande part de ...* 'the largest part' of something (LRPT, 1994:862), which also has consonant-final pronunciation. However, the relationship with feminine gender is unlikely to be associated with the same attribute. It can be argued that 'superlative' – excelling all others in some quality or degree (LRPT, 1994:1073) – is linked with 'unique', without equal or like in kind (LRPT, 1994:1151). Each identifies one that stands above all others with which it may be compared. It can be argued that for comparisons in size, 'diminutive' and 'augmentative' relate to the outer limits for a certain set, while the notion 'unique' forms the furthest extension in terms of size, beyond any other in the widest possible set of its kind – bird, fish, terrestrial animal.

The association between feminine gender and 'unique' in terms of largeness in French is not unlike an association suggested by Harvey in Australian Aboriginal languages (1997:35)

discussed earlier in Section 2.5, where largeness is associated with the female/feminine classification. However, Harvey suggests that 'largeness' and 'not large' form one of a number of prototypical oppositions, while in French oppositions in 'largeness' combine gradable oppositions 'augmentative' and 'diminutive' against 'superlative' to form ungradable oppositions associated with contrasting vowel- and consonant-final pronunciations. Size is not salient in relation to contrasting gender assignments in French, rather, they appear to concern the way that entities can be identified – one being distinguished from some others and thus 'different' (associated with masculine), and one being distinguished from all others and thus 'unique' (associated with feminine).

## 6.7 Related sets

The analysis above identifies closely-related sets of living creatures that have different gender assignments, and they are examined below.

### 6.7.1 Members of the sub-family 'antelope'

In French the term *antilope* (F) 'antelope' is generic in that it incorporates a range of members of a sub-family of bovid mammals. Antelopes are unlike horned grazing animals to which they are related, such as sheep, cattle and deer, in that they have a particular response when they are excited – the ability to flex the lower joints of all four legs, allowing them to propel themselves into the air, in some cases to an extraordinary height, in a leap known as 'stotting'. This physical adaptation is unique amongst four-legged mammals, and can account for feminine gender assignment of *antilope*, consistent with other creatures that are 'unique'. However, amongst nouns denoting various species of antelope, some are feminine, eg. *gazelle* (F) 'gazelle', and others are masculine, eg. *éland* (M) 'eland', *oryx* (M) 'oryx', etc., apparent 'inconsistencies' that require an explanation, as do the variations in word-final pronunciation patterns among these nouns. Of particular significance is the loan word *éland*, that denotes a large, spiral-horned, striped African 'elk' which is consonant-final in its Dutch/Afrikaans origins but has become vowel-final in the French lexicon.

The various nouns are set out in Table 6.30 below, alongside descriptions (from various

sources, including <animaldiversity.ummz.umich.edu>, <www.krugerpark.co.za>, and <en.wikipedia.org>, 2005-2007).

Table 6.30: Nouns denoting 'antelope'

Masculine vowel-final nouns			
<i>eland</i>	M	'eland'	male and female have spiral-shaped horns; impressive size (6 ft. at shoulder; up to 2000 lb.); forequarters more developed than hind quarters
<i>gnou</i>	M	'gnu', 'wildebeest'	male and female horned, bearded and maned; well-developed forequarters; requires water every other day
<i>impala</i>	M	'impala'	male has lyre-shaped horns; medium sized; noisy, grunts all day; when alarmed, herd scatters in every direction, leaping and jumping up to 9 ft. in height/length; needs to be close to water source
<i>nyala</i>	M	'nyala'	male has spiral-shaped horn; nocturnal; feeds in single-sex groups; female gives alarm audible only to those in hearing range; males have fringe under the chest that distinguishes them from females
<i>saïga</i>	M	'saiga'	horned sheep-like antelopes with enlarged nose; males do not graze at all during breeding season, spending most of their energy protecting the harem (male mortality 80-90%)
Masculine consonant-final nouns			
<i>dik-dik</i>	M	'dik-dik'	male and female typically horned; small shy antelopes; seek dense cover for camouflage at least alarm, which hinders vision and movement; males make whistling noise when disturbed; intrusion causes dik-diks to bounce and then whistle on landing
<i>oryx</i>	M	'oryx'	male and female horned; large antelope whose forequarters are more developed than hind quarters; can survive without water for many weeks
<i>springbok</i>	M	'springbok'	small antelope; goes into bouts of repeated high leaps (up to 4 m.), leaping back up as soon as feet touch the ground ('pronking'); can vary diet in way that allows it to remain independent of water
Feminine nouns			
<i>gazelle</i>	F	'gazelle'	male and female horned; small antelope but speedy; unique in flexion enabling them to 'stot' (flex legs to leap up)

Each of the masculine and feminine nouns above denotes an animal that can 'stot', is typically 'horned', and lives in herds. These attributes, however, do not appear to relate to different gender assignments among the various nouns in the set, which suggests that some other attribute/s may



account for their different classifications.

#### 6.7.1.1 Antelopes - masculine counter-examples

Some antelopes have forequarters that have developed at the expense of their hind quarters in order to carry additional weight, particularly around the head and neck. In some cases that weight incapacitates them to the extent that the slender, flexible legs are no longer able to make these prodigious leaps as, for instance, the small sheep-like *nyala* with its sturdy 125 kg body, and the enormous *éland* with its 2000 lb. body, and *oryx*. These creatures are denoted by masculine nouns.

Despite its considerable size and well-developed forequarters, the large *gnou* (M) is able to 'stot' which enables it to produce impressive speeds combined with sudden changes in direction that allow it to outsmart even cheetahs and lions. Yet it is masculine. This antelope has horns, beard and a mane, attributes that are typically associated with 'male' in the animal world. Perhaps more crucial is a requirement to find water at least every other day; its freedom to roam in search of food is thus constricted by, indeed is tied to, the availability of water. These attributes, 'male-like appearance' and 'restricted' ability to roam, are both associated with masculine gender in other lexical fields; it is thus not possible to determine precisely which attribute may be salient. Perhaps they combine to outweigh an adaptation that otherwise allows it to evade predators.

Various nouns such as *springbok*, *dik-dik* and *impala* denote slightly-built antelopes whose well-developed hindquarters can produce high leaps and extraordinary speed, but these nouns are masculine. The *springbok*, like the feminine *gazelle*, can leap 3 to 4 m. up into the air. However, for the *springbok* this leaping occurs in uncontrollable bouts known as 'pronking' – the same action is repeated as soon as feet touch the ground. 'Pronking' makes the *springbok* unique – but it turns an unpredictable movement into one that is predictable since this up-and-down movement is not combined with forward momentum, and thus reduces its effectiveness in evading capture.

The small *dik-dik* is a shy antelope that seeks deep cover. When disturbed, it lies down flat to hide – a practice that hinders its ability to see and removes the ability to employ their best response to threat (instant flight). It also makes a whistling noise that gives its cover away. On intrusion, like the *springbok*, the *dik-dik* will leap straight up into the air rather than fleeing. In light of these responses to threat – a combination of that of the *springbok* and that of nocturnal birds whose calls reveals their presence in the dark – masculine gender assignment for the *dik-dik* can only be regarded as regular and predictable!

The *impala*, when alarmed, flees using both speed and leaps – up to 3m. high and 3 m. long – but the herd scatters in every direction. While this response produces a sight that is highly entertaining for humans, it is potentially endangering for the *impala* not only because these creatures have horns, but the scattering loses individuals the protection offered by the herd. This example suggests that gender assignment is not itself related to 'herding' – but that failure to maintain it may endanger individuals.

For the *saiga*, a single male looks after a small herd of females. During the breeding season it spends all of its energy on protecting its harem and will starve to death rather than eat. Breeding males have an 80% to 90% mortality rate. Thus, for each of these masculine creatures, an adaptation that enhances the potential to survive is counteracted by another that places its life in danger, in some cases almost ensuring death.

#### 6.7.1.2 Word-final pronunciations

These nouns denoting members of the antelope family also vary in word-final pronunciation patterns. Further, the loan word *éland* is vowel-final where it was consonant-final in its Dutch/Afrikaans origins. This change, and the variations, require explanation.

For some antelopes, body formation appears to be crucial, such as the 'slender' form of *impala*, which shape is associated with vowel-final pronunciation, and 'heavily-built' *oryx*, which is associated with consonant-final pronunciation. Some antelopes, particularly those that graze in colder latitudes, develop thick shaggy coats, eg. *éland*, *gnou*, *nyala*, and there may be some

association between this 'hairy' covering and vowel-final pronunciation, as suggested for *bison*.

Since *dik-dik*, *gazelle* and *springbok* denote slender-framed creatures with short-haired coats, it is more likely that consonant-final pronunciation is related to 'motile' in relation to their ability to produce these extraordinary leaps. 'Motile' also seems to account for consonant-final pronunciation of the generic noun *antelope*, in relation to a unique adaptation that is directly related to movement, particularly swift darting changes of direction.

6.7.2 Snakes

The database contains a number of nouns denoting 'snake', set out in Table 6.31 below.

Table 6.31: Masculine nouns denoting 'snake'

Masculine nouns			
<i>anaconda</i>	M	'anaconda'	large (4.5 m.), non-venomous, semi-aquatic, camouflage colouration; suffocates prey
<i>aspic</i>	M	'asp'	venomous snake
<i>boa</i> ( <i>constrictor</i> )	M	'boa constrictor'	varied length up to 4 m.; non venomous; camouflage colouration (S. & C. America); docile, not prone to bite; suffocates prey; solitary, nocturnal
<i>cobra</i> syn. <i>naja</i>	M	'cobra'	highly venomous, spreads its neck into a hood to extend its height/size
<i>python</i>	M	'python'	non venomous snake of Africa, S. Asia Australia up to 20 ft. long; suffocates prey
<i>serpent</i>	M	'snake'	elongated cylindrical reptile, limbless, with smooth dry scaly non-sensitive outer covering; carnivorous; feeds sporadically; locomotion achieved by lateral undulation
<i>serpent à sonnettes</i>	M	'rattlesnake'	venomous snake that uses 'rattle' to intimidate and threaten
Feminine nouns			
<i>couleuvre</i>	F	'grass snake', 'water snake'	non-venomous European snake
<i>vipère</i>	F	'viper'	venomous European snake

The most crucial characteristic of snakes is their 'elongated' shape but, for the generic *serpent*, masculine gender assignment is suggested to relate to the absence of limbs and feet and an inability to grip (see above). Since other snakes denoted by the nouns above share these characteristics, variations in their gender assignments suggest that they may be motivated by other

attributes. In that both masculine and feminine nouns apply to 'venomous' snakes, this attribute appears unlikely to account for differences in gender assignment alluded to in the grouping of 'women, fire and dangerous things' discussed earlier in relation to Djirbal, an Australian indigenous language.

Pythons and boas are 'ambush' predators that constrict their prey by wrapping their bodies around it. Under appropriate cover they remain motionless while they wait for prey to pass by and then suddenly strike. This same approach, *pêche à l'affût*, is used by some herons and certain fish, and it is consistent in its association with masculine gender assignment. Descriptions show that other snakes such as the *cobra* respond to threat by holding their ground and building up their size in order to intimidate, rather than fleeing. Snakes can also add to a threatening posture other properties that increase the warning, such as 'rattling', etc., eg. *serpent à sonnettes*. Nouns denoting these snakes are masculine. However, these responses may expose them to danger when an opponent is more powerful, quicker, or better armed, or can work together to come from different directions, eg. 'guinea-fowl' as reported in Chapter 4.

Of the two feminine snakes, the *vipère* prefers to retreat into the undergrowth when there is any hint of danger. The *couleuvre* is equally at home on land and in the water since it is a strong swimmer, and while this snake is non-venomous and may feign death, it is able to defend itself by emitting a foul-smelling fluid powerful enough to repel any threat. This response is similar to that of musteline mammals such as *belette* (F) 'weasel', and *moufette* (F) 'skunk', mammals well-known for emitting a strong odour that repels predators without any damage to itself, and these adaptations are consistent in their association with feminine gender assignment.

These different responses of snakes to intrusion and possible threat – a wait-and-hope response in relation to prey, or attempting to repel danger by intimidation on the one hand, and immediate retreat or the ability to repel any potential threat on the other without endangering oneself, appear to be associated with and account for different masculine and feminine gender assignments respectively of nouns denoting specific snakes. These findings reflect similar findings above and in the analysis of birds (see Chapter 4).

Variations in word-final pronunciation can be accounted for by various attributes identified above. Vowel-final pronunciation may be associated with a 'spotted' or 'splodged' colouration pattern for the *anaconda*, or with the 'textured' surface of overlapping scales for *boa*, *python*, *cobra* and its synonym *naja*, consistent with other previous examples. Consonant-final pronunciation for *vipère* may be associated with motile for a creature that moves swiftly out of harm's way, and for *couleuvre*, which is equally at home on land or in the water.

### 6.7.3 Whales

A number of nouns in the corpus denote 'whale', an aquatic mammal with flippers, streamlined nearly hairless body and horizontally flattened tail whose breathing system is 'unique' in that it can blow air out through blow-holes or 'nostrils' that have 'migrated' to the top of the head. However, nouns denoting various species of whales vary in that some are masculine and others are feminine, and some have synonyms with different gender assignments all of which require an explanation. Descriptions are taken from a number of sources (including <marinebio.org>, <en.wikipedia.org>, <www.theporpoisepage.com>, 2005-2007).

Table 6.32: Aquatic mammals - whale family

Masculine nouns			Breaching	Blow-hole
<i>cachalot</i>	M	'sperm whale' with huge square head, toothed	breaching	single
<i>dauphin</i>	M	'dolphin', smaller than other whales; toothed	breaching	single
<i>épaulard</i>	M	'grampus', dolphin with blunt snout, toothed	breaching	single
<i>marsouin</i>	M	'porpoise', smallest of all whales, stouter; toothed	rarely breaching	single
<i>narval</i>	M	'narwhal', Arctic toothed dolphin with spiral tusk	does not breach	single
<i>grand rorqual</i> syn. <i>baleine bleue</i>	M	'blue whale' (rorqual) largest of all whales; 'whalebone' whale	does not breach	paired
<i>petit rorqual</i>	M	'minke whale' (rorqual); whalebone whale	does not breach	paired
<i>rorqual boréal</i>	M	'sei whale' (rorqual); whalebone whale	does not breach	paired
<i>rorqual</i>	M	'rorqual whale', fin(back) whale' (rorqual); whalebone whales	does not breach	paired

# Feminine nouns

<i>baleine bleue</i> syn. <i>grand rorqual</i>	F	'blue whale' (rorqual) largest of all whales; whalebone whale	does not breach	paired
<i>baleine franche</i>	F	'right whale', 18 m. long, rotund (more than half as wide as long; whalebone	breaching	paired
<i>jubarte</i> syn. <i>baleine à bosse</i> (F) <i>mégaptère</i> (M)	F	'humpback whale' similar to rorquals but with flippers	breaching	paired
<i>orque</i> syn. <i>épaulard</i>	F	'killer whale', unique black and white colouration; whalebone whale	breaching	single

Zoologists divide whales into those that are toothed (dolphins and porpoises) and those that have 'baleen plates' – or 'whalebone' – the numerous horny thin plates that hang from either side of the upper jaw that swing to strain food from water). Another division occurs among whales identified as *baleine* (F) 'baleen whale', since those identified by *rorqual* (M) 'rorqual whale' have a series of grooves or longitudinal folds or pleats of skin beneath the mouth that allow an enormously expanded 'mouthful'. The various species differ in body shape in that 'baleen' whales are rotund, more than half as wide as they are long (18 m.), while 'rorqual' whales have slender streamlined bodies. Yet it is the 'baleen' whales that are able to generate the force and speed required to 'breach', that is, to propel much of their bodies into the air from the water, eg. *baleine franche* (F), *jubarte* (F). The more slender 'rorquals' can only rise through the surface to the point of the 'shoulder' where the blow-holes are clear of the water's surface, eg. *narval* (M), *petit rorqual* (M), *grand rorqual* (M) and *rorqual boréal* (M).

Some whales have a single blow-hole or 'nostril' which produces a single vertical column of spray. Others, including baleen and rorqual whales, have a double blow-hole that produces two columns of spray in a V-shape. These distinctions rely on fairly close contact with these mammals and, in some cases, a degree of scientific knowledge that may not be generally available. However, even from the shore we are able to observe certain distinctions between them, in the ways they surface, and ways they expel air.

From nouns set out in Table 6.32 above, we can observe that whales that cannot 'breach', or rarely 'breach', have masculine gender assignment, eg. *narval*, *grand rorqual*, *petit rorqual*,

*rorqual boréal, marsouin*) – with one exception, *baleine bleue*, which is feminine. This counter-example is addressed below.

For those that can 'breach', finer distinctions can be made – between those with two blow-holes, eg. *baleine bleue*, *baleine franche*, *jubarte*, which are feminine, and those that with one blow-hole, eg. *cachalot*, *dauphin*, *épaulard*, which are masculine – again with one exception, the feminine noun *orque* (F). The *orque* performs spectacular 'breaching' movements but so, too, can *cachalot* (M) 'sperm whale' and *épaulard* (M) 'grampus'. If a single blow-hole is associated with masculine gender assignment, and paired blow-holes is associated with feminine gender, for the feminine *orque*, which has only one blow-hole, some other explanation is required. This noun is also addressed below.

Although in some circumstances the 'doubling up' of a particular property might be regarded as redundant and thus wasteful, for aquatic mammals the ability to expel the air they breathe is crucial. Scarred bodies of whales bear witness to the kinds of battles fought in the water. In these circumstances the lack of a second nostril might be considered less effective and even endangering since breathing is difficult, even life-threatening, when a single nostril may become impaired or blocked. These circumstances make masculine gender assignment for the non-breaching *marsouin*, and the single-nostril of the *dauphin* consistent with other creatures whose adaptations are less effective than for other like creatures.

#### 6.7.3.1 Synonyms with different gender assignments

The use of the feminine noun *baleine* to denote the *baleine bleue* (F) 'blue whale' suggests that this whale is able to breach, as for *baleine franche australe* (F) 'Southern right whale' but while it can lift itself out of the water further than other non-breaching whales, it does not breach.

However, the 'blue whale' grows to some 30 m. or more in length and can weigh as much as 180 tonnes – which dimensions make it unique as the largest living mammal. In its unique size, the use of a feminine noun makes its classification regular and consistent. It is also noted that *baleine* is described as being *de très grande taille* (LRPT, 1994:91). While this means a 'very great height' (since translations of *grande* include 'tall' and 'big' while *taille* includes 'height', in

COFED, 1985:256, 537) attention is called to an earlier discussion above concerning the nature of 'tall' and 'long' in French as the dimension that is the greatest regardless as to whether it is vertical or horizontal, while in English we use 'tall' to distinguish a dimension on a vertical plane from 'long', a dimension on a horizontal plane.

The masculine synonym for the 'blue whale', *grand rorqual*, identifies its size while its masculine gender assignment reflects that of other non-breaching whales, eg. *narwhal*, *marsouin*, etc.

The feminine noun *jubarte* denotes a breaching whale with two blow-holes which is consistent with other 'breaching' whales that also have two blow-holes. It has a feminine synonym, *baleine à bosse*, which places it alongside other breaching whales. However, it also has a masculine synonym, *mégaptère* denoting an 'enormous' creature of the deep, and part of this stem is found also in *baleinoptère* (M) 'Balaeinoptera', a scientific term that incorporates all the various whales. It can be argued that the masculine synonym, the least common term, may reflect the constraint placed on it by its weight such that it can only be supported in an aquatic environment.

#### 6.7.3.2 Counter-example – *orque* (F) 'orca'/killer whale'

An explanation is required for *orque*, a feminine noun denoting a whale that has a single blow-hole where other whales with a single blow-hole are masculine – even where they, too, have the ability to 'breach', eg. *cachalot* (M), *dauphin* (M), *épaulard* (M) since it is a less effective adaptation than two blow-holes.

However, amongst all whales the *orque* is instantly recognisable by its 'pied' black-and-white colouration. While the creation of this term as new lexical item might be regarded as a response to something being 'different', for the *orque* its pied black-and-white instantly distinguishes it from all other whales and creatures closely associated with them, such as whale-sharks, since it is uniquely a property of the *orque*. In contrast, black-and-white markings of panda are also found on the *blaireau* (M) 'badger', a bear-like creature, and thus cannot make *panda* 'unique'.



Elsewhere, as for the *frégate superbe* (F) 'magnificent frigatebird', its bright orange pouch instantly distinguishes it from all other birds. Thus, 'pied' is the salient attribute for *orque*, but its relation to feminine gender assignment is that it is 'unique'.

In regard to consonant-final pronunciation of *orque*, its robust, barrel-shaped body is capable of extraordinary 'breaching'. Previous evidence shows that a 'robust' shape is associated with consonant-final pronunciation, as is 'motile' where a creature displays an agility or outstanding capacity for movement not shared by other similar creatures. It is difficult to identify which of these two is the more salient.

The *baleine bleue* has a synonym, *grand rorqual*, that places it alongside other whales that lift only head, shoulders and blow-hole clear of the water. The different compound forms yield different word-final pronunciations. The use of a post-positional adjective and one that is vowel-final for *baleine bleue* makes it consistent with other vowel-final nouns denoting creatures that have a rough or bumpy outer layer as well as a series of grooves along the throat. Consonant-final pronunciation for *grand rorqual* is consistent with its robust, solidly build.

## 6.8 Summary and discussion – living creatures

The analysis of living creatures in the various sections above can be summarised as follows.

The phonological and morphological analysis in regard to derived terms does not reveal any regularity that might account for differences in either gender assignment or word-final pronunciation for nouns denoting other living creatures.

The analysis of the semantics of a broad range of nouns in the animal kingdom suggests that gender assignment can be accounted for by certain attributes, associated with specific masculine and feminine gender assignments – suggesting that gender assignment appears to be semantically motivated. Attributes associated with gender assignments of collective nouns, superordinate terms and loan words are summarised in §6.5 above. It is noted, however, that some of those attributes form binary oppositions, as in (9):

(9) Attributes associated with masculine gender:	Attributes associated with feminine gender
• 'captive'/'fenced in', eg. <i>harpail</i> (M) 'deer'	• 'free', 'wild', eg. <i>harpaille</i> (F) 'deer'
• 'different/unrelated', eg. <i>bétail</i> (M) 'livestock', <i>mollusque</i> (M) 'mollusc'	• 'alike/related', eg. <i>bande</i> (F) 'pack (of wolves)', <i>troupe</i> (F) 'pride'
• 'dead', eg. <i>gibier</i> (M) 'game'	• 'alive', 'living', eg. <i>faune</i> (F) 'fauna'.

These attributes are themselves straight-forward but their application can be varied according to the lexical referent – in terms of kind, matter, dimension and possibly further areas. Almost synonymous terms appear to be associated with the same gender assignments as, for instance, with 'different' or 'unrelated' that apply to masculine collective nouns while 'distinctive' appears to be salient in its application to masculine superordinate count nouns *être* (M) 'being' and *animal* (M) 'animal'. 'Constrained' can relate to 'domesticated' in its application to the collective term *attelage* (M) 'work team yoked together', but for the loan word *panda* (M) 'panda' it relates to an existence that is limited or constrained by its restrictive diet. While these attributes can account for gender assignments of many of the collective nouns and superordinate terms, other attributes are also mentioned as, for instance, an 'indefinite' kind, 'irregular' form, or a certain 'quantity' – in number rather than mass – for the collective term *essaim* (M) 'swarm' (of insects), or 'common purpose' for *meute* (F) 'pack of dogs trained for hunting', or 'common direction' for *bande* (F) 'pod of whales', or 'blood relatives' for *nichée* (F) 'nestlings', denoting members of the same brood. A certain quantity is already mentioned in relation to *vol* (M) 'flock' (of birds), and *banc* (M) 'shoal' or 'school' (of fish) in previous chapters. It is also possible that the masculine term *vol* may be used where the speaker is uncertain as to 'kind', which suggests attributes such as 'non-specific' or 'indefinite', and the feminine *volée* is used where the speaker is able to determine a 'specific' kind. These and other attributes mentioned here will be continue to be of interest in analysis of lexical fields to come.

The alternative gender assignments for the loan word *angora* (M/F) 'angora' (long-haired animal) are shown to correlate with the gender of the referent animal – masculine where the referent is masculine, eg. *lapin* (M) 'rabbit', *chat* (M) 'cat', and feminine where the referent is feminine, eg. *chèvre* (F) 'goat'. This explanation with regard to alternative gender assignments has important implications for alternative gender assignments of certain nouns denoting a human referent that are explored in Chapter 8.

Notions 'whole' or 'entire' also appear to be crucial in the meaning of *faune* (F) 'fauna'. Since 'living' can account for its feminine gender assignment, these additional attributes may be associated with consonant-final pronunciation, potential relationships that will continue to be explored. Also suggested to be associated with word-final pronunciation are contrasting movements between 'free-wheeling' and 'forward-travelling' for the vowel-final *banc* (M) 'school of fish' and consonant-final *bande* (F) 'pod' (of whales) respectively but since *bande* may also apply to a 'pack' (of wolves), other notions may be associated with word-final pronunciation of collective nouns. Other word-final pronunciation patterns are discussed further below alongside count nouns.

#### 6.8.1 Summary relating to count nouns

At a more specific level relating to 'limbless', 'footed', 'legged' and 'aerial' creatures in the database, the various summaries of nouns analysed in various groups and family sets of living things other than fish and birds suggest that attributes are associated with specific classifications, some relating to masculine gender assignment and others to feminine gender assignment.

Masculine gender assignment is found in contexts identified in (10) below:

- (10)
- 'male' of its species, eg. *bouc* (M) 'buck', *étalon* (M) 'stallion', *bélier* (M) 'ram'
  - 'male' in appearance (beard, mane, horns), eg. *gnou* (M) 'wildebeest'
  - adaptation in a less superlative form than others, eg. *écureuil* (M) 'squirrel', *chat* (M) 'cat' since tails help balance but are not prehensile
  - adaptations not exploited in the safest way or fullest extent, eg. *cheval* (M) 'horse', *zèbre* (M) 'zebra', which use speed rather than unpredictability to evade capture
  - instinct to seek safety underground, *lapin* (M) 'rabbit', *wombat* (M) 'wombat', which go to earth to evade capture but can be followed, or *hippopotame* (M) 'hippopotamus', that submerges itself in water
  - an attribute that is endangering, life-threatening, eg. *saïga* (M) 'saiga', an antelope that spends all its energy protecting its harem and starves rather than taking time to eat, or a propensity to attack rather than flee, eg. *ratel* (M) 'honey badger', or

uses intimidation to threaten, eg. *cobra* (M) 'cobra'

- domesticated, eg. *cheval* (M) 'horse', *buffle* (M) 'buffalo', *âne* (M) 'donkey', *bœuf* (M) 'cattle', *ferret* (M) 'ferret'
- different in some dimension than other similar creatures ('smaller/bigger'), eg. *chameau* (M) 'camel', *éléphant* (M) 'elephant'
- 'extinct', eg. *tarpan* (M) 'tarpan' (European breed of horse now extinct)
- 'fragile' form, eg. *moustique* (M) 'mosquito', *limaçon* (M) 'snail', *escargot* (M) 'snail'.

Feminine gender assignment is found in contexts identified in (11) below:

- (11)
- 'female', eg. *vache* (F) 'cow', *pouliche* (F) 'filly'
  - 'flat' form, eg. *planaire* (F) 'planarian (flatworm)'
  - 'free' form, eg. *amibe* (F) 'amoeba', *cellule* (F) 'cell', or
  - 'untamed' instinct, eg. *bête* (F) 'beast'
  - 'unique' among a certain kind, 'superlative' in a certain terrain
    - in colouration, eg. *orque* (F) 'killer whale', *panthère* (F) 'panther'
    - in dimension, eg. *girafe* (F) 'giraffe' (in height), *baleine bleue* (F) 'blue whale' (which encompasses both length/height)
  - adaptation that increases safety or enhances potential longevity
    - abundantly fertile, eg. *blatte* (F) 'cockroach', *souris* (F) 'mouse',
    - able to move safely in space supported by wings, eg. *abeille* (F) 'bee', *mouche* (F) 'fly', etc., or by thread, eg. *araignée* (F) 'spider'
    - able to move in leaps, eg. *jubarte* (F) 'humpback whale', *puce* (F) 'flea', *grenouille* (F) 'frog'
    - extra parts that provide grip or hold for safety, eg. *chenille* (F) 'caterpillar', *punaise* (F) 'bed-bug', *rainette* (F) 'tree frog' (suckers), *sarigue* (F) 'sarigue' (prehensile tail), or breathing, eg. *baleine* (F) 'whale', *nèpe* (F) 'water-scorpion'
    - instinct to flee from harm, eg. *vipère* (F) 'asp' (flees immediately and hides)
    - able to repel predator, eg. *belette* (F) 'weasel', *couleuvre* (F) 'grass snake', *salamandre* (F) 'salamander', *cantharide* (M) 'cantharis (beetle)', *tortue* (F) 'tortoise'/'turtle'

- nocturnal habit where other 'like' entities are 'diurnal', eg. *teigne* (F) 'moth'
- able to vary diet, or water intake, eg. *chèvre* (F) 'goat', *hyène* (F) 'hyena'

Many of these various attributes can be combined as unique or superlative adaptations that increase or enhance the potential to survive to the fullest extent possible of what would be regarded as the natural term of any one life.

In summary, masculine gender assignment appears to be associated with nouns denoting a creature that is male, or is distinctive in its comparative difference in size/age from another, or cannot benefit from an attribute otherwise associated with feminine, or has another attribute that endangers either the individual or other members of its group, or has other crucial attributes associated with masculine classification. Feminine gender appears to be associated with nouns denoting a creature that is 'female', or is 'unique'/'rare'/'superlative', or has a crucial attribute in the semantic system associated with feminine, or has an attribute that enhances the potential for longevity either of the individual or the species. Thus, except where it is associated with 'unique', feminine gender is less concerned with individual adaptations that enhance survival than to the contribution it makes to enhancing survival in ways not shared by all.

For creatures covered by the term 'bovid' (sheep, goats, cattle, oxen, antelopes, buffalo, etc.) that are typically 'horned' and 'maned' (and 'bearded' for some), these attributes also appear to be closely associated with 'male' in the animal kingdom. While other explanations may be offered for masculine gender assignments of these creatures, such as 'domesticated', or 'endangering' habits, there is a consistency between these various attributes and masculine gender – except in the presence of some attribute that enhances their survival, eg. *chèvre* (F) 'goat', which can adapt to very difficult terrains, or is 'unique', eg. *antilope* (F) 'antelope' in its ability to flex its limbs, which are associated with feminine gender. However, creatures whose adaptations come to be endangering, or are less helpful than for other similar creatures, are also associated with masculine nouns.

In their distribution among the various, any creature in this lexical field may have more than one crucial attribute, except where they are mutually exclusive, such as 'male' and 'female'. These

shared attributes in some instances may be associated with the same classification. While this make it difficult to identify that which is salient, it is unproblematic in terms of their classification. In some instances attributes are associated with different classifications and they must compete for gender assignment. Such examples include *planaire* (F) 'planarian', an aquatic flatworm which is both 'flat' and 'long/tall', and *moustique* (M) 'mosquito, which is both 'thread-like' and 'winged'. These nouns are particularly distinctive since gender assignments contrast with those otherwise anticipated from more superordinate levels. More rarely, this competition can bring about alternative gender assignments for the same noun, eg. *aigle* (M/F), *harpaill-le* (M/F) 'herd of young hinds and deer', but more commonly it is identified in synonyms that have different gender assignments, eg. *bêche de mer* (F) 'sea-cucumber', where feminine gender assignment appears to be associated with tentacles that can grip, like other living things, and *tripang* (M) 'sea-cucumber' where masculine gender assignment can be related to its constraint to the aquatic existence of this *animal marin* (LRPT, 1994:562).

The corpus also includes a single example of a creature, *angora* (M/F) 'angora', whose gender assignment is determined according to the gender of the referent animal – it is masculine when denoting the masculine *chat* (M) 'cat', and masculine *lapin* (M) 'rabbit', but it is feminine when denoting the feminine *chèvre* (F) 'goat'. Alternative gender assignments for *angora* are slightly different than alternative gender assignments for *aigle* (M/F) 'eagle'. In the case of *aigle*, changes in gender assignment are motivated by a change in context for the referent, while for *angora* changes in gender assignment are motivated by a change in the referent itself. These two examples are crucial in understanding the system of classification and gender assignment.

#### Discussion – opposition between 'life-enhancing' and 'endangering'

Evidence above and in previous chapters suggests that creatures that descend headfirst or hang upside down or travel at speed through tree-tops are associated with masculine gender, eg. *ai/unau* (M) 'sloth' that hangs head-down from branches, *écureuil* (M) 'squirrel' that scampers headfirst down, *gibbon* (M) 'gibbon', a tiny primate that can fling itself across enormous gaps at high speed, *rason* (M) 'cleaver wrasse', a fish that dives headfirst into the sand when threatened and the related *sublet* (M) 'long-snouted wrasse' that swims and sleeps head-down, *plongeon*

(M) 'loon', etc. These examples suggest that travelling at speed, height, and headfirst carry risks of falling for living creatures while rising into the air and head-up are identified with safety and freedom from harm. Even in English we pay attention to these inherent contrasts in danger or risk of speed and falling – head-first and feet-first options, in everyday expressions such as 'falling (headfirst) in love', 'falling on one's face', and the unhappy association with 'crest-fallen', in contrast to 'landing on one's feet'.

What motivating force underpins the regularity of the association of attributes 'hanging/hanging headfirst/falling' with masculine gender assignment? Other creatures also suspend themselves upside down, eg. *roussette* (F) 'fruit bat/flying fox', or hang in space, eg. *araignée* (F) 'spider, or travel at speed through tree canopies, eg. *sarigue* (F) 'opossum', but these nouns are feminine. The *araignée* is saved from any fall by its ability to produce instantaneously a fine thread that is strong enough to support its weight in space. Among the two nocturnal creatures that both hang head-down, the *chauve-souris* (M) 'bat' seeks underground or dark places in which to roost, while the *roussette* (F) 'fruit bat' roosts in the open in tall trees. The *roussette* has a built-in safety net that comes from roosting in high places, and it is feminine. It is possible that this same 'roosting in the open in high places' may be similar to one of the contexts in which *aigle* (F) 'eagle' is feminine.

In the classification of oppositions between 'life-enhancing' and 'endangering', we would more likely associate 'life-enhancing' with feminine, perhaps in an indirect link with 'female' through their ability to create new life (and, possibly, nurture it). In consequence, for a two-gender system the oppositional characteristic 'endangering' would necessarily come to be associated with masculine – without any association, direct or indirect, with 'male'. Given the contrasting semantics of *tête* (F) 'head', *crête* (F) 'summit/crest', and *pied* (M) 'foot', *bas* (M) 'bottom', *fond* (M) 'depths/furthest part', the possibility of some deictic contrast between 'head up/high' and 'head down/low' also comes into consideration. How, then, might 'front' and 'back' be classified? Their potential saliency in relation to gender assignment awaits further study. Notions suggested to be associated with word-final pronunciation are considered below.

## 6.8.2 Summary relating to word-final pronunciation

Evidence suggests that another narrow set of attributes can account for the different word-final pronunciation patterns of nouns in this lexical field. Those associated with vowel-final pronunciation include:

- 'textured', some outer covering that is 'other than smooth', eg. 'furry' *chat* (M) 'cat', 'hairy' *ai* (M) 'sloth', 'bumpy' *tortue* (F) 'tortoise'/'turtle', 'bristly' *cochon* (M) 'pig'
- 'slight' build, associated with vowel-final pronunciation, eg. *impala* (M) 'impala', *chamois* (M) 'chamois' (goat)
- 'spotted', eg. *daim* (M) 'fallow deer', *ocelot* (M) 'ocelot'
- 'smaller'/'larger' compared with another/others – in age or size, eg. *kangourou* (M) 'kangaroo', *crapaud* (M) 'toad', *éléphant* (M) 'elephant', etc.

For vowel-final creatures that are winged, eg. *papillon*, *tsé-tsé*, etc., 'slight' does not appear to be as appropriate as 'light', and it may be that 'slender', 'slight' and 'light' are related in their oppositions to various attributes associated with build that are consonant-final, such as 'rounded'/'plump', 'thickset'/'heavy'. There is some possibility of an association between 'lacking agility' and vowel-final pronunciation, eg. *tortue* (F) 'tortoise', and primates *loris* (M) 'loris' and *ai/unau* (M) 'sloth'.

Those attributes associated with consonant-final pronunciation include:

- 'other than slender', eg. *ours* (M) 'bear', *bœuf* (M) 'ox', *gorille* (M) 'gorilla', *hippopotame* (M) 'hippopotamus', *hamster* (M) 'hamster', *ours* (M) 'bear'
- 'smooth', associated with consonant-final pronunciation, eg. *grenouille* (F) 'frog', etc.
- 'motile', pertaining to movement, speed or agility, eg. *jaguar* (M) 'jaguar', *lièvre* (M) 'hare', *isard* (M) 'mountain goat', *orque* (F) 'orca'
- 'superlative' in size, eg. *baleine bleu* (F) 'blue whale', the largest living mammal
- 'striped', eg. *zèbre* (M) 'zebra', *tigre* (M) 'tiger', *protèle* (M) 'aardwolf'
- total/whole, eg. *faune* (F) 'fauna'.

There is some possibility that 'strong' is related to 'well-built' but 'strong' may be more salient in some cases, eg. the 'well-built' *buffle* (M) 'buffalo'. Some attributes form binary oppositions, eg. 'slender' and 'bulky', 'rough' and 'smooth', 'spotted' and 'striped', while for 'motile' there may be



some contrast between lacking 'agility' and extremely 'agile', as for *tortue* (F) 'hare' and *lièvre* (M) 'hare'.

Among some pairs of 'male' and 'female' of a kind, some pairs are both suffixed, eg. *chameau/elle* (M/F) 'camel'; but this is not always easy to tell, since the pair *renard/-arde* (M/F) 'male/female fox' are formed from the German name *Renart*, a masculine proper name. The feminine form *renarde* is produced by word-final voicing of the <D>, and back-formation gives us the masculine orthographic form *renard*. However, nouns vary in which of the pairs is the stem and which is suffixed, eg. *tigrel/esse* (M/F) 'tiger/tigress', where masculine noun is the stem and the feminine noun is suffixed but for *dindon/dinde* (M/F) 'turkey', *mulet/mule* (M) 'mule', the stem is formed by the feminine noun and it is the masculine form that is suffixed. Alternations in word-final pronunciation and their distributions relative to alternative gender assignments among 'male'/'female' pairs is equally interesting. Some pairs have contrasting vowel- and consonant-final pronunciations, eg. *chat/-te* (M/F) 'cat', *lapin/-ine* (M/F) 'rabbit'. Other pairs have different consonant-final pronunciations, eg. *canard/cane* (M/F) 'male/female duck', *oie* (F) 'female duck', *jars* (M) 'drake'. This area is explored in more detail in Chapter 9.

In some instances more than one attribute may be salient. In some instances equally salient attributes will be associated with the same word-final pronunciation pattern, eg. *tigre* (M) 'tiger', where 'striped', 'agile' and, potentially 'strong', are each associated with consonant-final pronunciation. It is noted that *tigre* has a word-final consonant cluster. Attributes associated with contrasting classifications must compete for word-final pronunciation, as for the obsolete consonant-final noun *coche* (F) 'sow' and the current vowel-final noun *truie* (F) 'sow', where consonant-final pronunciation associated with 'bulky' may have suggested 'smooth-skinned' for *coche*, vowel-final pronunciation cannot infer 'younger', or 'smaller' or 'slender' for a 'pig' and the more obvious bristly 'rough' skin shared by all members of this family, an attribute associated with vowel-final pronunciation. In this lexical change an older item in the lexicon with the potential to mislead is avoided by the introduction of a new term that cannot mislead.

For some loan words the original word-final pronunciation might be misleading. For instance, consonant-final pronunciation for a creature such as *wombat* is strongly associated with 'motile' as well as 'smooth'. However, the *wombat* is small, has a 'hairy' coat, and although capable of a fast turn of speed when retreating from threat into its burrow, is typically slow and cumbersome in its movement. Thus, while consonant-final pronunciation is appropriate for 'bulky', vowel-final pronunciation could never be associated with 'slender' for this 'solidly' built animal. Changes in word-final pronunciation from the original language among loan words makes an interesting area of study in itself.

Among consonant-final nouns in this domain are a number of masculine terms formed with stem of a single-syllable noun plus the masculine suffix *-ard*. In the main, these nouns are formed from feminine stems, eg. *guépard* (M) 'cheetah' formed from *guêpe* (F) 'wasp', *têtard* (M) 'tadpole' formed from *tête* (F) 'head', *brocard* (M) 'one-year-old roe-deer' from (ant.) *broque* (F) 'wood' (of antlers), but not always, eg. *broutard* (M) 'calf' formed *brout* (M) 'spring growth' (of grass). Elsewhere the suffix *-ard* is paired with *-arde* in male:female oppositions, eg. *renard/-arde* (M/F) '(male/female) fox'. However, even here there is no regularity since for paired nouns *canard/cane* (M/F) '(male/female) duck' it is only the masculine/'male' term that is suffixed. The feminine/'female' term *cane* is not. The feminine noun *poularde* (F) 'fattened pullet/young hen' (from *poule* (F) 'hen') has no masculine pair, and in the database the only other feminine noun with *-arde* word-finally denoting a living creature, *outarde* (F) 'bustard', is not formed in the same way. The different applications of these suffixes, paired or not, is an interesting one and requires further exploration.

## 6.10 Concluding remarks

This analysis does not cover every creature in the corpus to the same degree, nor every family set, particularly musteline mammals (the largest family group of mammals). However, evidence from the analysis reveals similarities within the system in its capacity to deal with birds, fish, and other animals in relationship to each other, according to a range of attributes of the various creatures. These individual expressions can be linked to narrower features in the semantic system, some of which are associated with different gender assignments, and others with

different word-final pronunciation patterns. The 'harmony', or interaction, between these two apparently independent systems in relation to alternative gender assignments and alternative suffixations for 'male' and 'female' of a kind is not fully understood at this stage.

It is considered significant that similar treatments in relation to 'pairs' of like and unlike entities occur for Arabic and Hebrew, and they may extend to other gendered languages. Other features may also be salient elsewhere, particularly among the group of Australian Aboriginal languages discussed by Harvey (1997), since most birds are in the masculine class of the various individual languages, while 'emu', the largest Australian bird, is in the feminine class – along with several other birds. It is possible that findings in this current research may have certain implications in accounting for distributions in such languages, or are currently considered 'anomalous' in relation to others in their lexical field.

## Chapter 7 Gender Assignment & Word-final Pronunciation – Plant Kingdom

### 7.0 Introduction

This category covers members of the plant kingdom, the fourth of five groups of living things which not only find some contrast with other animate entities but with inanimate entities. The analysis below includes very general terms relating to vegetable matter but at more specific levels it covers two quite different sets – woody plants, and fruits. It thus excludes annuals, rhizomes, bulbs, etc., and flowers. Nouns in the database are examined for predictability according to frequency and word-final pronunciation, and also in relation to linguistic or semantic properties or attributes of nouns themselves to determine any principles that may pertain to gender assignment. An initial exploration of distributions relating to gender assignment and word-final pronunciation is followed by an analysis of superordinate terms, collective nouns, nouns derived through various linguistic processes, and loan words, for both woody plants and fruits. Count nouns at more specific levels in these two areas are examined separately, in certain sets pertinent to the different domains. The full list of nouns used in this analysis can be found in Appendix XI.

### PART I – PLANT KINGDOM

#### 7.1 Predictability – frequency based on word-final phonology and gender assignment

The two groups that form the focus among the range of nouns in the area of living vegetable matter are 'woody plants', and 'fruit', and distributions of nouns in these two domains are examined below.

##### 7.1.1 Woody plants – distributions in gender assignment and word-final pronunciation

The corpus contains 175 nouns denoting woody plants and distributions according to gender and word final pronunciation patterns are as follows.

Table 7.1: Woody plants - distribution of nouns according to gender and word-final pronunciation

	Vowel-final	Consonant-final	Total
Masculine	96	41	137
Feminine	11	27	38
Total	107	68	175

Nearly 80% of the 175 nouns in this set are masculine and just over 20% are feminine. While these distributions are interesting they are of little assistance in relation to gender assignment in any specific case. While 90% of the vowel-final nouns are masculine and 10% are feminine, which distributions are similar to those in previous fields, distributions among consonant-final are less so since fewer than 40% are feminine.

#### 7.1.2 Fruit – distributions in gender assignment and word-final pronunciation

The database contains 96 nouns denoting fruits – covering nuts, drupes, and berries (listed in Appendix XII). Distributions relating to gender assignment and word-final pronunciation of these nouns are laid out in Table 7.2 below.

Table 7.2: Fruits – gender assignment and word-final pronunciation

	Vowel-final	Consonant-final	Total
Masculine	26	5	31
Feminine	4	61	65
Total	30	66	96

These figures are interesting in some distributions are unlike any observed previously. Nearly 70% of these nouns are feminine, which suggests that there may be some relationship between distributions and the subject matter. While the strong relationship between vowel-final pronunciation and masculine gender is consistent with figures obtained previously, for consonant-final nouns 95% are feminine and only 5% are masculine, a result that is intriguing.

Nonetheless, while above distributions suggest that most nouns denoting a woody plant are masculine and most nouns denoting a fruit are feminine, no further explanation regarding such figures can be determined. Nouns in the two different lexical fields in this set are discussed in two sets, Part I Woody Plants, and Part II, Fruits. While nouns denoting fruits are fairly straightforward, for woody plants we find certain issues similar to those encountered in the lexical fields of birds and fish.

## PART I – WOODY PLANTS

### 7.2 Background

Issues encountered in the analysis of nouns in this field include defining characteristics of the set, problems in identification of 'woody' plants and terminological issues, and one issue not previously encountered, relating to historical reclassifications in gender assignment that seem not to have occurred naturally. These areas are discussed below

#### 7.2.1 Woody plants - defining characteristics

Inclusion in the set of 'woody plants' is based on the presence of a permanent, hard, above-ground structure. This structure is typically a single column or stem, the trunk, but some woody plants may produce multiple trunks. Others may have no trunk at all, but they still have a ground-level permanent structure, a 'woody' crown. Over time these woody 'trunks' or 'crowns' begin to subdivide, forming branches, a subdivision that continues along each stem to outermost and topmost point according to individual expectations. Even among woody plants that develop trunks, subdivision into branching typically begins at some distance from the ground, but for some species it can commence at ground level. For some of these 'woody' plants, the main trunk continues as a single column to the top, subdividing into branches at regular intervals along the single column – as for pines and many conifers. For others the subdivision is so complete that the single column disappears into branching, which continues to subdivide out to the fullest extent of their growth – as for elms and many deciduous trees, but also evergreen eucalypts. These different habits affect both height and shape.

#### 7.2.2 Confusion in botanical terms

Woody plants denoting trees, shrubs and vines are analysed together as a set because of difficulties in separating them. The very same plant may be described as 'tree', 'vine' or 'shrub' – in French and in English. Descriptions of *glycine* (F) 'wisteria' identify it variously as *arbre grimpant* 'climbing tree' (LRPT, 1994:523), *plante sarmenteuse* (<atilf.atilf.fr>, 2005) 'sarmentose' (having vine-like stems in the form of runners), a 'woody climbing plant' (CED, 1986:1742), and 'perennial creeper' (Yates, 1983:204).

The various nouns denoting woody plants are also grouped together because separation according to height is difficult – not least in establishing a stable cut-off point between 'tree' (*arbre/arbuste*) and 'shrub' (*arbuste/arbrisseau*). Definitions themselves are vague, one definition of *arbre* 'tree' suggesting that it must have *une certaine hauteur* 'a certain height' (LRPT, 1994:55). In fact, among hundreds of web sites and texts covered in this work, no common standard is found for that 'certain height'. Plants appear to be identified as 'tree' at around 4 m., or 13 ft. (<[www.forestry.about.com](http://www.forestry.about.com)>, 2005) but as a 'shrub' when under 7 m. or 20 ft. (<[www.sain.nbii.org/phpqueries/shrubs.php](http://www.sain.nbii.org/phpqueries/shrubs.php)>, 2005) – an overlap that is not helpful. Maximum heights associated with certain plants also vary according to sources, eg. *arbousier* (M) 'arbutus', which in one source grows to around 12m. (<[www.les.arbres.free.fr](http://www.les.arbres.free.fr)>, 2005) but elsewhere its maximum height is given as 5-6m. (Yates, 1983:208). The *sureau* (M) 'elderberry' can reach somewhere between 2 m. and 8m. (in <[www.cravie.ac-strasbourg.fr](http://www.cravie.ac-strasbourg.fr)>, <[nature.jardin.free.fr](http://nature.jardin.free.fr)>, 2005), but also 4 m. (<[web.fccj.org](http://web.fccj.org)>, 2005), or 6 m. (<[www.ibiblio.org](http://www.ibiblio.org)>, 2005) or 4 to 10 m. (<[thierry.jouet.free.fr](http://thierry.jouet.free.fr)>, 2005). As would be expected with such variations, the *sureau* is categorised differently in different sources – as *arbre* (<[thierry.jouet.free.fr](http://thierry.jouet.free.fr)>, 2005), *arbrisseau* (LRPT, 1994:1075) and *arbuste* (<[www.cravie.ac-strasbourg.fr](http://www.cravie.ac-strasbourg.fr)>, <[nature.jardin.free.fr](http://nature.jardin.free.fr)>, 2005). Descriptions of height may also vary. For instance, the *tilleul* (M) 'linden', at 15m. (or 50 ft.), is described as a *grand arbre* 'enormous tree' (<[atilf.atilf.fr](http://atilf.atilf.fr)>, 2005). However, the taller *nyssa* (M) 'tupelo' which grows up to 20m. (or 60 ft.), is described as a *petit arbre* 'small tree' (<[www.psn3.com](http://www.psn3.com)>, 2005) – as is the considerably shorter 5m. (or 16 ft.) *myrte* (M) 'myrtle' (<[www.ag.arizona.edu/pima/gardening/aridplants](http://www.ag.arizona.edu/pima/gardening/aridplants)>, 2005). However, the first web site covers a wide range of plants of varying heights, while the second source deals mostly with (typically very tall) conifers, and the third deals with plants growing in arid regions (typically very much smaller), and their otherwise idiosyncratic use becomes understandable and effective in these specific contexts.

### 7.2.3 Terminological issues in cross-linguistic identification of plants

The same difficulties are encountered for woody plants as occurred for fish and birds – the problem of identifying specific names across different languages. This matter is crucial since properties of species within a plant genus may vary significantly. A crucial aspect of this work,

then, is the relationship between the French, English and Latin names in identifying the very same botanical item. For example, regular confusion occurs among members of the 'buckthorn' genus (*Rhamnus*), between *bourdaïne* (F) 'alder buckthorn' (*R. frangula* or *Frangula alnus*) which is deciduous but is often described as evergreen, and two other European species of 'buckthorn' that are evergreen, *nerprun* (*R. cathartica*) and (*nerprun*) *alaterne* (*R. alaternus*) (<[www.encyclopedie-universelle.com](http://www.encyclopedie-universelle.com)>, 2005). 'Buckthorns' are typically thorned, but the *bourdaïne* is not.

It is important to note that, in many cases, French nouns – particularly older French nouns – specify a variety of tree native to Europe. Today such terms may be used to cover other species not found in Europe. The noun *tremble* (M) 'European aspen' or 'common aspen' (*P. tremula*), common to colder Northern European conditions, now also denotes other species of 'aspen' which may be quite different in shape, such as 'quaking aspen' (*P. tremuloïdes*). Further, some non-European species may have properties not present in European varieties. As mentioned, *houx* (M) 'holly' is typically evergreen in Europe, but one non-European species is deciduous. However, it would still be labelled as *houx*, since it shares other properties of the 'holly'. Differences in properties between otherwise similar (particularly European) species may be sufficiently significant to provoke the coining of different French terms in the lexicon, as has occurred for the three 'buckthorns' but also for *chêne* (M) 'oak' (any *Quercus*) and *rouvre* (M) 'oak' (*Q. robur*).

#### 7.2.4 Reclassification of gender assignments – historical data

During the data collection stage, three instances came to light of changes in gender assignment for nouns denoting two tall trees, *mélèze* (M) 'larch' and *saule* (M) 'willow', and one vine, *lierre* (M) 'ivy'. These changes were identified in one source only, ATILF (<[atilf.atilf.fr](http://atilf.atilf.fr)>, 2005).

Gender reclassification does occur from time to time – as examples such as *aubépine* (F) 'hawthorn', and *minuit* (M) 'midnight' show. *Aubépine* appears first as the masculine noun *aubespın*, but by the early seventeenth century when the first dictionaries came to be published, this masculine noun appeared with a feminine alternative, *aubespine* (*Dictionnaire de*



*l'Académie française*, 1694, at <www.lib.uchicago.edu/efts/ARTFL/project/dicos>, 2005). For some centuries old dictionaries continue to provide these alternatives (although with slight simplification of pronunciation during the eighteenth century to *aubépin/aubépine*), until the point where the masculine form disappeared, leaving the feminine noun without any masculine alternative. Thus, for at least 250 years or more, we have evidence of the co-existence of alternative forms for this tree. *Minuit* (M) 'half night' is first documented (1165) as a feminine noun, *mienuit* (F), applying to the extent of time in a day over which darkness reigned. By the mid-sixteenth century it is recorded as a masculine noun. During the four hundred years between these two forms, public clocks became more common in cities and towns, and 'midnight' came to mean a precise point in time. It is not unreasonable to suggest that this advance in technology led to a gradual change in the way people viewed *minuit* – from its application to a continuous expanse of time, to a new application identifying a punctual moment in time – and that this change in meaning led to a gradual change in gender assignment. No specific date for such a change can be found, for either *minuit*, or for *aubépine*, as occurs for *mélèze* (discussed further below).

For *saule*, only from the way the information is set out can we deduce that its gender assignment was historically feminine since the only record of this change is documented in the following way:

*Le genre masc., qui est aussi celui de nombreux autres n. d'arbres,  
a remplacé le fém., att. en m. fr. et dans qq. pat.*

(Masculine gender, which is also that for numerous other names of trees, replaced feminine gender, att(ested) to in Middle French and in several 'patois'.

(<atilf.atilf.fr>, 2005, trans. M. à Beckett)

The exact meaning of this is not clear, nor is it clear whether it is the change in gender or the use of feminine that is attested to in Middle French and other 'patois'. There is insufficient evidence in examples provided to glean anything more about the circumstances surrounding this change. All that can be deduced is that some time during the Middle French period, the gender of this noun changed from feminine to masculine – certainly by the time of the earliest French dictionary, *Thresor de la langue française* (Nicot, 1606, <atilf.atilf.fr>, 2005) where *saule* is masculine. However, for a tree whose flexible stems were so highly valued that specific lengths

had different names in the same way as coins (<[www.1911encyclopedia.org/B/BA/BASKET.htm](http://www.1911encyclopedia.org/B/BA/BASKET.htm)>, 2005), it would be surprising for there not to be evidence of co-occurring masculine and feminine gender assignments over centuries as there is for *aubépin/aubépine* and *mienuit/minuit*. Future research may well produce some clarification.

Two other nouns that display these changes in gender assignment are *mélèze* (M) 'larch' and *lierre* (M) 'ivy', and a little more information is made available from documentary evidence. Fourteenth century writings attest to feminine gender assignment for *mélèze*, and it continued as feminine during the period 1552 to 1771 until its apparent reassignment to masculine in 1765. This precise date is itself interesting since it is so very different from *aubépine* and *minuit* but is perhaps more like *saule*. Even more interesting is that feminine gender assignment continues in documents until the end of nineteenth century, which suggests that this change had some difficulty in becoming accepted. In fact, even today there remains a level of resistance to this change amongst regional speakers of the Dauphiné since some speakers continue to use feminine gender assignment (<[atilf.atilf.fr](http://atilf.atilf.fr)>, 2005).

Alongside changes in orthography for *lierre* (M) 'ivy', ATILF provides considerable documentary evidence of historical changes in gender assignment (<[atilf.atilf.fr](http://atilf.atilf.fr)>, 2005). This noun appears with the form *ierre* in the twelfth century as a feminine noun, and in the 1300s this form absorbs the definite article and becomes *lierre*, but is still feminine. However, by the early seventeenth century *lierre* appears with masculine gender assignment. This change is explained in the following way:

... le changement de genre peut s'expliquer par assimilation au genre gén. masc. des noms d'arbres et d'arbustes en fr.

'the change in gender (for *lierre*) can be explained by its incorporation to the general masculine classification of names of trees and shrubs in French'

(<[atilf.atilf.fr](http://atilf.atilf.fr)>, 2005) (trans M. à Beckett)

As the feminine tree *aubépine* and other feminine trees and shrubs show, this statement is not entirely correct. Beyond these limited references, no other information has been brought to light regarding such 'regularisations' in sources currently available.

The two hundred years from the fourteenth to sixteenth centuries were an extraordinarily troubled époque in socio-political terms, with war, the plague and famine all contributing to the unrest, and the French language itself was undergoing a transitional phase. From various histories of the French language we know that gender assignments of certain French nouns were 'settled' by François de Malherbe (1555-1628), the official poet at the court of Henry IV, king of France from 1589-1610, and this continued during the period that followed under the reign of Louis XIII while his mother, Maria de' Médici, was regent. It is well acknowledged that during the sixteenth century religious clerks and scribes had become very influential within the State apparatus. Their admiration of Latin and its masterpieces led them to covet the same glory for French, particularly the spoken language which was considered 'rough' and much scorned (<[www.tfq.ulaval.ca/axl/francophonie/HIST\\_FR\\_s4\\_Moyen-francais.htm](http://www.tfq.ulaval.ca/axl/francophonie/HIST_FR_s4_Moyen-francais.htm)>), 2004). As grammarians, these religious clerks and scribes were tasked by the king to determine basic rules and characteristics of French through an analysis of spoken and written language to give it the patina Latin and the glory it once had. These Renaissance grammarians used Latin, the language in which they had been trained, as the basis for of their analysis and are recorded as having been 'somewhat uneasy' when they realised that French had only two genders (Rickard, 1974:91). During the seventeenth century this control and regularisation of the language increased (Rickard, 1974:96, 100, <[www.tfq.ulaval.ca/axl/francophonie/HIST\\_FR\\_s4\\_Moyen-francais.htm](http://www.tfq.ulaval.ca/axl/francophonie/HIST_FR_s4_Moyen-francais.htm)>, 2004).

It would be interesting to examine other changes in gender assignment they were able to bring about. This is not to claim that all reclassifications among plant names were imposed by such a regulatory body. However, these examples highlight the willingness and capacity of the state, through dictionary-makers, to enforce changes in gender assignment (albeit in one direction) and the wide-spread acceptance that authorities can obtain in the broader community (as well as pockets of resistance that continue). These examples make it difficult to argue that gender assignment is inviolate, that it cannot be altered or find acceptance of such alterations. However, regardless of how changes have come about, meaningful explanations are required for all gender assignments, including historical feminine gender assignment for the various nouns in the corpus.

### 7.3 Analysis of superordinate terms, collective nouns and loan words

The analysis below relating to plant life follows a similar pattern to that of earlier chapters of other living things (birds, fish, etc.), covering collective nouns, superordinate nouns, hyponyms, and loan words to gather any significant information that might allow us to account for the various gender assignments and word-final pronunciation patterns. These terms relate to woody plants and fruits in particular.

#### 7.3.1 Collective nouns

The database contains a number of collective nouns denoting entities in the plant world. They are set out in Tables in their different gender assignments. Table 7.3 covers masculine collective nouns.

Table 7.3: Collective nouns relating to plants - masculine

<i>bocage</i>	M	'weald'	mixture of open fields and areas planted with trees (LRPT, 1994:116)
<i>bois</i>	M	'wood/s'	smaller than <i>forêt</i> , terrain with closely packed trees forming a wooded area (LRPT, 1994:117)
<i>bosquet</i>	M	'clump of trees', 'spinney', 'grove'	<i>petit bois</i> 'small wood', planted for pleasure, ornamentation (LRPT, 1994:121)
<i>buisson</i>	M	'bush', 'shrubbery'	various shrubs 'clumped' together (LRPT, 1994:138)
<i>fagotin</i>	M	'faggot' (bunch of small twigs)'	small pieces of different-sized wood tied together, esp. to be used as fuel (<www.atilf.fr>, 2005)
<i>fourré</i>	M	'brake', 'thicket'	dense growth of small trees (LRPT, 1994:490),(<atilf.atilf.fr>, 2005)
<i>maquis</i>	M	'bush', 'jungle'	shrubby thick vegetation specific to the Mediterranean region (LRPT, 1994:697)
<i>raisin</i>	M	'fruit of any vine', 'grapes' (on a bunch)	collective, ensemble of small berry-like fruits gathered together in bunches (LRPT, 1994:932)
<i>taillis</i>	M	'copse', 'coppice'	wooded area of small trees or bushes, esp. where trimmed back to stumps for continual supply of poles, firewood (LRPT, 1994:1087)
<i>verger</i>	M	'orchard'	area planted with fruit trees (LRPT, 1994:1166)

The explanatory information for *verger*, *taillis* and others amongst this set point to a limited or

restricted area in terms of size. However, for these terms denoting trees what seems more crucial is that there is no identification of 'kind'; instead, meanings focus on a single shared attribute such as 'fruiting' (*verger*), 'small in height' (*fourré*, *maquis*), 'small in number' (*bosquet*), 'small in area' (*bois*) or 'cut-back' (*taillis*). While there is a potential association here between 'indefinite' kind and masculine gender assignment, for *verger* and possibly *forêt* there is some implication of 'variety', and for *bosquet* there is some indication as to 'quantity'. The association between these attributes and masculine gender assignment is consistent with collective terms and count nouns in previous chapters for which 'indefinite', or 'various', or 'quantity' also appear to be salient – collective terms such as *banc* (M) 'school of fish', *bétail* (M) 'livestock', *attelage* (M) 'team of beasts harnessed together', and the plural count noun *camelidés* (M) 'camel family' which are also masculine.

The term *raisin* has a collective sense 'bunch' where it applies to a number of berries massed together on the same stem or connected stems. As a 'quantity' its masculine gender assignment is consistent with previous examples, such as *essaim* (M) 'swarm', a quantity of insects, and *vol* (M) 'flock', a quantity of birds. It is also possible that 'quantity' may be salient for *fagotin* (M) as a number of small sticks tied together, which noun is also masculine. This potential association of 'quantity' and masculine gender assignment will continue to be explored. The noun *raisin* is also further discussed below in its application to a single berry, the 'grape'.

One masculine collective noun in Table 7.3 pertains to a mixture of different kinds – *bocage*, which relates to a combination of open fields and wooded areas – quite different habitats. The meaning of *buisson* 'shrubbery' planted for pleasure suggests that the attribute 'various' may be more salient. Masculine gender assignment for nouns with these attributes is consistent with collective nouns in other lexical fields where 'different', 'diverse' or 'various' are salient in relation to kind, eg. *troupeau* (M) 'farm animals' identified in Chapter 6. The semantic link between 'different', 'diverse' and 'various' allows nuances of meaning as the nature of entities within the collective term changes.

Differences in word-final pronunciation patterns for these masculine nouns await explanation.

Table 7.4 below contains a very much larger group of feminine collective nouns.

Table 7.4: Collective nouns relating to plants - feminine

<i>aulnaie</i>	F	'alder plantation'	planted with alder trees
<i>botte</i>	F	'bale' (of hay), 'bundle'	same kind (stems of a specific plant, such as hay, asparagus, radish, cut and bound together, LRPT, 1994:121)
<i>boulaie</i>	F	'birch plantation'	planted with birch trees
<i>cacaoyère/ cacaotière</i>	F	'cocoa-tree plantation'	planted with cocoa trees
<i>cerisaie</i>	F	'cherry orchard'	planted with cherry trees
<i>châtaigneraie</i>	F	'chestnut grove'	planted with chestnut trees
<i>chênaie</i>	F	'oak forest'	planted with oak trees
<i>flore</i>	F	'flora'	all and any plant life of a given location (LRPT, 1994:478)
<i>fougèraie</i>	F	'fern-brake', 'bracken'	planted with ferns
<i>forêt</i>	F	'forest'	collective of large trees (LRPT, 1994:484)
<i>fraiseraie/ fraisière</i>	F	'strawberry bed'	planted with strawberries
<i>frênaie</i>	F	'ash grove'	planted with ash trees
<i>futaie</i>	F	'mature forest'	old forest growth
<i>gerbe</i>	F	'sheaf of wheat, cut cereal'	plant stems cut and laid in same direction, LRPT, 1994:518)
<i>mangrove</i>	F	'mangrove swamp'	dense thicket that spreads along an entire tropical coastline
<i>meule</i>	F	'round bale'	large amount of hay collected together, traditionally in the form of a wheel (LRPT, 1994:723)
<i>olivaie,-eraie</i>	F	'olive-grove'	planted with olive trees
<i>pelouse</i>	F	'lawn'	ground covered with grass (LRPT, 1994:826)
<i>peupleraie</i>	F	'poplar grove'	planted with poplars
<i>pinède</i>	F	'pinetum'	planted with pine trees
<i>pineraie</i>		'pine or fir plantation'	planted with pines
<i>roseraie</i>	F	'rose-garden'	planted with roses
<i>saulaie (orig. saussaie)</i>	F	'willow grove'	area planted with willows
<i>saulée</i>	F	'row of willows'	row of willows
<i>tremblaie</i>	F	'aspen grove'	area planted with aspens

Many of these collectives in Table 7.4 relate to their composition as the 'same' kind, from

*aulnaie* 'alders', to *pinède* and *pineraie* both of which relate to 'pine trees', and *tremblaie* 'aspen'

trees – even *gerbe* 'sheaf', composed of stems cut and laid in the same direction. These examples suggest that collectives of individuals of the 'same' kind have feminine gender assignment. While the masculine noun *essaim* also denotes a composition of the same kind of creatures, this is not the focus of the meaning since 'same' kind is a given – the more salient attribute is its composition not as a single mass but a considerable number of tiny individuals.

The contrast between 'same' and 'mixed' can be observed in contrasting meanings and gender assignments of *botte* (F) 'bunch' of the same kind of flower, and the masculine term *bouquet* (M) 'bouquet', a bunch composed of 'diverse' kinds of flowers (and possibly greenery). These contrasting attributes 'same' and 'diverse' or 'different' appear to be consistent in their association with contrasting feminine and masculine gender assignments.

For a collective noun such as *flore* (F) 'flora', which covers the entirety of plants living within a certain area, more crucial than 'mixed' (a given) or 'limited' are other notions, 'living' and 'entire'. The nature of its meaning suggests *flore* would only apply to plants that are 'alive'. This same attribute is also crucial for *faune* (F) 'fauna' as a term that covers the fullest extent of animal life in a certain area, and both nouns have feminine gender assignment and consonant-final pronunciation. Given the mounting evidence of an association between 'living' and feminine gender, it is possible that 'entire/whole' may be associated with consonant-final pronunciation of *flore*. This attribute will be further explored in relation to collective nouns denoting human referents in the following chapter (Chapter 8).

Among the feminine collective terms above other attributes may also be salient, such as 'spreading' for *mangrove*, the sub-tropical species that spreads in a continuous way along the shoreline since its roots can survive in salt water. The notion 'spreading in a continuous way' is mentioned in relation to certain birds involved in a continuous process of moving out to colonise new settlements which process is repeated over and over, eg. *tourterelle turque* (F) 'Eurasian collared dove' (see Chapter 4), even *saulée* (F) 'row of willows' which forms a continuous line along the banks of rivers. In each case this attribute is associated with feminine gender assignment although the principle that underpins that association is not yet transparent.

The original meaning of the noun *meule* came from a flat block of stone for grinding cereals to a powder. It then came to designate the massive flat round grindstone block for grinding larger amounts of cereals, olives, etc. In its association with *meule* as a bail of hay, it seems more likely that it relates to a form created in a continuous roll not unlike *roue* (F) 'wheel', which is also feminine. The English term 'bale' in the Australian vernacular originally applied to large rectangular blocks of wheat/hay, a form in Australia that is fast disappearing as the recent introduction of forming cut grass into a continuous roll spreads.

### 7.3.2 Superordinate nouns

The database contains a number of superordinate terms relating to vegetable and plant matter. Superordinate nouns in this lexical field include generic or lay terms, several scientific terms, and botanical terms in everyday use. They are set out in Table 7.5 below.

Table 7.5: General terms for plant life

<i>arbre</i>	M	'tree'	woody plant with single-stemmed trunk reaching some height (LRPT, 1994:55); generally 6 m/20ft. plus (<www.encyclopedia.thefreedictionary.com>, 2005)
<i>arbrisseau</i>	M	'shrub' (smaller single-trunked tree)	small woody plant branching from the base (LRPT, 1994:55)
<i>arbuste</i>	M	'shrub', 'bush', smaller (single/multi-trunked) tree	small tree with <i>tronc bien différencié</i> 'clearly differentiated trunk'
<i>champignon</i>	M	'mushroom' (plant without leaves, base covered with cap)	small spore-producing; has no leaves, grows from underground mycelium; some are deadly (LRPT, 1986:172)
<i>courge</i>	F	'gourd'	any fruit of the genus <i>Cucurbita</i> that has a hard, rounded shell, esp <i>citrouille</i> and <i>potiron</i>
<i>épine</i>	F	'thorn-bush'	tree or shrub with branches with prickles or thorns (LRPT, 1994:405)
<i>herbe</i>	F	'small, supple, non-woody plant.'	non-woody plant 'whose aerial parts die off each year' (LRPT, 1994:555)
<i>liane</i>	F	'liana'	any tropical vine with a long, thin flexible stems; climbs by leaning
<i>légume</i>	M	'plant having part used in cooking'	<i>plante potagère</i> 'comestible plant', of which certain parts are edible (particularly having shells or pods) (LRPT, 1994:658)



<i>mousse</i>	F	'moss'	<i>plante rase et douce</i> 'close-cropped, soft plant, generally green without flowers that forms a dense mat (LRPT, 1985:747, COD, 1986:1003)
<i>plante</i>	F	'plant'	living structure made of vegetable matter (comprising root, stem and leaves (LRPT, 1994:857)
<i>ronce</i>	F	'bramble'	any thorny shrub ( <i>arbuste</i> ) with edible fruits (LRPT, 1994:995)
<i>rave</i>	F	'root vegetable'	any root vegetable or plant
<i>vigne</i>	F	'(grape)vine'	climbing shrub with long flexible stems in form of runners, with tendrils to grip support structures; fruits in bunches (LRPT, 1994:1175)

The most general of these nouns is *plante* (F) 'plant'. The status of *plante* as a 'living' entity is less obvious than it is for *animal* where constant movement asserts 'alive'. As for *flore* in its application to entities that are 'alive' it seems equally crucial for *plante* and both nouns are feminine. The term *plante* also has a more specific application to small-sized plants that have stems, roots and leaves (and thus excludes *champignon*, *mousse*, etc.), such as grasses, cacti (LRPT, 1994:857). It might also be argued that 'plant' in this sense apply to entities that are dead yet are still capable of generating new life – from seed, branches, even dead/dying trunks. It is noted that neither grasses nor cacti are 'woody', and the contrast between attributes 'woody' and 'non-woody' is reflected in contrasting masculine and feminine assignments. In these circumstances 'living/alive' seems to be less of a precondition; as crucial, perhaps, is the ability to generate new life – for which feminine gender assignment is still regular and predictable. The shared association between these attributes 'alive', 'non-woody' and 'capable of generating new life' and feminine gender demonstrates considerable consistency within the classification system.

#### Masculine nouns

The masculine term *arbre* applies to plants with long woody trunks that commence branching at a point well above the ground. These living entities are able to survive from season to season since new growth becomes dense and rigid as it builds up year after year, the hardness providing both strength and rigidity. This strong, dense, hard matter might otherwise suggest 'inanimate', but the 'upright' orientation of these tall entities shows that they are living since they

fall onto their sides when they die, like fish. For such entities 'living' can be taken as a given, and since 'long' does not preclude a side-on orientation the more salient attribute is arguably this 'upright' orientation.

The term *arbuste* denotes a 'small tree'. Such a combination would not be expected to have any connection with 'diminutive', particularly since 'small trees' can still produce a growth that makes them taller than humans. However, they have the same strong, dense, rigid woodiness as *arbre*. Most such entities to which this term applies are single-trunked, but in practice *arbuste* can also apply to multi-stemmed plants since it is more a horticultural distinction than a strict botanical category. Although *arbuste* typically applies to any tree less than 20 ft., an *arbuste* may be almost twice this size. For instance, the *osage oranger* (M) 'osage orange' at 40 ft. is described as *arbre ou arbuste* 'tree or shrub', while the 30 ft. or more *houx* (M) 'holly' is an *arbuste* (<nature.jardin.free.fr>, 2005), a plant that in English we call a 'bush', but both *osage oranger* and *houx* reach heights that might well suggest *arbre*. A low-growing shrub such as *romarin* (M) 'rosemary' is also an *arbuste* – which suggests that it is not height that is crucial but hardness since *arbuste* cannot apply to smaller woody plants that are 'herbaceous'. It seems plausible to argue that *arbuste* applies to plants with a trunk or trunks that produce 'hard' or 'rigid' growth out to their furthest extent. These notions 'hard' and 'rigid' have not previously been identified in relation to masculine gender and will continue to be of interest.

The term *arbrisseau* (M) 'bush/shrub' applies to small woody plants *ramifié dès la base* 'subdivided from the base'. But not all such plants are 'woody' to the furthest extent of their branching in the same way as for *arbre* and *arbuste* since outermost growth for some is herbaceous and dies off at the end of the growing season. However, regardless of differences in these characteristics, *arbrisseau* applies to any plant with a permanent above-ground trunk that is very much 'smaller' in height than those denoted by either *arbre* or *arbuste*. As with other such examples relating to a difference in comparative size, masculine gender assignment and vowel-final pronunciation for *arbrisseau* are regular and predictable.

The English term 'champignon' denotes a specific variety of edible mushrooms (such as

*Marasmius oreades*, having gills on the underside of the cap) (COD, 1986:263) while the French term *champignon* (M) 'fungus' or 'mushroom' has a more superordinate role in its application to plants that lack leaves, true stems and roots. The sheer variety of forms, shapes and textures of such plants is extraordinary. They grow from an underground spore which restricts their growth to damp, dark or very shaded environments, particularly underground habitats. These plants are low-growing, small and soft, easily bruised or broken – even the larger horse-mushrooms and more solid oyster mushrooms. While there may be a causal link between these attributes, previous evidence shows that 'varied' form and 'constrained' to a specific environment are associated with masculine gender; other attributes, such as 'smaller' in size, 'textured' and 'fragile' are suggested to be associated with vowel-final pronunciation. It is not possible to identify which is salient in the classifications of either domain for *champignon*.

The masculine term *légume* applies to annual vegetable plants that produce fruit in pods of various sizes and shapes, even on the one plant. It distinguishes them from other other annual vegetable plants whose fruit have very different forms. This attribute 'various' is not unlike 'different', an attribute suggested in earlier chapters to be associated with masculine gender assignment, eg. *camélidés* (M) 'various members of the camel family'.

#### Feminine nouns

Feminine nouns *liane* and *vigne* identify plants with long flexible stems. Those of the *liane* are able to grow to extraordinary heights in their effort to reach sunlight at the top of the forest canopy by leaning or lying against strong and ever-higher branches in their forest environment. The slender, flexible stems of a *vigne* are able to grow upwards leaning but their growth is supported by tendrils, thread-like runners that seek and then twist tightly around the nearest support structure. Where no such support is found stems lie along the ground where they root to form new plants whose stems continue this process. Amongst these extraordinary attributes there may be one that is salient in relation to feminine gender assignment. These nouns are discussed with other vines, below. However, the contrast in form between the solid, inflexible stems of trees and shrubs and the flexible stems of the 'liana' and 'vine' find contrasting associations with masculine and feminine gender assignments respectively.

The feminine term *rave* applies to *plantes potagères* or 'kitchen vegetables', plants grown for their edible roots. They come in various shapes, eg. the 'rounded' *betterave* (F) 'beetroot', 'irregular' and 'bumpy' *céleri-rave* (M) 'celeriac', *radis* (M) 'radish' and *raifort* (M) 'horse-radish', where form depends on kind. *Rave* applies particularly to the part that grows underground, a location that is more commonly associated with masculine gender assignment, particularly for fish and animals that bury themselves underground. For matter that is not inert, the inability to move might suggest that it is 'dead', it is possible that feminine gender for this noun relates to 'living'.

Feminine nouns *ronce* and *épine* also designate woody plants, but while stems of plants denoted by *épine* are solid and rigid those of the *ronce* are flexible. However, both nouns apply to plants that are 'thorned'. For living entities that cannot move away from harm, such an adaptation provides considerable protection against predators since few grazing animals are equipped to cope with thorns and will choose easier options. This ability to repel predators also occurs among members of the animal kingdom though the means may vary – such as the foul odour for *belette* (F) 'weasel' and *couleuvre* (F) 'grass snake', corrosive acid covering of *salamandre* (F) 'salamander' and *fourmi* (F) 'ant', the thick shell of the *tortue* (F) 'tortoise'/'turtle'. These nouns are consistent in their association with feminine gender assignment, the same feminine classification as creatures able to flee from danger, eg. *orphie* (F) 'garfish'. It is interesting to note that the same associations occur among similar nouns in Australian Aboriginal languages such as Dyirbal (Dixon, 1972), although Dixon offers a very different explanation for those in the feminine set, considering them 'harmful'. A similar explanation forms part of Harvey's (1997:35) schema to account for contrasting distributions of flora and fauna in Ngan'gityemerri, an Australian Aboriginal language of the Northern Territory. Attributes 'harmful/pain-inflicting' are associated with feminine and 'not harmful' is associated with masculine. Those explanations and the very different principles argued to relate to contrasting distributions in French are discussed further in Chapter 9, Discussion, Conclusions and Theoretical Implications.

The noun *mousse* (F) 'moss' designates a plant that spreads across damp undisturbed surfaces.

While it forms a dense carpet, it is both 'soft' and 'smooth' to touch, and any of these attributes may also be associated with its classifications. The attribute 'soft' provides a binary opposition with 'hard', and the association between 'soft' and feminine gender contrasts with the association between 'hard' and masculine gender assignment for *arbuste*. Word-final pronunciations among the various nouns are examined below.

These attributes and their various associations will continue to be of interest in the analysis of other plants below.

### Word-final pronunciation

In relation to word-final pronunciation for general plant terms in Table 7.5, only two nouns have vowel-final pronunciation – *arbrisseau* (M) 'bush/'shrub', and *champignon* (M) 'fungus', and remaining nouns are consonant-final. The term *arbrisseau* is formed in a similar way to other 'diminutive' nouns denoting the 'young' of various kinds, a stem that reflects the entity with which it is compared, in this case *arbr-*, plus a vowel-final suffix, *-isseau*. The definition of *arbrisseau* suggests that it applies to plants whose potential height is relatively 'small' (LRPT, 1994:55) rather than to 'sapling', a 'young' tree (*jeune arbre*) – that is, not necessarily young, and not precisely 'small', just 'smaller' in comparison with any *arbre*.

The other vowel-final term, *champignon* does not find a ready comparison with any specific plant kind, although its form is 'tiny' in comparison with many other plants. Some fungi are edible while others are not. It is unlikely that this combination of mutually exclusive attributes 'resolves' to vowel-final pronunciation at this superordinate level. Fungi are renowned for two other attributes, their 'light' and 'delicate' structure, two attributes that are previously suggested to be associated with vowel-final pronunciation. It is not possible to identify which of the two is salient although it can be argued that since 'small' is self-evident and can be taken as a given, 'edible/inedible' is more pertinent than 'small'.

Consonant-final pronunciation for *legume*, *rave* and *courge* may relate to 'edible' since *légume* designates only those plants with 'pod' that is edible. It is also possible that consonant-final

pronunciation for *herbe* is also related to 'edible', in some cases for humans and in other cases for animals. The velvety 'smooth' surface of *mousse* may be associated with consonant-final pronunciation in much the same way as the 'smooth' scaleless slimy surface of 'eels' all three of which have consonant-final pronunciation (see Chapter 5). Although the dictionary definition of *plante* emphasises a contrast in size with *arbre* (M) 'tree', it is highly unlikely for 'diminutive' to find any association with consonant-final pronunciation in this case. Since *plante* extends to the whole – roots, stem and leaves – the possibility of some association between 'whole' and consonant-final pronunciation can be considered. It is equally possible that *arbre* and *arbuste* also pertain to the whole – roots, stems and leaves, but they are also extremely strong and these attributes may be associated with consonant-final pronunciation of nouns at this general level of meaning. These attributes seem less pertinent for the more specific term *épine*. A habit of any *épine* that makes it such a pest is its branching which sends up long arched canes with recurved thorns that weave their way through other plants. Once it takes hold it forms a tangled mass of stems, making it very difficult to remove and stems that touch the ground can take root, creating new plants and colonising new fields in an endless repetition – a habit shared by the *ronce* and *vigne*. The precise nature any association between such a habit and consonant-final pronunciation is not yet clear and is discussed further below alongside more specific terms.

### 7.3.3 Botanical terms

Some superordinate nouns in the database are botanical or scientific terms and their gender assignments also require explanation. They include the following.

Table 7.6: Botanical or scientific superordinate terms

<i>dicotylédones</i>	F	'dicotyledon'	class of flowering plants having two embryonic seed leaves (most trees, shrubs, and many herbaceous plants) (LRPT, 1994:322)
<i>graminée</i>	F	'gramineous plant', 'grass'	any member of the grass family (COFED, 1985:256)
<i>légumineuse</i>	F	'legume'	plant whose fruit is a pod (LRPT, 1994:658)

In each case the noun applies to a whole class of plants that share the same reproductive system. It is possible that the association with feminine gender may relate to this focus on the means of reproduction since it is typically associated with female, in which connection feminine gender

assignment would not be unexpected. However, it may be that all members share the same feature, and there is considerable evidence of an association between 'same' and feminine gender. Support also comes from their contrast with other similar superordinate terms in previous chapters, such as *camelidés* (M) 'camel family', a masculine superordinate term that applies to various camel-like mammals not all of which are humped; there is no requirement to share the feature that the stem *camel-* would suggest (see Chapter 6).

Though the above analysis relate to only three examples, they provide evidence of a breadth of application of these notions not only to members of the animal kingdom but to plant life as well.

### 7.3.4 Loan words – trees

The database contains many loan words denoting trees and they are discussed below.

Table 7.7: Loan words denoting 'tree'

<i>acajou</i>	M	'mahogany' (tree), 'acajou'	18th century Portuguese from Amer-Indian language, Tupi ( <i>acajú</i> ) (LRPT, 1994:6, CED, 1986:7)
<i>balata</i>	M	'balata' (tropical American tree)	American Spanish, of Caribbean origin (CED, 1986:114)
<i>balsa</i>	M	'balsa tree' (tropical American tree)	from Spanish (18th century) (CED, 1986:116)
<i>banyan</i>	M	'banyan' (fig tree)	Indian, from Hindi (CED, 1986:120)
<i>baobab</i>	M	'baobab'	Arabic (LRPT, 1994:95)
<i>calambac</i>	M	'aloes- or eagle-wood'	from Malay (<atilf.atilf.fr>, 2005)
<i>catalpa</i>	M	'catalpa'	from Cherokee (<www.plantifolia.com>, 2005)
<i>ginkgo</i> ( <i>bilobée</i> )	M	'ginkgo/gingko', 'maidenhair tree'	from Japanese <i>ginkyo</i> (CED, 1986:642)
<i>jacaranda</i>	M	'jacaranda'	Tupi-Guarani, through Portuguese (LRPT, 1994:629)
<i>kumquat</i>	M	'kumquat tree'	from Cantonese (LRPT, 1994:646)
<i>liquidambar</i>	M	'liquidambar', 'copalm', 'sweet gum'	Spanish (from translation of New Latin text, <atilf.atilf.fr>, 2005)
<i>luffa</i>	M	'luffa', 'dishcloth gourd'	Arabic, 19th century (LRPT, 1994:677, COD, 1986:906)
<i>mahaleb</i>	M	'wild cherry tree'	Arabic
<i>manioc</i>	M	'manioc'	from Tupi-Guarani, (Amer-Indian, Brazil) (LRPT, 1994:695)

<i>pippal</i>	M	'bhodi'	from Bengali or Nepali (<www.srimahabodhiya.lk, 2005)
<i>sassafras</i>	M	'sassafras'	16th C, Spanish (LRPT, 1994:1012)
<i>teck</i>	M	'teak'	1614, from Tamil, Malay <i>tékka</i> , via Portuguese (<atilf.atilf.fr>, 2005)
<i>tonca</i>	M	'tonka-bean tree'	from Tupi (COD, 1986:1603)
<i>tsuga</i>	M	'hemlock' (tree)	Japanese, 19th century (<atilf.atilf.fr>, 2005)

All loan words in the database denoting 'tree' are masculine regardless of differences in word-final pronunciation patterns, eg. the vowel-final *luffa* and consonant-final *manioc*, *mahaleb*, etc. Evidence from the analysis of loan words in the previous chapter, in particular, suggests that gender assignment of loan words entering the French lexicon appears to be based on the same semantic principles as for other nouns in the lexicon. For these nouns denoting a specific kind of 'tree', the consistency of masculine gender assignment may be associated with the same 'hard' matter or 'upright' form present for both *arbre* (M) 'tree' and *arbuste* (M) 'smaller tree/shrub'. At this stage it is unclear which of these attributes is the most salient and they will continue to be of explored in the detailed analysis of other count nouns denoting specific 'woody' plants.

### 7.3.5 Nouns formed by extension and compounding

A number of nouns in the database denoting trees, shrubs and woody vines are coined via extension or by compounding using pre-existing nouns. They are set out in Table 7.8 below.

Table 7.8: Trees, shrubs and vines – nouns formed by extension, compounding

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Masculine nouns			
<i>bois-blanc</i>	M	'sumaruba', 'marupa'	from <i>bois</i> (M) 'wood'
<i>bois d'Inde</i>	M	'Pimenta racemosa/dioicia'	from <i>bois</i> (M) 'wood'
<i>bonnet d'évêque</i>	M	'spindle-tree'	from <i>bonnet</i> (M) 'cap (syn. for <i>fusain</i> )
<i>chèvrefeuille</i>	M	'honeysuckle'	from <i>chèvre</i> (F) 'goat' plus <i>feuille</i> (F) 'leaf'
<i>cyprés de Provence</i>	M	'Mediterranean cypress' ( <i>C. sempervirens</i> )	from <i>cyprés</i> (M)
<i>libocèdre</i>	M	'incense cedar'	from <i>cèdre</i>
<i>mouillefer</i>	M	'false holly'	from <i>mouill-</i> 'damp' plus <i>fer</i> 'iron'
<i>pin pignon</i>	M	'Austrian pine'	from <i>pin</i> (M)



<i>pois doux</i>	M	'ice-cream bean tree'	from <i>pois</i> (M) 'pea'
Feminine nouns			
<i>airelle</i>	F	'mountainberry plant'	from <i>airelle</i> (F) 'bilberry'
<i>étoile de Bethléem</i>	F	'potato vine' (jasmine)	from <i>étoile</i> (F) 'star'
<i>sauterelle noire</i>	F	'honey locust tree'	from <i>sauterelle</i> (F) 'locust'
<i>vigne vierge</i>	F	'Virginia creeper'	from <i>vigne</i> (F) plus <i>vierge</i> (F) 'virgin', 'maid'

These examples show that gender assignment for nouns formed via linguistic processes do not always follow the same gender assignment in their extension or compounding, eg. two feminine nouns *chèvre* and *feuille* that form the masculine compound noun *chèvrefeuille*.

Given the kinds of entities specified by these nouns, we can observe that all but one of the nouns denoting an entity that is 'upright', 'hard' and has 'rigid' branching is masculine, eg. *libocèdre*, *mouillefer*, and the 20 m. or more *pois doux* (<[www.hear.org/pier/species/inga\\_edulis.htm](http://www.hear.org/pier/species/inga_edulis.htm)>, 2005). This association between masculine gender and attributes 'hard' and 'upright' growth and 'rigid' branching can be contrasted with the association between feminine gender and ground cover or recumbent vine-like woody plants with their 'fleshy' or flexible stems, eg. *airelle rouge*, *étoile de Bethléem*, *vigne vierge*.

However, amongst the feminine nouns is the extraordinary *sauterelle noire*, a counter-example which denotes a tree of considerable size which grows to 25 m. (80 ft.) that might otherwise be associated with masculine gender assignment. It has one very striking feature – large, purple-brown, three-part thorns in clusters along its trunk (<[www.worldagroforestry.org](http://www.worldagroforestry.org)>, 2005). The association between 'thorns' and feminine gender assignment was also observed above in relation to superordinate terms *épine* (F) 'thorned plant' and *ronce* (F) 'bramble' (a thorned rambling plant). This notion is further examined below.

Nouns denoting woody plants may also be formed by morphological derivation with the addition of suffixes. In some cases they are formed with the suffix *-ia*, as in Table 7.9.

Table 7.9: Nouns formed with the suffix *-ia*

<i>deutzia</i>	M	'deutzia'	19th century, after 18th century Dutch patron of botany, Jean Deutz (COD, 1986:422)
<i>fuchsia</i>	M	'fuchsia'	18th century, after 16th century Bavarian botanist Leonhard Fuchs (LRPT, 1994:500)
<i>gardenia</i>	M	'gardenia'	18th century, after Dr. Alexander Garden, botanist, American (COD, 1986:625) or Scottish (LRPT, 1994:511)
<i>hortensia</i>	M	'hydrangea'	18th century, botanical Latin from <i>hortus</i> 'garden' (<www.atilf.fr>, 2005)
<i>magnolia</i>	M	'magnolia'	18th century, after Pierre Magnol, French botanist (COD, 1986:960)
<i>parrotia</i>	M	'parrotia', 'Persian ironwood'	native to northern Iran, after F.W. Parrot (1792-1841), German naturalist and professor of medicine (<www.oregonstate.edu/dept/ldplants>, 2005)

Other nouns denoting woody plants are formed with the suffix, *-ier*, also vowel-final, as shown in Table 7.10.

Table 7.10: Nouns formed with the suffix *-ier*

<i>abricotier</i>	M	'apricot tree'	from <i>abricot</i> (M) 'apricot'
<i>brugnonier</i>	M	'nectarine tree'	from <i>brugnon</i> (M) 'nectarine'
<i>c��risier</i>	M	'cherry-tree'	from <i>c��rise</i> (F) 'cherry'
<i>cognassier</i>	M	'quince tree'	from <i>coing</i> (F) 'quince'
<i>cannelier</i>	M	'cinnamon tree'	formed from <i>cannelle</i> (F), the aromatic bark of cinnamon trees used as flavouring
<i>groseillier</i>	M	'current-bush'	from <i>groseille</i> (M) 'red-currant' (LRPT, 1994:538)
<i>laurier</i>	M	'laurel', 'bay'	from Old French, <i>lor</i> , (LRPT, 1994:655)
<i>magnolier</i>	M	'magnolia'	synonym for <i>magnolia</i>
<i>marronnier</i>	M	'horse chestnut'	from the Spanish <i>cimarr��n</i>
<i>noisetier</i>	M	'hazel-nut tree'	from <i>noisette</i> (F) 'hazelnut' (LRPT, 1994:769)
<i>noyer</i>	M	'walnut tree'	from <i>noix</i> (M) 'nut, walnut'
<i>oranger</i>	M	'orange tree'	from <i>orange</i> (M) 'orange' plus <i>-ier</i>
<i>prunier</i>	M	'plum tree'	from <i>prune</i> (F) 'plum'
<i>rosier</i>	M	'rose bush'	from <i>rose</i> (F) 'rose', flower of any of this genus (LRPT, 1994:996)

The *marronnier* (M) 'horse chestnut' is derived from the Spanish adjective *cimarrón* rather than the edible *marron* (M) 'chestnut', the cooked nuts of the *châtaignier* (M) 'chestnut tree'.

The full database of plants includes 10 nouns formed with *-ia* and 47 formed with *-ier*. In every case but one, such nouns are masculine. The exception is *fraisial/freesia* 'freesia', a flowering bulb which has alternative masculine and feminine gender assignments according to ATILF (<atilf.atilf.fr>, 2009). It varies in both application and gender assignment across botanical sources. Some sites use masculine for both the bulb and the flower, eg. *Le freesia se plaît dans un sol léger* (<isaisons.free.fr>, 2009), *le freesia exhale un puissant parfum de jasmin, de bergamote et de bois de rose* (<www.interflora.fr>, 2009) while others use feminine, eg. *La Freesia est de taille moyenne* (<fr.gardening.eu>, 2009), *fleurs à bulbe à floraison printanière, telles que la tulipe, le narcisse, la freesia, la jacinthe* (<www.actahort.org>, 2009). What these feminine examples do show, however, is that masculine gender is not invariable in relation to the suffix *-ia*. If gender assignment is unrelated to and independent of the suffix *-ia* in the case of *freesia*, it raises doubts about the relationship for masculine nouns with the suffix *-ia*. One might expect, however, that as two very similar suffixes, *-ia* and *-ier* may relate to some property shared by all plants.

Botanical names formed with these vowel-final suffixes *-ia* and *-ia* can be compared with common synonyms that are also vowel-final but have different gender assignments, as in (1).

- |     |                  |     |                           |                       |     |                      |
|-----|------------------|-----|---------------------------|-----------------------|-----|----------------------|
| (1) | <i>deutzia</i>   | (M) | 'genus <i>Deutzia</i> '   | <i>deutzie</i>        | (F) | ' <i>deutzia</i> '   |
|     | <i>hortensia</i> | (M) | 'genus <i>Hydrangea</i> ' | <i>hydrangée, -ée</i> | (F) | ' <i>hydrangea</i> ' |

It is noted that plants designated by *deutzie* and *hydrangée* have open irregular branching that is either 'caney' (*hydrangée*) or 'flexible' (*deutzie*), different structures that contrast with 'dense' and 'rigid'. It is possible that perennial growth that is not dense or rigid may be associated with feminine gender assignment in the same way as suggested above for *vigne*, and is unrelated in any way to vowel-final pronunciation. While these attributes appear to form conditioning environments in relation to contrasting masculine and feminine gender assignments of nouns formed with suffixes *-ia* and *-ier*, the two feminine examples in (1) have other closely-related vowel-final suffixes, *-ie*, *-éa* and a variant *-ée*. These various vowel-final pronunciations are yet

to be accounted for – not only for masculine and feminine nouns with these vowel-final suffixes, but among other nouns denoting a specific woody plant. While they denote living entities, they are unlike those in other fields in that they lack any capacity for independent movement. Previous discussion has suggested that there may be a possible association between vowel-final pronunciation and creatures that are 'less motile' than others. For entities such as those above that are without any potential for independent movement whatsoever, the attribute 'immotile' may be equally salient.

### 7.3.6 Nouns derived from other grammatical classes

Only two nouns in the corpus relating to 'woody' plants are derived from other grammatical classes – *tremble* (M) 'aspen', which appears to be derived from the Old French verb *trembler* (COD, 1986:1621, LRPT, 1994:1135, from the Latin *tremulare*), and *bleuet* (M) 'blueberry', from the French adjective *bleu* 'blue'. The use of such a stem suggests that *tremble* is not sturdy, but this tree has the same dense growth and 'rigid' branching and stems of other trees; its name refers to an attribute of its leaves since they are attached via long flat stalks and quiver in the slightest breeze. Masculine gender assignment for this 'rigid' entity is consistent with others that are 'rigid'.

The term *bleuet* is a Canadian term denoting the most abundant and flavoursome of Canadian wild berries, a dark berry (*Vaccinium myrtilloides*) that is very like the European *myrtille* (*Vaccinium myrtillus*) 'bilberry'. Both of these botanical names denote low-growing heath plants that grow to about 50 cm. The Canadian shrub is found in the forests of Quebec and the similarity of its berries to the European 'bilberry' can be seen in their dark colour, red pulp and growth in clusters rather than in pairs or singly. However, the Canadian *bleuet* differs from the European *myrtille* in that it has hairy rather than smooth stems and hairy undersides of leaves where those of the *myrtille* are smooth but coarsely toothed. These distinctions in stem and leaf for the Canadian plant differentiate it from the European *myrtille*. In such a context masculine gender is not surprising. However, in their application to a 'berry', the two terms *bleuet* and *myrtille* are discussed further below with nouns denoting fruits.

### 7.3.7 Summary – initial analysis

Analysis of collective nouns suggests that masculine gender assignment is associated with:

- 'indefinite' kind, eg. *verger* (M) 'orchard', *maquis* (M) 'bushland', *fourrée* (M) 'thicket',
- 'quantity', eg. *raisin* (M) 'bunch (of grapes)', possibly *fagotin* (M) 'faggot' (bunch of sticks)
- 'mixed/different/various' in kind, eg. *bouquet* (M) 'bouquet', *agrumes* (M) 'citrus fruits', *fagotin* (M) 'faggot'
- 'restricted' in area, eg. *taillis* (M) 'copse'/'coppice'

Feminine gender assignment of collective nouns appears to be associated with:

- 'same' kind, eg. *botte* (M) 'bunch', *frênaie* (F) 'ash-grove', *gerbe* (F) 'sheaf', *saulaie* (F) 'willow-grove'
- 'living', eg. *plante* (F) 'plant'
- 'continuous' spread, eg. *mangrove* (F) 'mangrove', *pelouse* (F) 'lawn', *meule* (F) 'bale', *saulée* (F) 'row of willows'.

The basis on which 'continuous' may be associated with feminine gender assignment in its application to notions such as 'spreading in a continuous layer' or 'rolling in a continuous movement' is not clear at this time and will continue to be explored. Certain attributes are identified above in respect of *nature* (F) 'nature' including 'adaptable', 'enduring', 'continuously evolving', 'generating new life', and in respect of *flore* (F) 'flora' which applies to the 'entirety' of living vegetable matter found across a specific area. Mounting evidence suggests an association between 'adaptable' and feminine gender, but other attributes mentioned here require further support and will be explored in the following chapter relating to human beings.

Analysis of superordinate terms shows that contrasting gender assignments may relate to their above-ground form. Masculine gender assignment appears to be associated with:

- 'upright' form, eg. *arbre* (M) 'tree'
- 'hard', 'rigid' growth to the outermost extent, eg. *arbuste* (M) 'tree/shrub'
- 'different' in comparative (smaller) size, eg. *arbrisseau* (M) 'bush'
- different from others in form, eg. *légume* (M) 'legume' (fruit in the form of a pod)
- 'varied' form, eg. *champignon* (M) 'fungus'/'mushroom'

- 'restricted' to a specific habitat, eg. *champignon* (M) 'mushroom'
- grows underground, eg. *champignon* (M) 'mushroom' (associated with 'dead')
- 'indefinite' form, eg. *fruit* (M) 'fruit'

Feminine gender assignment of superordinate terms appears to be associated with:

- 'flexible' stems, eg. *liane* (F) 'liana', *plante* (F) 'plant with flexible stems', *vigne* (F) 'vine' (plant with flexible stems)
- 'soft', eg. *mousse* (F) 'moss' (soft growth)
- 'thorned' in its capacity to repel predators, eg. *ronce* (F) 'bramble', *épine* (F) 'thorn-bush'.

It is possible that feminine gender assignment applies where meanings relate to a shared attribute, eg. *graminée* (F) 'grass plant', that all reproduce in the very same way. This feminine term can be contrasted with a masculine term in previous chapter, *camélidé* (M) 'camel-like animal', that applies to a class of animals similar to a camel but which may have one or two humps or no hump at all. These two examples suggest that we understand very well how to form meanings around 'same' but can also find semantic cohesion in 'not same' – 'similar but different'.

Loan words denoting trees are all masculine and it is argued that it may relate to their 'upright' orientation, 'dense' form, or 'rigid' stem and branching. The different gender assignments of loan words in their application to fruits are discussed below with native French count nouns.

Evidence from the analysis shows that gender assignments of terms denoting 'woody' plants formed by extension and compounding from pre-existing nouns do not always follow that of the original noun, eg. *chèvrefeuille* (M) 'honeysuckle', a masculine noun formed from two feminine nouns. Masculine gender assignment for many of these terms is argued to relate to a form that is 'upright' or 'rigid', eg. *tremble* (M) 'aspen', while feminine gender in most cases appears to relate to 'recumbent' or 'flexible' stems. The exception is *sauterelle noire* (F) 'honey locust tree', a tall tree with 'rigid' stems that is feminine, coined from a feminine term *sauterelle* (F) 'grasshopper'. The large thorns along its trunk cause predators to leap back, and this ability to repel predators is associated with feminine nouns elsewhere, eg. *moufette* (F) 'skunk'.

For botanical terms formed by extension from pre-existing nouns plus vowel-final suffixes *-ia*, *-ier*, *-éa* and *-ée*, contrasting masculine and feminine gender assignments appear to relate to oppositions identified above for superordinate terms between woody plants that have dense, rigid stems, eg. *magnolia* (M) 'magnolia', and those with 'caney' stems, eg. *hydrangée* (F) 'hydrangea'. For the few nouns derived from other grammatical classes, masculine gender for *tremble* (M) 'aspen' appears to relate to the same hard, rigid growth typical of woody plants. The masculine term *bleuet*, derived from the adjective *bleu*-*e*, denotes a Canadian 'blueberry' whose hairy stems and undersides of leaves mark it as 'different' from the European *myrtille* (F) 'bilberry' which has smooth stems and leaves.

Many of the attributes observed here are identified in earlier chapters and are consistent in their associations with specific masculine and feminine gender assignments identified earlier. This consistency is particularly significant in that it provides considerable support where examples are few in any one domain. However, for the superordinate term *créature* (F) 'creature' the possible association between feminine gender assignment and 'created anew' may be better tested in relation to entities that are 'man-made' and thus in lexical fields outside the domain of this thesis.

Distributions relating to word-final pronunciation discussed for the various sets of nouns above raise the possibility of their association with certain attributes:

- vowel-final pronunciation: 'diminutive' for *arbrisseau* (M) 'small tree'; 'diminutive', 'textured', 'fragile' or 'not all edible' for *champignon* (M) 'fungus/mushroom'; 'immotile' for vowel-final suffixes of *magnolia* (M) 'magnolia', *abricotier* (M) 'apricot tree'
- consonant-final pronunciation: 'flexible' for *herbe* (F) 'grass', *vigne* (F) 'vine' and *liane* (F) 'liana', edible' for *légume* (M) 'legume', *courge* (F) 'marrow', 'living for *rave* (F) 'root vegetable', 'smooth' or 'shiny' for *mousse* (F) 'moss', 'strong' and 'resilient' for *arbre* (M) 'tree' and *arbuste* (M) 'shrub', and 'whole' for *plante* (F) 'plant' and *flore* (F) 'flora'.

Among the various sections above there is little discussion regarding different vowel- and consonant-final pronunciation patterns. However, it is suggested that the range of vowel-final

suffixes, *-ia*, *-ier*, *-ie*, *-éa*, *-ée* used to form names of living entities that lack any capacity for movement may relate to the attribute 'immotile' – which is not unlike 'clumsy' or 'less motile' for certain creatures that are capable of movement but move little, eg. *aï/unau* (M) 'sloth' and are consistent in their association with vowel-final pronunciation. Consonant-final pronunciation for *épine* (F) 'thorn-bush' is discussed in terms of a growing habit that forms a tangled mass but at this stage the principle underpinning such an association remains unclear.

#### 7.4 Woody plants – count nouns in the corpus

Since plants identified as 'woody' require only a ligneous, or woody, perpetual above-ground structure that remains at the end of the growing season (<[www.wikimirror.com/Tree](http://www.wikimirror.com/Tree)>, 2005, Yates, 1983:194), the term does not discriminate for height. The 'woody' plants discussed below therefore include very tall trees, taller and shorter shrubs, some vines as well as ground cover 'woody' plants. Descriptions focus on more general aspects of appearance and any outstanding quality.

##### 7.4.1 Masculine consonant-final nouns

The database of woody plants (listed in Appendix XI) contains 41 masculine nouns with irregular consonant-final pronunciation. Table 7.11 below presents descriptions of many of these nouns, particularly in relation to leaf growth, crown shape, etc., characteristics that appear to be crucial in distinguishing between them.

Table 7.11: Masculine consonant-final nouns denoting 'woody plant'

<i>ailante</i>	M	'tree-of-heaven', 'ailanthus'	S. Asian sub-tropical deciduous tree, with thin irregular upright branches, irregular crown, long hollow trunk (< <a href="http://fr.wikipedia.org">fr.wikipedia.org</a> >, < <a href="http://www.les.arbres.free.fr">www.les.arbres.free.fr</a> >, 2005)
<i>alaterne</i>	M	'Italian buckthorn'	genus <i>Rhamnus alaternus</i> , evergreen shrub to 3.5m. tall, 3m. wide, with <i>arrondi</i> 'rounded' habit and crown, plus thorned tips of branches (< <a href="http://nature.jardin.free.fr">nature.jardin.free.fr</a> >, < <a href="http://atilf.atilf.fr">atilf.atilf.fr</a> >, 2005)
<i>aulne</i>	M	'European alder', 'black alder'	20-25m., large deciduous European native, oval habit, pyramidal crown, conical in maturity; after death new shoots can sprout from base; bears cones < <a href="http://www.ces.ncsu.edu/depts/hort/consumer/factsheets">www.ces.ncsu.edu/depts/hort/consumer/factsheets</a> >, < <a href="http://www.worldagroforestry.org">www.worldagroforestry.org</a> >, 2005)



<i>azadirac</i> syn. <i>margosier</i>	M	'bastard tree', 'cornucopia', 'Indian cedar', 'Indian lilac', 'margosa/ neem tree'	( <i>Azadirachta indica</i> ) medium-sized tree (30m. max.), usu. evergreen, with large round crown, bole; branchless for up to 7m. or more
<i>campêche</i>	M	'bloodwood tree', syn. 'logwood', 'campeachy'	tropical Mexican bushy tree, evergreen, up to 15m., long straight thorny branches, rounded crown (<ravenel.si.edu>, <www.life.uiuc.edu/ib/ 363/dyeslide.html>, 2005)
<i>cèdre</i>	M	'cedar'	Old World conifer, tall evergreen, wide- spreading form, umbrella-shaped compact crown in maturity, pointed sharp stiff needles in tufts of 30 to 40 (<www.botanik. uni-bonn.de>, <www.ces.ncsu.edu/depts/ hort>, <www.stihl.com>, 2005)
<i>cédrele</i>	M	'Spanish cedar'	evergreen, deciduous for part of dry season oval silhouette and rounded crown, native to Central and S. American, W/E. Indies (<www.ces.ncsu.edu/depts/hort>, <www.arbolesornamentales.com>, 2005)
<i>charme</i>	M	'hornbeam'	deciduous, 15-25m. tall, 18m. wide, slender trunk, rounded crown/habit (<nature.jardin. free.fr>, <www.canr.uconn.edu>, <www.daytonnursery.com>, 2005)
<i>chêne</i>	M	'oak'	tall, 50 m., deciduous or evergreen, with rounded broad crown, form (<www.site-en- bois.net/fr>, 2005)
<i>chèvrefeuille</i>	M	'common honeysuckle'	low-growing deciduous shrub ( <i>Lonicera</i> , <i>fragrantissima</i> ), tangled mass of recurving branches forming round-shaped bush; also ground-cover vine (<nature.jardin.france. fr>, <www.habitas.org.uk> 2005)
<i>ciste</i>	M	'rockrose'	small to medium-sized Mediterranean shrub, evergreen, with rounded silhouette, rose-like flower (<www.botanical- online.com>, 2005)
<i>citrus</i>	M	'citrus tree'	evergreen tropical and sub-tropical (gen. <i>Citrus</i> ) incl. orange, lemon, lime, etc.; typically rounded crown and wide habit; aromatic leaves, flowers, round shiny fruit (<www.atilf.fr>, 2005)
<i>copalme</i>	M	'liquidambar',	syn. for <i>liquidambar</i>
<i>érable</i>	M	'maple'	deciduous temperate zone tree, to 18m., typical rounded crown, can extend to 20m. (<nature.jardin.free.fr>, <www.psn3.com>, 2005)
<i>eucalyptus</i>	M	'eucalyptus'	evergreen leaves but deciduous bark; often v. tall; long trunk, rounded crown, rounded canopy, (<www.ag.arizona.edu/pima/ gardening>, 2005)
<i>frêne</i> (commun)	M	'ash'	deciduous, 30-40m, generally wider than tall; dense rounded crown (<nature. jardin.free.fr>, <www.hort.uconn.edu>, 2005)

<i>genièvre</i> syn. <i>cade</i> , <i>genévrier</i> (M)	M	'juniper'	Mediterranean/ Eurasian conifer, of <i>garrigues</i> , <i>maquis</i> (arid scrubland), small tree to dwarf shrub, evergreen; pear-shaped habit, rounded crown, prickly needles, unique cone in form of a soft berry (<fr.wikipedia.org>, 2005)
<i>hêtre</i>	M	'beech'	tall (30-40m), very broad (20m), deciduous, dense wide foliage with <i>couronne large et arrondi</i> 'large rounded crown' (<nature.jardin.free.fr>, <www.hort.uconn.edu>, 2005)
<i>hibiscus</i>	M	'hibiscus'	tropical E. Africa/Asian tree or shrub to 4m., typically evergreen in native regions (varieties may be semi-deciduous in colder/drier areas; dense growth and typically rounded form (<www.oregonstate.edu/dept/ldplants>, <nature.jardin.free.fr>, 2005)
<i>if</i>	M	'yew' ( <i>Taxus baccata</i> )	evergreen conifer to 18m., rounded spreading crown, broad rounded form, densely branched, flattened needle-like leaves tapering to horny point, red fleshy berry-like cone (<www.jardin-de- <www.hort.uconn.edu/plant>, <woodyplants.nres.uiuc.edu/plant>, chandoyse.com>, 2005)
<i>libocèdre</i>	M	'incense-cedar' ( <i>Libocedrus</i> )	evergreen conifer native to W. USA, China, introduced to Europe in 19th C; conical form, narrow pyramidal crown rounded in maturity; keeled leaves in whorls of four (<www.ces.ncsu.edu/depts/hort>, <www.floridata.com>, aka <i>cèdre à l'encens</i> (<fr.wikipedia.org>, 2005)
<i>lierre</i>	M	'ivy'	evergreen shrub with spreading climbing or trailing habit, <i>arbuste ou arbrisseau</i> (<nature.jardin.france.fr>, 2005)
<i>liquidambar</i> <i>d'amérique</i> syn. <i>copalme d'or</i>	M	'liquidambar', 'sweetgum'	tall wide (tropical C. America); deciduous (esp. <i>L. styraciflua</i> ), pyramidal to conic in youth, oval to rounded in maturity (<www.hort.uconn.edu>, <www.urbanext.uiuc.edu/treeselector>, <www.les.arbres.free.fr>, 2005)
<i>mélèze</i>	M	'European larch'	tall deciduous conifer, <i>Larix decidua</i> , to 35m., pyramidal when young, crown opens with age; needle-like leaves in tufts (apex pointed or rounded); erect yellow ovoid cones (<www.biologie.uni-hamburg.de/b-online/earle/pi/la/index.htm>, <www.hort.uconn.edu>, 2005)
<i>mouillefer</i>	M	'false holly'	evergreen shrub; rounded crown, rounded wide spreading form 4m. x 4m., scented flowers ( <i>Osmanthus aquifolium</i> / <i>O.heterophyllus</i> )(<www.ibiblio.org>, 2005)
<i>myrte</i>	M	'myrtle'	Mediterranean evergreen dense, round-headed tree or shrub ( <i>arbre/arbrisseau</i> ) (<www.desert-tropicals.com/Plants>, 2005, LRPT, 1994:754)

<i>orme</i>	M	'elm'	tall, to 30 m., deciduous, broad-spreading; ascending branches, winged fruits (<nature.jardin.free.fr>, 2005)
<i>orne</i>	M	'flowering ash'	tall, 40-50', rounded dense crown, broad spreading (to 10m.), deciduous (<www.hort.uconn.edu/plants>, 2005)
<i>osage orange</i>	M	'hedgeapple tree'	deciduous, tall (12 m.) with rounded crown, spines (<www.morgan.k12.il.us/jvstd117/herget/tree_id.html>, 2005)
<i>platane</i>	M	'plane tree'	tall, 23-28m., 21m. wide, broad-spreading foliage, broad rounded crown; deciduous (www.hort.uconn.edu/plants>, 2005)
<i>rouvre</i>	M	'English oak'	18 m. plus, deciduous, rounded broad crown, upright spreading branches ( <i>Quercus robur</i> ) (www.hort.uconn.edu/plants>, 2005)
<i>saule</i>	M	'willow'	deciduous gen. <i>Salix</i> , tree or shrub to 30m. open spreading crown, graceful spreading branches (<nature.jardin.free.fr>, <www.hort.uconn.edu/plants>, <www.ces.ncsu.edu>, <atilf.atilf.fr>, 2005)
<i>tamaris,-x</i>	M	'tamarisk'	deciduous tree or shrub to 10m. native to SE Europe, multi-stemmed trunk, arching branches; open oval to rounded habit and crown (<www.selecttree.calpoly.edu>, <www.aujardin.info/plantes/tamaris.php>, <nature.jardin.free.fr>, 2005)
<i>teck</i> syn. <i>vène</i>	M	'teak'	native to India/Malaysia, evergreen in tropical climates, deciduous in monsoon regions, tall; branching produces dense canopy and rounded crown (<www.da-academy.org/images/bois_lezard1.jpg>, <en.wikipedia.org>, 2005, 2008)
<i>tilleul</i> ( <i>européen</i> )	M	'linden tree'	typically 15-18m., deciduous, wide, dense, pyramidal in form when young, rounded crown and oval form in maturity (<www.hort.uconn.edu/plants>, (www.psn3.com>, 2005)
<i>tremble</i>	M	'aspen'	20 m. ( <i>Populus tremula</i> ), deciduous, has distinctive branching pattern of birches, leaves attached to stems by long flattened stalks and quiver in the slightest breeze, rounded crown in maturity (LRPT, 1994:1135, <www.mobot.org>, 2005)
<i>troène</i>	M	'privet' ( <i>Ligustrum lucidum</i> , <i>L. vulgaris</i> )	<i>arbrisseau</i> , evergreen; rounded crown, bushy wide-spreading rounded form, 7m. x 5m., perfumed flowers (<www.hort.uconn.edu/plants>, <www.fuf.net/tree_plantings/tree_listings.html>, <www.les.arbres.free.fr>, 2005)
<i>vergne</i> syn <i>aulne</i>	M	'alder'	regional synonym for a tree found across all of southern France, deciduous; develops rounded crown (<atilf.atilf.fr>, 2005)

<i>zanthoxylum</i> M	'zanthoxylum' (eg. 'thorny yellowwood', 'toothache tree', 'Szechwan pepper', 'prickly ash', 'Hercules' club')	deciduous tree/shrub, up to 35 m. depending on species; broad-spreading rounded crown; small plants have slender rigid prickles which become conical woody prickly-bearing growths on older trees, native to N. America, Africa, Australia, China, Japan (< <a href="http://www.mobot.org">www.mobot.org</a> > < <a href="http://www.worldagroforestry.com">www.worldagroforestry.com</a> >, < <a href="http://www.ibiblio.org/pfaf">www.ibiblio.org/pfaf</a> >, < <a href="http://www.brisrain.webcentral.com.au">www.brisrain.webcentral.com.au</a> >, 2005)
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Many of these nouns apply to 'woody' plants of some considerable height, particularly Old World forest evergreens, eg. *cèdre* (M) 'cedar', *if* (M) 'yew', temperate forest deciduous trees, eg. *hêtre* (M) 'beech', *orme* (M) 'elm', etc., tropical trees, eg. *ailante* (M) 'tree of heaven' and *teck* (M) 'teak', Asian and Australian trees, eg. *zanthoxylum* (M) 'toothache tree', *eucalyptus* (M) 'eucalyptus'. Some nouns apply to smaller shrubby plants such as *troène* (M) 'privet', while the height of a *genièvre* (M) 'juniper' depends on species and latitude since dwarf species found in colder regions are only 6 cm. tall but have a considerable spread. Thus, while most nouns in this set apply to evergreens, some are deciduous, and for others it depends on the species, eg. *chêne* (M) 'oak'. Although some trees are tall, height is not pertinent in every case, nor is 'upright'. However, for all but two of these 'woody' plants the same dense, hard growth continues to the outermost extent of their branching. The two exceptions are *saule* (M) 'willow', whose growth becomes progressively less dense as it extends outwards, and *lierre* (M) 'ivy' which produces slender vine-like stems and both of these nouns were historically feminine.

#### Consonant-final pronunciation

Descriptions of plants in Table 7.11 reveal considerable variation in height, leaf growth and fall, etc., suggesting that they are unrelated to shared consonant-final pronunciation patterns.

However, many descriptions include the term *arrondi* 'curved' to describe the crown shape.

Those trees that in maturity develop crowns that produce a smooth, 'rounded' curve include *campêche*, *citrus*, *chêne*, *eucalyptus*, *if*, *orme*, *orne*, *rouvre*, as well as smaller trees or shrubs, *ciste*, *cytise*, *hibiscus*, *mouillefer*, *myrte*, *oléandre*, *tamarix*, etc. Others are described as 'canopy' plants as branching spreads outwards to produce a broad roof-like structure offering shade to the area beneath. Those described as 'canopy' trees include *ailante*, *baume*, *eucalyptus*, *platane*, *teck*, and many of the European deciduous forest trees. Many are noted for both, eg. *chêne*, *hêtre*, *cèdre*, *orme*, again many of the European deciduous forest trees. A

'broad' shape is also associated with consonant-final pronunciation for birds, particularly well-built birds of prey such as *aigle* (M/F) 'eagle', *vauture* (M) 'vulture', *buse* (F) 'buzzard', and fish, eg. *ange* (M) 'angelshark'. The notion 'rounded' also occurs earlier in relation to terrestrial and aquatic fowl, eg. *canard* (M) 'duck', *cygne* (M) 'swan', *pintade* (F) 'guinea fowl' and 'rounded' or oval outline of certain fish, eg. *perche* (F) 'perch', *sole* (F) 'Dover sole'. These attributes are consistent in their association with consonant-final pronunciation and deserve further attention.

While the smooth 'rounded' curve across the top of a canopy is easily observed from a distance, it is more difficult to identify when standing underneath a tree, particularly when it is very tall, eg. the enormous height of some elms, and the 90 ft. height of *ailante*. However, what becomes very clear from that viewpoint is the extent of the overhead canopy produced by a single trunk. It is possible that these two conditions concerning the overhead canopy work in tandem to allow different attributes to become salient – the smooth 'curve' across the crown that can be observed from a distance, and the 'broad' or 'spreading' canopy that can be observed from beneath.

In this respect it is interesting to discuss word-final pronunciation of *campêche*, a noun denoting a tree that is native to Mexico. As one of the English synonyms 'bloodwood' suggests, the heartwood of this tree turns blood red when exposed to air, and for centuries logs of the *campêche* tree were shipped by the Spanish from the Mexican port of Campeche to Europe for use in creating an extremely expensive red dye. Some two hundred years later the French managed to grow this tree in the Antilles but rather than continue the vowel-final Spanish pronunciation of the port Campeche as /kampetʃe/, the form became the consonant-final /kâpeʃ/, eliding the final vowel of the original term when it could quite as easily been maintained. Descriptions of the Mexican tree (*Haematoxylum campechianum*) vary, 'gnarled and bushy', 'slender rather crooked trunk', 'grows to 15 ft.', 'usually 20-25 ft.', 'thorny'. Described as a 'canopy tree' (<ir.library.oregonstate.edu>, 2005), this spreading canopy and rounded crown can be observed in various photographs (<waynesword.palomar.edu>, <www.zoneten.com/FloweringTrees.htm>, <www.botanikos-sodas.vu.lt/gallery/Fabaceae/br\_honduras\_6?newlang=en\_US>, 2005). It is possible that the change in French pronunciation may have resulted from a growing awareness of its broad 'spreading' shape. It is noted that a similar phonological

change occurred also for *teck*, a borrowing from the Portuguese vowel-final noun *teca* from the vowel-final *īkku* in its Malay/Tamil source languages (<atilf.atilf.fr>, 2009). As images of the *teck* show (<en.wikipedia.org>, 2005) it, too, has a 'broad' spreading canopy as well as a 'rounded' crown. If changes in word-final pronunciation for *campêche* and *teck* are related to such attributes, they demonstrate the considerable force that a semantic system is able to bring to bear in its interaction with word-final phonology.

It may be that the 'broad' canopy produced by *aulne* 'alder' can account for its consonant-final pronunciation. The above generalisation relating to 'rounded' and 'broad' can also account for consonant-final pronunciation among conifers such as *cèdre*, *if*, and *genièvre*, the older form of this noun denoting 'juniper tree' – but not *mélèze*, where the crown is spire-like when young and opens as it ages, nor *saule* which varies according to species but is neither 'rounded' nor 'spreading'. Neither attribute is relevant account for the consonant-final *lierre* 'ivy'.

#### 7.4.2 Masculine vowel-final nouns

The corpus contains 35 masculine nouns that have vowel-final pronunciation, a more regular distribution in association with masculine gender. Descriptions of many of these plants are presented in Table 7.12 below according to height, form, leaf growth, and crown shape.

Table 7.12: Masculine vowel-final nouns denoting 'woody plant'

<i>abutilon</i>	M	'abutilon', 'Chinese lantern tree'	shrub to 3m., multi-stemmed, evergreen, erect then open shape, irregular pendulous branching, (<www.burkesbackyard. com.au>, <atilf.atilf.fr>, 2005)
<i>acajou</i> <i>gen. Swietana</i>	M	'mahogany', 'big- and small-leaf mahogany'	New World tropical evergreen (to 130 ft.), leaves drop in cold (36°F); produces round but narrowish crown (<www.tropilab.com>, <www.eol.org>, <www.worldagroforestry. org>, <bio.fiu.edu/trees/images/Swietana mahoganiHa.jpg>, 2005)
<i>alba</i>	M	'white fir'	synonym for <i>sapin</i> ( <i>des Vosges</i> ) ( <i>Abies pectinata</i> )
<i>araucaria</i>	M	'monkey puzzle tree', 'Chilean pine'	South American coniferous tree, evergreen, conical to pyramidal form and crown; stiff spiny ovate leaves pointed at apex (<www.worldagroforestry.com>, 2005)
<i>balsa</i> <i>Ochoroma pymramidale</i>	M	'balsa'	tall tropical American evergreen (deciduous in a long dry season), producing a flat spare crown (<blogs.law.harvard.edu/ crofoot>, <www.cds.ed.cr>, 2005)

<i>bélimbé</i> syn. <i>pomme-macaque</i>	M	'canary wood', 'kamani' ( <i>Morinda</i> <i>citrifolia</i> )	tropical evergreen tree/large shrub; rounded crown, much variation between species (< <a href="http://www.ctahr.hawaii.edu/noni/botany.asp">www.ctahr.hawaii.edu/noni/botany.asp</a> >, < <a href="http://volcreole.fr/forum">volcreole.fr/forum</a> >, 2005)
<i>bonnet d'évêque</i> syn. <i>fusain</i>	M	'spindle-tree', 'euonymus'	deciduous European shrub with irregular spread and crown (Yates, 1983:211, < <a href="http://nature.jardin.free.fr">nature.jardin.free.fr</a> >, < <a href="http://www.uwgb.edu/biodiversity/herbarium/shrubs">www.uwgb.edu/biodiversity/herbarium/shrubs</a> >, < <a href="http://www.cnr.vt.edu">www.cnr.vt.edu</a> >, 2005)
<i>bouleau</i>	M	'birch', 'paper birch'	height relates to species/region; deciduous, crown shape irregular, slender, branches may drooping at tips (< <a href="http://www.ces.ncsu.edu/depts/hort">www.ces.ncsu.edu/depts/hort</a> >, < <a href="http://psn3.com">psn3.com</a> >, < <a href="http://www.enature.com/fieldguide">www.enature.com/fieldguide</a> >, 2005)
<i>buis</i>	M	'English box'	evergreen tree/shrub ( <i>arbrisseau</i> ), to 4.5m. or more; one or more trunks; dense multi-branched upright spreading form, ovate to pyramidal variety (European var. <i>B. sempervirens</i> (< <a href="http://www.raretrees.org/buxusem6.html">www.raretrees.org/buxusem6.html</a> >, < <a href="http://www.the-tree.org.uk/BritishTrees/box.htm">www.the-tree.org.uk/BritishTrees/box.htm</a> >, 2005, LRPT, 1994:138)
<i>cajou</i> syn. <i>anacardier, acajou</i>	M	'cashew tree'	( <i>Anacardium occidentale</i> ) broad evergreen tree to 12 m., native to tropical America; crooked trunk; spreading crown reaching down to the ground ( <a href="http://www.aluka.org">www.aluka.org</a> ), (< <a href="http://www.hort.purdue.edu">www.hort.purdue.edu</a> >, 2005)
<i>catalpa</i>	M	'Indian bean tree'	deciduous tree to 24m., oval form, irregular crown, Asia, N. America, esp. maritime forests (< <a href="http://www.plantfolia.com">www.plantfolia.com</a> > < <a href="http://www.urbanext.uiuc.edu/treeselector">www.urbanext.uiuc.edu/treeselector</a> >, 2005)
<i>cyprès</i>	M	'cypress'	evergreen, pointed crown, form dependent on species, scale-like leaf (< <a href="http://www.atilf.fr">www.atilf.fr</a> >, < <a href="http://www.worldagroforestry.com">www.worldagroforestry.com</a> >, 2005)
<i>daphné</i>	M	'(sweet) daphne'	syn. <i>bois-joli</i> , small evergreen shrub (deciduous variety <i>D. mezereum</i> ), multi-stemmed, irregular crown, upright growth, glossy foliage, highly perfumed (< <a href="http://nature.jardin.free.fr">nature.jardin.free.fr</a> >, 2005)
<i>épicéa commun/</i> <i>arbre de Noël,</i> <i>*sapin de Noël</i>	M	'Norway spruce'	tall evergreen spruce ( <i>Picea abies</i> ), graceful-branching, pointed crown, blunt needles attached to twig with peg-like projections (< <a href="http://nature.jardin.france.fr">nature.jardin.france.fr</a> >, < <a href="http://woodyplants.nres.uiuc.edu">woodyplants.nres.uiuc.edu</a> >, 2005)
<i>fusain</i> syn. <i>bonnet d'évêque</i>	M	'spindle-tree', euonymus'	see above
<i>galba</i> syn. <i>bois de</i> <i>charromage</i>	M	'Antilles callophylum', 'beauty leaf'	tropical American evergreen with straight clear trunk and dense rounded crown (< <a href="http://www.worldagroforestry.org">www.worldagroforestry.org</a> >, < <a href="http://davesgarden.com">davesgarden.com</a> >, < <a href="http://www.tropilab.com">www.tropilab.com</a> >, 2005)
<i>genévrier</i>	M	'juniper'	synonym of <i>genièvre</i> (LRPT, 1994:517)

<i>houx (commun)</i>	M	'holly'	evergreen tree or shrub ( <i>Ilex</i> ), dense pyramidal form and crown, one or more trunks (eg. <i>I. opaca</i> , <i>I. aquifolium</i> ), the only Scandinavian evergreen not a conifer (<fr.wikipedia.org>, <www.fuf.net>, <www.ces.ncsu.edu/depts.hort> LRPT, 1994:727)
<i>jasmin</i>	M	'jasmine'	<i>arbuste</i> , evergreen or deciduous depending on species, climate; upright or scrambling stems, yellow or white perfumed flowers (LRPT, 1994:631, Yates, 1983:203, <atilf.atilf.fr> 2005)
<i>lilas</i>	M	'(common) lilac (tree)'	small tree to 5m., deciduous, multi-stemmed trunk, upright form, irregular crown, fragrant flowers, native to Europe (<woodyplants.nres.uiuc.edu/plant>, <www.hort.uconn.edu/plants>, <des.arbres.free.fr>, 2005)
<i>mimosa</i>	M	'wattle'	syn. <i>acacia</i> , evergreen, tree or shrub, up to 15m., dense wide-spreading, variety of crown and form, bushy, irregular to rounded form depending on species, shrub often multi-stemmed, with soft tiny ball-like flowers in clusters (LRPT, 1994:727, <www.anbg.gov.au/acacia/species.html>, <www.fuf.net>, 2005)
<i>nerprun</i>	M	'buckthorn'	evergreen, up to 6m. tall, tree or shrub, multi-stemmed, irregular upright branching (<www.fuf.net/tree_plantings/tree_listings.html>, <www.borealforest.org>, 2005)
<i>nyssa</i>	M	'tupelo'	tall 15m. deciduous tree of southern USA, pyramidal in youth to rounded pyramidal in maturity, brilliant autumn foliage (<www.domtar.com/arbre>, <psn3.com>, 2005, CED, 1986:1637)
<i>pandoréa</i> aka <i>tecoma</i>	M	'pandorea', 'bower vine', 'wonga-wonga vine'	warm temperate or tropical <i>arbuste</i> with glossy evergreen leaves, creeping habit, white trumpet-like flowers (<www.nature.jardin.free.fr>, 2005)
<i>pin</i> (commun)	M	'pine', 'Scots pine' <i>P. sylvestris</i>	evergreen, resinous, v. tall native of the Auvergne, conical form, dome-like in old age, long needle-like leaves to 10 cm. in clusters, with egg-shaped cones (<nature.jardin.free.fr>, <www.pennine.demon.co.uk/Arboretum>, 2005)
<i>pin noir</i>	M	'Austrian pine'	'evergreen ( <i>P. laricio</i> , <i>P. nigra</i> ) broad pyramidal form, broad, flat-topped umbrella-like crown, ovoid conical cones (found in many regions of France (<www.oregonstate.edu/dept>, <nature.jardin.free.fr>, 2005)
<i>pin pignon</i>	M	'stone-pine', 'umbrella pine'	evergreen Medit. conifer, multi-forked has highly distinctive rounded silhouette (shared by one other pine, long needles source of <i>pigne</i> (F) 'pine nuts' (<nature.jardin.free.fr>, 2005)



<i>pois doux</i>	M	'icecream bean tree', 'monkeytail'	tropical tree indigenous to Amazon and French Antilles rainforests; small tree up to 20m. with broad spreading crown ( <a href="http://www.hear.org/pier/species/inga_edulis.htm">www.hear.org/pier/species/inga_edulis.htm</a> ), 2005)
<i>rhododendron</i>	M	'rhododendron'	genus native to S. Asia, multi-stemmed, evergreen (rare deciduous exception); diverse in size and shape, upright irregular form and crown ( <a href="http://www.hort.uconn.edu">www.hort.uconn.edu</a> ), < <a href="http://www.rsfcitymax.com/rhodoinfo.html">www.rsfcitymax.com/rhodoinfo.html</a> >, 2005) LRPT, 1994:988)
<i>romarin</i>	M	'rosemary'	small (1-2m.) aromatic evergreen European shrub, upright straggly form, multi-stemmed, with irregular crown (< <a href="http://nature.jardin.free.fr">nature.jardin.free.fr</a> >, 2005, Yates, 1983:217, )
<i>*sapin (des Vosges)</i>	M	'fir', 'true fir', 'silver fir'	evergreen (esp. <i>Abies alba/pectinata</i> , indigenous to France), to 50m., conical, w. pyramidal crown; prickly rigid flattened needle-like leaves indented/notched at apex (< <a href="http://nature.jardin.free.fr">nature.jardin.free.fr</a> >, < <a href="http://www.plantifolia.com">www.plantifolia.com</a> >, 2005, *NB 'sapin de Noël' is a 'spruce', not 'fir'
<i>seringa(t)</i>	M	'mock orange'	small deciduous shrub, <i>arbrisseau/arbuste</i> (dep. on variety of species), upright arching branches create broad-spreading form with irregular-shaped crown (2005)
<i>sureau (noir)</i>	M	'(European) elder'	small tree ( <i>arbrisseau</i> , gen. <i>Sambucus</i> ) 2-7m. tall, 3-5m. wide; multi-stemmed, deciduous; open bushy spreading form, irregular crown, berry-like fruits (< <a href="http://nature.jardin.free.fr">nature.jardin.free.fr</a> >, < <a href="http://www.web.fccj.org/~dbyres/elderberry.htm">www.web.fccj.org/~dbyres/elderberry.htm</a> >, 2005)
<i>thuya</i>	M	'thuja', 'red/false cedar'	tall evergreen, flattened scale-like leaves 2 mm. long; conical form, pointed crown; ovoid erect cones (< <a href="http://www.plantifolia.com">www.plantifolia.com</a> >, < <a href="http://www.elib.cs.berkeley.edu/photos/flora">www.elib.cs.berkeley.edu/photos/flora</a> >, < <a href="http://www.oregonstate.edu/dept/ldplants">www.oregonstate.edu/dept/ldplants</a> >, < <a href="http://www.nationmaster.com">www.nationmaster.com</a> >, 2005)
<i>tsuga</i>	M	'tsuga', 'hemlock'	(syn. <i>pruche</i> ) evergreen, narrow pyramidal habit in youth, pendulously pyramidal in maturity, central leader leans over; short flat needles in two ranks, with two stripes underneath (< <a href="http://www.oregonstate.edu">www.oregonstate.edu</a> >, < <a href="http://www.horticultopia.com">www.horticultopia.com</a> >, 2005)
<i>thym</i>	M	'thyme'	small aromatic shrub that flourishes in arid scrubland and bush (LRPT, 1994:1109, CED, 1986:1590)

The term *acajou* originally applied to two very different evergreen tropical trees. The earliest recording (1557) identifies the 10 m. Brazilian 'cashew nut tree' from the Tupi *acaïou*. The same term *acaïou* was also used to denote the very tall (35 m.) tropical American 'mahoganies', derived from a different Tupi word, *acaiacatinga* (<[atilf.atilf.fr](http://atilf.atilf.fr)>, 2005). Sound changes,

possibly caused by confusion between the two, led eventually to *acajou* which served for a considerable period as the term for both. Today, pronunciations allow the two to be distinguished, *acajou* serving as the term for mahoganies, and *cajou* as the term for the cashew nut tree, with its synonyms *anacardier* and, occasionally, *acajou*.

Descriptions show that 'woody' plants denoted by these masculine vowel-final nouns as varied as those in the previous masculine set. Many are very tall, eg *bouleau*, *cyprès*, *sapin*, and some are smaller, eg. *buis*, or very much smaller by comparison, eg. *daphné* and *romarin*, while *thym* is better described as tiny in such company. It follows that masculine gender assignment would seem to be unrelated to height. Most of these plants have the same typical upright orientation of any tree but not all those identified as *genévrier* since dwarf varieties do not fit this description. Another problem is *bouleau*, a term that applies to three Old World European species as well as birches found around the world. One of the native European species is *bouleau pubescent* (M) 'downy/(European) white birch'. While branching may drift downward, its growth is typically more upright than *bouleau verruqueux* (M) 'silver birch', which has *rameaux retombants* 'drooping stems'. Its stems can be distinguished from the *saule* (M) 'willow' since they are rigid and snap when bent and thus lack the flexibility that enables stems of the willow to be used for ties, straps or canework. Thus, for all but two of these 'woody' plants, it can be said that branching and stems are sufficiently 'hard' or 'rigid' or 'dense' to snap when bent. The association between these attributes 'hard', 'rigid' and 'inflexible' and masculine gender assignment may be underpinned by an intuitive or stereotypical link with 'masculine' and possibly, although less directly, to 'male'.

The two exceptions to these conditions are *jasmin* and *pandoréa*, vines which produce long, slender, flexible stems of enormous length. This growth might possibly have anticipated some association with feminine gender assignment, as for examples such as *vigne* (F) '(grape)vine' in their opposition to the 'rigid' growth of other 'woody' plants in this masculine set. Neither of the two plants is native to Europe. No explanation is offered at this moment for their masculine gender assignment and they are discussed further below with other vines as a set.

## Vowel-final pronunciation

Variations in height, leaf form, fruit and silhouette amongst these woody plants provide no regularity that would account for shared vowel-final pronunciation patterns. For many of these trees the trunk continues as the central leader to the very top, producing lateral branches at regular intervals, eg. evergreen conifers such as *pin* (M) 'pine', *araucaria* (M) 'monkey puzzle tree', and the deciduous *nyssa* (M) 'tupelo'. This growth produces a smallish but open crown in some cases, or a steeple-shaped crown, particularly amongst conifers, or one that is sparse and irregular, as for *bouleau*, or narrow and conical, as for the typical *cypres*. These differences result in very different silhouettes. If crown shape is crucial, the various shapes above include:

- pyramidal or pear-shaped, eg. *épicéa* (M) 'spruce', *pin* (M) 'pine', *sapin* (M) 'fir', *nyssa* (M) 'tupelo', particularly where growth produces a spire-shaped pointed crown
- open and uneven at the crown, eg. *abutilon* (M) 'Chinese lantern tree', *balsa* (M) 'balsa', *fusain* (M) 'spindle-tree', *houx* (M) 'holly', *jacaranda* (M) 'jacaranda', *lilas* (M) 'lilac', *mimosa* (M) 'mimosa'/'wattle', *nerprun* (M) 'buckthorn', etc.
- narrow, conical or thinning, eg. *cypres* (M) 'cypress', *bouleau* (M) 'birch'.

Another form of branching occurs for smaller plants, described as *évasé*, 'funnel-shaped' or concave, where upright stems fall outwards and away from the centre to leave an open crown, as for *abutilon* (M) 'Chinese lantern', and *parrotia* (M) 'Persian parrotia', etc. The various branching patterns and the different shapes and crowns produced – 'narrow', 'irregular', 'open', 'flat' among these vowel-final nouns all provide a contrast with the two – 'spreading' shape and 'rounded' crown – associated with consonant-final pronunciation nouns.

In this respect it is interesting to note the *balsa* (*Ochoroma pyramidale*) whose form when young is pyramidal (as noted in its Latin name), but as it grows subdivisions become fewer and fewer and as it grows taller and taller the crown becomes flat and thin. Thus, in both stages its vowel-final pronunciation is consistent with the paradigm suggested here. It is the original consonant-final pronunciation that is yet to be accounted for. While it could not be called a 'canopy' tree, the leaves of this sun-loving tree are wide and create a large amount of shade, which offers an explanation for the original consonant-final pronunciation.\

Slightly different are synonyms for 'juniper', the consonant-final *genièvre* and vowel-final *genévrier* both of which can denote the same genus *Juniperus* 'juniper tree'. These contrasting word-final patterns do not relate to different forms at the crown since members of this genus share a broad spreading habit regardless of height. It is possible that this 'spreading' crown may account for the consonant-final *genièvre*.

Nouns denoting a specific kind of tree may be used in extension to reflect one or more shared characteristics, and they maintain the gender assignment and word-final pronunciation of the original noun. In some cases there is a happy coincidence between these classifications and the forms of the original 'woody' plant and the 'woody' plant in its extended meaning, eg. *lilas* (M) 'lilac', and *lilas des Indes* (M) 'chinaberry tree', which share the same deciduous foliage, lavender-coloured flowers and irregular form. Other examples may not so close, eg. the typical cool-climate European *pin* produces a pyramidal crown, eg. *pin noir* (M) 'Austrian pine', but it may be broadly domed elsewhere, eg. the Mediterranean *pin piñon* (M) 'umbrella pine', which shares the same needles and cones as the pine but has an umbrella-shaped crown.

While the generalisations relating to 'other than rounded/spreading' can account for vowel-final pronunciations in most instances, there are several counter-examples, *acajou* (M) 'mahogany' (gen. *Swietenia*), *bélimbé* (M) 'canary wood', *galba* (M) 'beauty leaf' and *pois doux* (M) 'icecream bean tree'. These tropical trees are evergreen and have a rounded or spreading crown, yet all four are denoted by vowel-final nouns. Since other tropical evergreen trees with a rounded or spreading canopy have consonant-final pronunciation, eg. *campêche*, *citrus*, *teck*, these counter-examples require explanation. Some definitions of the *acajou* describe it as 'deciduous' (<[www.encyclopedia.com](http://www.encyclopedia.com)>, 2005), possibly since it is affected by cold in a similar way to deciduous trees in temperate zones, dropping its leaves when temperatures reach 36°F.

#### 7.4.3 Feminine vowel-final nouns

Of all the nouns denoting woody plants, only six feminine nouns have the less regular vowel-final pronunciation. They are set out in Table 7.13 below.

Table 7.13 Feminine vowel-final nouns denoting 'woody plant'

<i>azalée</i>	F	'azalea'	<i>arbuste</i> , deciduous, of gen. <i>Rhododendron</i> , (3m. by 2m.) with bushy upright dense or open form, irregular crown (<nature.jardin.free.fr> 2005, Yates, 1983:208)
<i>bougainvillée</i> syn. <i>bougainvillier</i>	F	'bougainvillea'	<i>arbrisseau</i> (LRPT, 1994:123.), <i>arbuste</i> (<nature.jardin.free.fr>), woody scrambling creeper with evergreen leaves and showy flowers forming ground cover in native state; most are thorned (<www.mobot.org>, 2005, Yates, 1983:201)
<i>hydrangéale</i> syn. <i>hortensia</i> (M)	F	'hydrangea'	deciduous multi-stemmed Asian/American shrub to 3m. with large ball-shaped flowers, lanky open habit, irregular crown (<nature.jardin.free.fr>, <www.psn3.com>, 2005)
<i>ketmie</i>	F	'hibiscus', 'rose of Sharon'	deciduous <i>Hibiscus</i> species ( <i>H. rosa sinensis</i> , <i>H. coccineus</i> <i>H. syriacus</i> , etc.) multi-stemmed shrub, vase-shaped to oval form, upright open branching, large palmate leaves (<nature.jardin.free.fr>, <www.playtyfolia.com>, 2005)
<i>russélie</i> syn. <i>goutte de sang</i>	F	'coral plant', 'fire-cracker fern'	evergreen, 1.5m., strongly multi-branching from the base, with thin wiry erect stems, usually leafless, forming irregular crown (<www.hear.org/pier/species>, 2005)
<i>spirée</i>	F	'meadow-sweet'	caney shrub, <i>arbrisseau</i> , to 3m., deciduous, spreading form, irregular crown (Yates, 1983:217, <nature.jardin.free.fr>, 2005)

These feminine nouns denote smaller shrubs and one vine. Three of the four smaller shrubs in this set, *azalée*, *hydrangée* and *ketmie*, are deciduous, while *russélie* is evergreen, contrasting with low-growing shrubs in the masculine set such as *romarin* (M) 'rosemary' and *thym* (M) 'thyme'. Differences in foliage growth and drop do not appear to form part of a wider generalisation since they cannot account for the shared feminine gender assignments here, nor can they account for masculine nouns as both masculine sets of nouns contain European deciduous and evergreen forest trees. However, two of these feminine plants, *azalée* and *ketmie*, are closely related to plants identified by masculine terms *rhododendron* and *hibiscus* in the masculine set. These nouns are examined in related sets below. The shrubs *hydrangée*, *russélie* and *spiraea* are 'trunkless' in that stems grow directly from the permanent ground-level base. The *russélie* subdivides into a multiplicity of 'wiry' stems, a form described as *très ramifié* 'greatly subdivided' and flexible. Stems produced by both *hydrangée* and *spirée* are

described as 'caney' while the 'canes' of the *hydrangée* are 'hollow'.

In their association with feminine gender assignment these various attributes 'wiry', 'hollow', 'caney' and 'flexible' find a direct contrast with attributes of stems produced by woody plants denoted by masculine nouns:

- 'fleshy' contrasting with 'hard'
- 'hollow/caney' contrasting with 'dense'
- 'flexible/wiry' contrasting with 'rigid'.

This paradigm presents certain difficulties in relation to *saule* 'willow' as a masculine noun. As mentioned above its branches are thick, but only to a certain distance from the trunk at which point the 'woody' density lessens and stems lose their 'rigid' strength and either break off easily or lose their rigidity and as they become more flexible they are unable to stand upright and become pendulous. Although stems of the *bouleau* (M) 'birch' may become pendulous, 'particularly the 'silver birch' (*Betula pendula*), they maintain a rigidity and inflexibility that causes them to snap when bent. These differences in rigidity can also be observed in their different uses, the birch as a rod, the willow in basketry and cords. Thus, the paradigm above can account for masculine gender of *bouleau* and historical feminine gender of *saule* but not its change to masculine gender.

#### Vowel-final pronunciation

Shrubs denoted by nouns *ketmie*, *spirée* and *russelie* are multi-stemmed. The wiry stems of the *russelie* produce a form best described as *évasé* or 'vase-shaped' – where stems spill out from the centre to produce a leggy, open, concave shape. This concave shape is not shared by caney shrubs such as *spirée* or shrubs such as *azalée*, *hydrangée* and *ketmie*. For these plants stems are rigid and upright but they are irregular in length, producing an open, irregular shape similar to *daphné* (M) 'daphne' and *romarin* (M) 'rosemary'.

It seems that these two different shapes – concave-*évasé* from the base and 'irregular' at the top – appear to be associated with vowel-final pronunciation of shrubs in this set. Vowel-final pronunciation for *bougainvillée*, a quasi-twining vine, cannot be accounted for at this stage. It is

noted that both *jasmin* and *pandoréa*, other quasi-twining vines lacking the ability to cling to a surface, are also vowel-final.

#### 7.4.4 Feminine consonant-final nouns

The database contains a number of feminine nouns denoting woody plants that are regular in that they have consonant-final pronunciation, the pattern more closely associated with feminine classification. They are set out below in Table 7.14.

Table 7.14: Feminine consonant-final nouns denoting 'woody plant'

<i>angélique du Japon</i> (syn. <i>aralia</i> )	F	'golden umbrella'	thorny deciduous Asian <i>arbuste</i> , <i>Aralia elata</i> to 12m.; trunk covered with spines; upright (<nature.jardin.free.fr>, 2005)
<i>airelle</i>	F	'European creeping (blue)berry'	any of 400 Ericaceous varieties, evergreen low-growing shrubs widespread across N.Europe, 20-50 cm. tall, stems to 10 cm, creeping to 50 cm.; sour-tasting black or red berries (<www.nationmaster.com>, <fr.wikipedia.org>, 2005, LRPT, 1994:20)
<i>airelle bleue</i> syn. <i>orcette</i>	F	'bilberry'	deciduous, to 80cm., creeping or trailing woody plant (<www.galactus.ch/botanist>, 2005)
<i>airelle rouge</i>	F	'cowberry', 'lingberry'	evergreen shrub 30cm. tall, creeping or trailing stems, bright red berries (<www.plantnames.unimelb.edu.au/Sorting/Vaccinium>, <www.habitas.org.uk>, 2005)
<i>aubépine</i>	F	'hawthorn'	<i>arbuste</i> , deciduous, low-branching shrub, 6m. tall/wide, rounded crown, thorns ( <i>Crataegus laevigata</i> ) (<www.fuf.net> <www.hort.uconn.edu>, 2005)
<i>badiane</i>	F	'star anise'	evergreen, medium-sized (15 m.), straight trunk and rounded crown
<i>barbe de bouc</i>	F	'goats beard' ( <i>Aruncus dioicus</i> / <i>Spiraea aruncus</i> )	perennial to 2m., branches out from ground level to produce rounded form and crown (<nature.jardin.free.fr>, 2005)
<i>bourdaine</i>	F	'alder buckthorn' 'black dogwood'	deciduous Eurasian shrub ( <i>Rhamnus frangula</i> , <i>arbuscle/arbrisseau</i> , 5m. x 4m., rounded crown, dense canopy, black berry-like fruit, not thorned (<www.horticopia.com>, <woodyplants.nres.iuc.edu/plant>, 2005, LRPT, 1994:125)
<i>bruyère</i>	F	'heather', 'Scotch heather'; 'heath'	low-growing small evergreen shrubs <i>Calluna</i> (heather), <i>Erica</i> (heath); hard needle-like evergreen leaves, forms thick layer, widespread across W. Europe in boggy areas up to 1800m. (<www.hort.uconn.edu/plants>, <nature.jardin.france.fr>, 2005, LRPT, 1994:137)

<i>busserole</i>	F	'bearberry', 'alpine berry' (gen. <i>Erica</i> )	( <i>Arctostaphylos uva ursi</i> ) prostrate creeping shrub ( <i>arbrisseau</i> ), trailing habit forming dense mats 15cm. high in cold-region peat-bogs; evergreen, with stems from 50cm. to 2m. long, bright red berries (< <a href="http://www.chezmarie.nuxit.net">www.chezmarie.nuxit.net</a> >, < <a href="http://atilf.atilf.fr">atilf.atilf.fr</a> >, < <a href="http://www.hipematural.com/fr/pltgayuba.html">www.hipematural.com/fr/pltgayuba.html</a> >, < <a href="http://www.nybg.org">www.nybg.org</a> >, 2006)
<i>callune</i>	F	'true heather', 'Scotch heather' (gen. <i>Calluna</i> )	low-growing <i>arbrisseau</i> to 60cm. forming dense covering, numerous ramified branches, evergreen needle-like leaves (< <a href="http://www.fleurs-des-champs.com">www.fleurs-des-champs.com</a> >, < <a href="http://nature.jardin.france.fr">nature.jardin.france.fr</a> >, 2005)
<i>canneberge</i>	F	'European cranberry'	( <i>Vaccinium oxycoccus</i> , <i>Oxycoccus palustris</i> ) (not the American variety <i>V. macrofolium</i> ); low (to 20 cm.) European shrub w. creeping stems( 50cm.), small leaves, red berry fruit (< <a href="http://www.vertde terre.com">www.vertde terre.com</a> >, 2005)
<i>clématite</i>	F	'clematis'	woody climbing shrub <i>arbuste</i> , stems in the form of runners; deciduous/evergreen a/c to species; sensitive petioles which aid ascent (< <a href="http://pages.britishlibrary.net/charles.darwin/texts/climbing_plants/plants">pages.britishlibrary.net/charles.darwin/texts/climbing_plants/plants</a> >, < <a href="http://nature.jardin.france.fr">nature.jardin.france.fr</a> >, 2005)
<i>épinette</i> (reg., Canada)	F	'Canadian spruce', 'white spruce'	evergreen conifer ( <i>Picea glauca</i> ), tall; steeple-like crown, grey-green needles (< <a href="http://woodyplants.nres.iuc.edu/plant">woodyplants.nres.iuc.edu/plant</a> >, < <a href="http://www.cfl.scf.mcan.gc.ca/imfoc-idwcf/arbreshotes/coniferes">www.cfl.scf.mcan.gc.ca/imfoc-idwcf/arbreshotes/coniferes</a> >, 2005)
<i>épine noire</i> syn. <i>prunellier</i>	F	'blackthorn', 'sloe-tree'	thorny Eurasian shrub <i>Prunus spinosa</i> , black twigs, white flowers and sour plum-like blue-black fruits ( <i>prunelle</i> ) (COD, 1986:160, COFED, 1985:445, LRPT, 1994:912)
<i>épine-vinette</i>	F	'barberry'	gen. <i>Berberis</i> , shrubs to 3m., evergreen and deciduous varieties, all thorned, with compact rounded form (< <a href="http://nature.jardin.france.fr">nature.jardin.france.fr</a> >, 2005, Yates, 1983:209,
<i>erythrine</i> syn. <i>crête de coq</i> (F) <i>arbre corail</i> (M)	F	'coral tree'	gen. <i>Erythrina</i> , deciduous <i>arbuste</i> (3 m.), thorny ascending branches, large coral-red flowers (< <a href="http://www.plantifolia.com">www.plantifolia.com</a> >, 2005)
<i>étoile de Bethléem</i>	F	'potato vine'	<i>arbuste</i> ( <i>Solanum jasminoides</i> ); flexible dark green branching stems, evergreen leaves, shrubby climber to 3.5m. or more, petioles which thicken to aid clasping (< <a href="http://nature.jardin.free.fr">nature.jardin.free.fr</a> >, 2005)
<i>garance</i>	F	'madder (wild, common)'	evergreen perennial, creeping/climbing shrub of S. France, to 1.5m., tiny hooks on stems/leaves for climbing, quadrangular-shaped stems, brilliant green oval leaves (< <a href="http://nature.jardin.france.fr">nature.jardin.france.fr</a> >, < <a href="http://www.witwib.com">www.witwib.com</a> >, 2005)
<i>glycine</i>	F	'wisteria'	deciduous climbing tree ( <i>arbre</i> , <i>arbuste</i> ) perfumed racemes (LRPT, 1994:523)



<i>grenadille</i>	F	'passionfruit vine', 'granadilla'	evergreen woody climbing vine (4m.), supported by tendrils at the leaf axil, perfumed flowers, dark green shiny leaf (<nature.jardin.france.fr>, 2005)
<i>lavande</i>	F	'lavender'	multi-stemmed shrub ( <i>arbrisseau</i> ) indigenous to W. Mediterranean, perennial with narrow flat pointed leaves, evergreen in warm climates, grows in clumps (<www.mobot.org>, <www.nature1.org>, <www.plantcultivar.info>, 2005)
<i>myrtille</i>	F	'whortleberry', bilberry'	small vigorous Eurasian shrub 20-60cm. of N. France, forming dense colonies to an altitude of 2500m., deciduous, <i>tiges ramifiées et anguleuse</i> , with creeping/trailing habit and blue-black berry ( <i>Vaccinium myrtillus</i> ) (<www.forestryimages.org>, <www.vertdeterre.com>, <fr.wikipedia.org/wiki/Myrtille>, <ip30.eti.uva.nl>, 2005, LRPT, 1994:754)
<i>pruche du Canada</i>	F	'Canadian/Eastern hemlock', 'hemlock spruce'	syn. <i>tsuga</i> , evergreen conifer ( <i>T. canadensis</i> ), pyramidal form, dense conical crown although central leader leans over; needles dark green with white stripes (<woodyplants.nres.uiuc.edu/plant>, <www.oregonstate.edu/dept/ldplants/tsca.htm>, 2005)
<i>ronce</i>	F	'bramble bush' (thorned, rambling)	thorned; edible fruits; abundance of long arching canes (LRPT, 1994:995)
<i>rose</i>	F	'rose'	(antiq.) thorny shrub with canes
<i>salsepareille</i> syn. <i>liseron épineux</i> (M)	F	'sarsaparilla'	<i>arbrisseau</i> , evergreen prickly climbing tropical shrub with flowers in racemes, shiny dark red berries in bunches (<nature.jardin.france.fr>, 2005, LRPT, 1994:1009)
<i>sauge</i>	F	'sage'	<i>sous-arbrisseau</i> to 1 m. branching out strongly from ground level woody base, herbaceous perennial; upright stems produce a rounded shape; culinary herb crown (Yates, 1979:100), <nature.jardin.france.fr>, 2005)
<i>sauterelle noire</i>	F	'locust tree'	deciduous tree ( <i>Gleditsia triacanthos</i> ) to 25 m., broadly rounded crown, straight trunk covered in clusters of large purple-brown branched thorns (<www.worldagroforestry.org>, 2005)
<i>symphorine</i>	F	'snowberry'	shrub that grows to about 7 ft., multi-multi-stemming, suckering, etc., grows in colonies of many plants intertwined together, often covering many square yards of mountain-side (<plants.montara.com>, 2005)
<i>vigne</i>	F	'grapevine'	climbing shrub with flexible stems that turn to canes when left on plant; fruit in bunches (LRPT, 1994:1175)

<i>vigne</i> <i>vierge</i>	F	'Virginia creeper/ivy'	deciduous woody creeping perennial vine, tendrils have adhesive tips (Yates, 1983 COD, 1986:1694)
<i>viorne</i> syn. <i>clématite</i> syn. <i>alisier</i>	F	'viburnum'	<i>arbrisseau</i> , multi-stemmed shrub with (esp. <i>V. lentago</i> ) w. white perfumed flowers; vine-like long flexible stems used for straps, bindings (clematis) (LRPT, 1994:1178, <atilf.atilf.fr>, 2005)

This set includes 'ground-cover' plants such as *airelle*, *busserole*, *canneberge*, *myrtille*, etc. which have a permanent above-ground low-growing woody stem that produces fleshy vine-like but shorter stems. Without the rigidity that holds other stems erect they simply lie in a recumbent position on the ground where nodules at various intervals start to produce roots to form a new plant, which then replicates the process by sending out more roots that scramble and clamber under and over each other. Eventually this abundance of convoluted stems forms a dense mat or carpet. Thus, the fleshy stems of these ground-cover plants typically produce recumbent branching in contrast erect 'hard' or 'rigid' growth typical of 'woody' plants. The 'flexible' stems of *airelle*, *myrtille*, etc., are not unlike the wiry 'flexible' stems of *russellie*. The erect but herbaceous stems of plants such as *lavende* and *sauge* also contrast with other low-growing if not recumbent 'woody' plants – those with erect 'hard' or 'rigid' stems, such as *daphné*, *romarin*, *thym*. For these plants there is no contrasting in orientation, but attributes 'fleshy' and 'soft' appear to form oppositions to 'hard' and 'rigid'. Together they can account for, contrasting gender assignments of a number of 'woody' plants – and, possibly non-woody plants, although they do not form part of this thesis and must await future analysis.

However, these associations cannot account for other feminine woody plants denoting trees, such as *badiane* (F) 'star anise tree', *épinette* (F) 'white spruce', *pruche* (F) 'Canadian spruce/hemlock spruce', and *sauterelle noire* (F) 'locust tree'. They are considered below.

Also amongst plants in this set are *bruyère* and *callune* – low-growing, evergreen, bushy plants that have a small trunk and rigid, upright stems which attributes are otherwise shown to be associated with masculine gender. These plants are noted for spreading so abundantly that they have come to form a continuous expanse. This ability to spread is not because stems are able to colonise by rooting themselves to produce new plants, but because of the abundance of their

seed-producing capacity. Each tiny heather flower has 30 seeds, and a single large plant might produce up to 150,000 seeds per season (<flood.nhm.ac.uk>, 2005). These small, light seeds are easily dispersed by both wind and insects and have a germination period lasting up to six months. Thus, not only can seeds produce new plants close-by to their source, they can disseminate over an extraordinary expanse and these seeds can take root to start a new colony, particularly in difficult or disturbed habitats such as sand dunes, lowland heaths, peaty soils and bogs and denuded habitats, eventually forming a continuous, ever-expanding layer across the landscape. From sea level to mountainside in France, this *bruyère* forms a landscape known as *lande* (F) a Gaulish word meaning 'plain', ... *dans tout l'Ouest, le Nord et le Centre; Pyrénée* '... in the West, North and Central France, the Pyrenees' (<herbierfrance.free.fr>, 2005). This process of spreading through the creation of new colonies is not unlike that of certain pigeons, particularly those denoted by the feminine noun *tourterelle* that can take root and flourish, bringing new life to an often difficult landscape.

The 'spreading' nature of evergreen *bruyère* and *callune* is different from that of *airelle* and *myrtille* discussed above since, for heaths and heathers the 'spreading' forms an almost limitless expanse over the countryside but for mountainberries the 'spreading' is more related to the creating of new plant life alongside others in the immediate vicinity. They spread only as far as shorter stems can repeat this process within in a single season since only the woody crowns survive through the wintry conditions these plants enjoy. However, the deciduous *symphorine* lies somewhere between the two in that its extent is not as unlimited as other woody berry plants, while the convoluted mass of suckering and branching among the intertwining plants can cover an extensive area within a single season and it, too, is feminine. This capacity to multiply abundantly occurs also for the *saule* (M) 'willow'. It is further discussed below.

Historically feminine noun *saule* (M) 'willow'

The *saule* (M) 'willow' flourishes in damp or wet conditions since its roots do not rot unlike those of other tall forest trees. Early and later definitions of *saule* all make reference to its connection with damp conditions, eg. '*Arbre ... qui croist dans des lieux aquatiques ... le long des ruisseaux*, 'Tree ... which grows in moist places ... along streams', etc. (Dictionnaire de

L'Académie française, 1st Edition, 1694, in <[www.lib.uchicago.edu/efts/ARTFL/projects/dicos](http://www.lib.uchicago.edu/efts/ARTFL/projects/dicos)>, 2005) and today this characteristic association between water is still made clear ([www.environnement.ecoles.free.fr/saule.htm](http://www.environnement.ecoles.free.fr/saule.htm)>, 2005, LRPT, 1994:1014).

The noun *saule* applies to more than three hundred species of the genus *Salix* many of which are native to Europe, including the 100 ft. *saule blanc* 'white willow'. Willows are renowned for the hardness of their trunks, but they produce *rameau flexibles*, cane-like 'flexible stems' of the *saule blanc*; in other species stems seem rigid but are weakened, eg. *saule fragile* (M) 'brittle' or 'crack willow', and break off easily. Willows reproduce prolifically via male and female fruit in a capsule or pod, and each pod bears numerous minute seeds furnished with long, silky down that enables them to be carried long distances by the wind. The prolific output and spread of seed mirrors that of *bruyère* (F) 'heath' and *callune* (F) 'heather'. However, equally significant is the ability of twigs and broken pieces of branch of any *saule* to form roots very quickly in those damp or wet conditions. Broken stems and twigs can root either where they fall or they may be carried to a new location by running water, where new roots begin to shoot in the same way as nodules along stems of mountainberries, creating a new colony some distance from its source. This process can be repeated endlessly in damp or wet conditions. Such conditions once covered much of northern Europe in an entire expanse of damp, boggy and muddy terrains crisscrossed with water courses, from the United Kingdom to Russia – until methods of draining were invented. Under these inhospitable conditions, the *saule* would have spread endlessly in much the same way as *bruyère* (F) 'heath' and *callune* (F) 'heather' in equally inhospitable but drier terrains.

The many regional names give testimony as to its widespread presence, *saudze*, *sauge*, *sodze*, etc. in Swiss patois (*patois romand*), *sausse* in Comté patois, *sauge* in Ancient Franko-Provençal, *sauce*, *sauche*, *saulx* and many more in Old French (*sauce*, *sauche*, *saulx* and many more), *salha* in Frankish (full list at <[www.perso.wanadoo.fr/trebla-mountain/toponymes/topo\\_04\\_r-z.htm](http://www.perso.wanadoo.fr/trebla-mountain/toponymes/topo_04_r-z.htm)>, <[www.suter.home.cern.ch](http://www.suter.home.cern.ch)>, 2005), as well as place names. It is noted that while the etymology of *saule/saulx* in some sources is suggested to be derived from an Indo-European source *sal-*, 'grey', Celtic origins are also suggested, apparently constructed from *sel*

'near' and *lis* 'water' which may relate to the unique ability of its roots to tolerate watery conditions that will rot the roots of most trees.

The result is that the *saule* can reproduce itself in an almost endless layer through the *marécages* or bogs of northern Europe, as it does today along water courses in Australia and anywhere else it is introduced. This capacity for abundant regeneration is found not only among plants such as *saule* and *bruyère* but throughout the animal world – for some pigeons, for fish such as *carpe* (F) 'carp' and *perche* (F) 'perch', terrestrial creatures such as *souris* (F) 'mouse'. It is consistent in its association with feminine gender assignment and it is equally possible that this 'abundant' re-creation and spreading of life in otherwise inhospitable domains offers another explanation for the historical feminine gender assignment of *saule*.

It is noted that *aulne*, another tree loves wet conditions. However, it differs from the *saule* in that its seeds are wingless and can only spread a short distance in the air; typically they must travel outwards in water buoyed up by an internal air flotation sac. Moreover, alder seedlings do not compete well in shady woodlands and so this species gradually dies out as the other trees become established. While new growth can occur from a dying stump, and from cuttings, branches do not have the same ability to root where they fall as the *saule*, and alders are more likely to be found in narrow bands along watercourses as companion plants to the willow, or in dense thickets or stands, usually small in height, growing together in wet swampy soils rather than spread through a landscape as the *saule*. The *bouleau* tolerates damp conditions, and the roots are able to survive flooding for several weeks at a time after which they, too, start to root. The contrasting genders of the masculine *aulne* and *bouleau* and the feminine *saule* would once have been regular and predictable in relation to those attributes.

Another 'spreading' plant, *lavande* (F) 'lavender'

The same ability to spread across the landscape identified for *bruyère*, *callune* and *saule* applies also to *lavande* (F) 'lavender', whose native habitat of rocky and calcified terrains which cover much of the Mediterranean region allowed this plant to spread across an extraordinary expanse:

... toute l'Europe méditerranéenne entre 700 et 1.800 m d'altitude, et tout particulièrement dans le midi de la France.

'... the whole of Mediterranean Europe between 700 and 1,800 m., most particularly in the 'midi' region of France .

([chezmarie.myftp.org/plantes/lavande.htm](http://chezmarie.myftp.org/plantes/lavande.htm), 2005)

These lavender landscapes can still be found today, particularly in Provence, and while this attribute might have once accounted for feminine gender assignment, this plant is frequently found as a single specimen. It nonetheless remains capable of abundant regeneration.

However, the outermost growth is herbaceous and in colder regions it dies back at the end of the growing season. It may be that this 'herbaceous' growth finds another contrast with 'woody' that is consistent with their contrasting gender assignments.

#### Other 'woody' plants with flexible stems

Two other nouns in this set relate to woody plants equally renowned for their long slender stems, *clématite* and *viorne*. While English speakers might not consider these plants to be related, dictionary entries for *clématite* (F) 'clematis' (LRPT, 1994:196) identify it in the context of *viorne*, while entries for *viorne* (LRPT, 1994:1178) mark it as related to *clématite*. Another source ([atilf.atilf.fr](http://atilf.atilf.fr), 2005) describes *clématite* as ... *vigne blanche*, *viorne* ... suggesting a somewhat synonymous relationship. Certainly, these shared references point to a strong association, the basis of which warrants consideration. It is noted that the branching of both plants is in the form of long, slender stems or runners.

All plants identified as 'viburnum' produce *rejets*, new shoots, that are not only very long and very slender but are sufficiently flexible that they, too, have been used for centuries to make *des liens et des harts* 'cords and ropes' ([www.florealpes.com/fiche\\_viornelantane.php](http://www.florealpes.com/fiche_viornelantane.php), 2005). This attribute is highlighted in compound names of various 'viburnum', both in French, eg. *viorne lantane* (*Viburnum lantana*) and *viorne flexible* (*Viburnum tomentosa*), and in English as 'witherod viburnum' (*Viburnum cassinoides*) since 'withe' applies to strong flexible twigs (CED, 1986:1742). These long, slender, flexible stems are found also for *clematite* and are able to be twined together to make ropes and ties in the same way as those of the *viorne*.

Of course, the standard against which all such 'flexible' stems are measured is *saule* (M) 'willow', one of the historically feminine nouns. Willows have been of enormous importance and value to humans over millennia in both basket weaving and rope-making, used extensively in the packing and transportation of goods (<[www.basketmakers.org](http://www.basketmakers.org)>, 2005). Willow canes were classed for coarse or fine work in much the same way as for wool is classed today, sorted according to various lengths, up to 10 ft. or so, with different names for different measures as for coins (<[www.1911encyclopedia.org/B/BA/BASKET.htm](http://www.1911encyclopedia.org/B/BA/BASKET.htm)>, 2005).

The common thread amongst each of these feminine shrubs *lavande*, *clématite*, *sauge* and *viorne*, is the contrast between their growth - whether 'fleshy', 'herbaceous', or 'flexible' - and the 'dense', 'hard', 'inflexible', 'rigid' if not straight or upward growth anticipated for 'woody' plants. Although feminine gender assignment for *saule* and *lavande* is suggested above to be associated with their ability to cover otherwise inhospitable landscapes in a continuous spread in the same way as heaths and heathers, as individual entities they are also consistent with feminine gender among 'woody' plants that have 'flexible' or herbaceous stems.

#### Other thorned plants

Descriptions of other plants in the above set reveal the presence of thorns, eg. *aubépine*, *épine-vinette*, *erythrine*, *rose*, and the vine *bougainvillée*. The association between 'thorned' and feminine gender assignment is mentioned earlier in relation to the superordinate term *ronce* (F) 'bramble bush'. It is noted that while the noun *épine* (F) 'thorn-bush' is marked as obsolete in one English/French dictionary (COFED, 1985:199), its presence in a more up-to-date French dictionary (LRPT, 1994:405) as 'tree or shrub armed with thorns or prickles' suggests that it remains current. A French definition of the noun *rose* (LRPT, 1994:996) as ... (*f*) *fleur du rosier* 'flower of the rose bush' suggests that it applies only to the flower. However, other expressions suggest otherwise, eg.

' <i>pas de rose sans épines</i> '	'no rose without thorns'
' <i>découvrir le pot aux roses</i> '	'to reveal foul play'
(fam.) ' <i>envoyer qqn sur les roses</i> ',	'to 'bite someone's head off', 'rebuke violently'.

These expressions still have currency today and the nature of their meanings suggests that *rose*

can apply to the 'bush' since the unpleasant and/or painful outcomes attributed to their meanings could not relate to a flower renowned for the pleasure of its soft petals and fragrant perfume but to the stems of these plants. As an adaptation that repels predators, its association with feminine gender assignment is consistent with other adaptations that repel, eg. *belette* (F) 'weasel' or present an impenetrable barrier, eg. *tortue* (F) 'tortoise'/'turtle' with its impenetrable shell.

'Feminine gender for the *sauterelle noire*, a tall tree, is argued above to relate to the extraordinary array of thorns along its trunk and stems. The replacement of the feminine *rose* with the masculine *rosier* suggests a weakening in relation to 'thorned' but is not yet fully explained.

However, other 'thorned' trees have masculine gender assignment, eg. *campêche*, *zanthoxylum*, and two formed with the suffix *-(i)er*, *osager orange*, and *prunellier*, the synonym of *épine noire*, whilst amongst three related plants in the 'buckthorn' family, two that are thorned have masculine gender assignment, *alaterne* (M) and *nerprun* (M) and the 'buckthorn' without thorns, *bourdaine* (F), has feminine gender assignment. A tree closely-related to the *campêche* is 'brazilwood' (*Haematoxylum brasiletto*) is only 'often thorny' ([www.worldagroforestry.org](http://www.worldagroforestry.org)), 2005). These 'thorned' counter-examples are examined further below as a set.

Many of the remaining nouns in this feminine set of 'woody plants' are vines. Since they share the same long slender stems as masculine vines, differences in gender assignment among these 'woody' plants, and differences in word-final pronunciations among the four sets, are yet to be accounted for.

### Consonant-final pronunciation

Consonant-final pronunciation for many woody plants in this set of regular feminine nouns can be argued to relate to the smooth 'curved' shape over the crown (*cime*) that they come to develop, eg. *aubépine*, *bourdaine*, etc. However, for smaller shrubs branch whose branching commences at the base it is difficult to tell precisely where the crown is, and the shape at the top is thus less significant. Nonetheless, a distinction can be observed between shrubs whose stems curve out from the crown base and then up in a convex shape, eg. *lavande* (F) 'lavender', *sauge*



(F) 'sage' – even those that are masculine such as *géranium* (M) 'geranium, and shrubs whose stems grow up from the base and then curve out in a concave shape have vowel-final pronunciation, eg. *russélie* (F) 'fire-cracker plant', and the masculine *abutilon* (M) 'Chinese lantern tree'. These distinctions lie at the heart of two contrasting shapes used to describe many of these shrubs, *en touffe* 'puffed out', and *évasé* 'funnel-shaped' or 'flaring out'.

Any association between the convoluted twisting, winding and spiralling of stems produced by ground-cover plants, such as *airelle*, *busserole*, *canneberge*, *myrtille*, *symphorine*, resulting in a tangled carpet-like mass is unclear. The potential attribute associated with the tangled growth of ground-cover plants such as *bruyère* and *callune* is also unclear. The same tangled threads are also found in *famille* (F) 'family', whose individual parts cannot be isolated from the whole. The possibility of some association between a mass whose parts cannot be separated and consonant-final pronunciation will continue to be explored. It certainly forms a contrast with *essaim* (M) 'swarm', where individuals that make up the whole can be separated from it.

### 7.5 Closely-related plants with different gender assignments

Some plants in the different masculine and feminine groups above are very closely related, for some even to the point of being confused with each other, or are used interchangeably yet denoting nouns have different gender assignments. These related groups are discussed below.

#### 7.5.1 Genus *Rhododendron*

Two nouns, *rhododendron* (M) 'rhododendron' and *azalée* (F) 'azalea' in (2) both identify plants belonging to the same genus *Rhododendron*.

(2)	<i>azalée</i>	F	'azalca'	gen. <i>Rhododendron</i>	deciduous	uneven crown
	<i>rhododendron</i>	M	'rhododen-' dron	gen. <i>Rhododendron</i>	evergreen	uneven crown

In recent years the lower-case English term 'rhododendron' has come to be used by gardeners as the common name for plants in the genus. In the main, plants to which the French noun *rhododendron* applies are typically taller than those identified as *azalée* but this is not always the case. Minor differences can be found in the number of lobes on each flower, and number of

stamens, etc., but they are slight and would not seem to warrant distinction either lexically, or in contrasting gender assignments. These contrasting gender assignments require explanation.

The masculine term *rhododendron* appears to apply to plants in this genus whose leaf growth and fall occurs on a 'year-round' basis, while the feminine term *azalée* applies to those that whose leaf growth and fall is 'seasonal'. These contrasts between the 'seasonal' growth and fall for *azalée* and 'year-round' growth and fall for *rhododendron* seem less crucial in English since two species, *R. dauricum* and *R. mucronulatum*, are called 'rhododendron' but are deciduous – although this may be more closely related to extreme weather conditions they are able to tolerate. Given the strong association between 'seasonal' and 'female', it would not be unexpected to find feminine gender assignment for a plant whose leaf growth and fall is habitual, related to seasons, as is the case for *azalée* in its contrast with the 'constant' leaf growth and fall identified with *rhododendron*. There is not such a direct association between 'evergreen' or 'constant' leaf growth/fall with masculine gender, but it is the only other gender. It is possible that these contrasts in habit between 'evergreen' and 'deciduous' are able to become salient since they divide an otherwise indistinguishable large set into smaller sub-sets in a similar way to oppositions 'diurnal : nocturnal' – two attributes in binary opposition, associated with contrasting gender assignments – that only become salient when they can divide otherwise very similar members of a set into two divisions. However, in that contrasts in leaf growth and fall are, to some extent, dealt with in contrasting word-final pronunciation patterns, it is possible that other attributes may be crucial in the contrasting gender assignments of these two nouns.

It is possible that the different growth habits may be more closely linked to other binary contrasts – between mutually exclusive attributes such as 'habitual' and 'constant', unrelated to any season, and 'seasonal' – the former pair associated with and accounting for masculine gender of *rhododendron* and the latter, 'seasonal', associated with and accounting for feminine gender of *azalée*. These mutually exclusive oppositions are more reliable than 'evergreen' and 'deciduous', since these distinctions may no longer be visible when unseasonable dry conditions persist. It would be interesting to ascertain how other languages with more than two genders treat these examples.

Vowel-final pronunciations of both *rhododendron* and *azalée* appear to relate to the straight but sparse, irregular and open branching from the main stem that also occurs along their branches, a growth that produces their irregular and open shapes.

### 7.5.2 Genus *Hibiscus*

Two further shrubs *hibiscus* (M) 'hibiscus' and *ketmie* (F) 'rose of Sharon' are in the same genus *Hibiscus*, and relevant comparisons are set out in (3) below:

(3)	<i>ketmie</i>	F	'rose of Sharon' <i>H. coccineus</i>	'seasonal', leaf growth	concave, open form
	<i>hibiscus</i>	M	'hibiscus' gen. <i>Hibiscus</i>	typically evergreen, but can vary	rounded form crown

The noun *ketmie* applies to 'malvaceous' ('mallow') plants originally from warmer regions of China and India introduced into Syria in the 1600s and thence into Europe as *ketmie*, derived from Arabic *ḥaṭnā* (<woodyplants.nres.uiuc.edu/plant/hibsy>, <atilf.atilf.fr>, 2005). The term *hibiscus* as the generic form can apply to both since they have rigid upright branching.

However, while *hibiscus* applies in specific cases to those that are 'evergreen', *ketmie* appears to apply to various species with 'seasonal' leaf growth/fall, such as the 'deciduous' *ketmie des jardins*, *ketmie musquée*, *ketmie à chanvre*, or *ketmie éclarte* each of which is described as *caduc* 'deciduous'.

Similarities between the pairs of nouns of the genus *Rhododendron* and those of the genus *Hibiscus* suggest that the same explanations may account for feminine gender assignment for *ketmie*. That is, 'seasonal'/'deciduous' leaf growth and fall appears to be associated with feminine gender of *ketmie*, while a 'persistent'/'evergreen' leaf growth and fall that is constant and unrelated to seasonal changes appears to be associated with masculine gender assignment of *hibiscus*. Again these distinctions occur only in the context where they distinguish between woody plants that are related.

In that plants denoted by the consonant-final *hibiscus* have a rounded crown typical of the genus while plants denoted by the vowel-final *ketmie* have an irregular leggy shape more like the *azalée*, findings for this set are consistent with more general findings for other trees and shrubs.

### 7.5.3 Genus *Rhamnus* ('buckthorns')

Three nouns in the corpus denote a specific 'buckthorn', three European members of the genus *Rhamnus*. These nouns are set out in Table 7.15 below according to certain variables.

Table 7.15: Three nouns denoting 'buckthorn' (genus *Rhamnus*)

<i>nerprun</i>	M	VF	'European/purging/ common buckthorn' ( <i>R. cathartica</i> )	deciduous, thorned	irregular crown
<i>alaterne</i> syn. <i>nerprun alaterne</i>	M	CF	'Italian buckthorn' ( <i>R. alaternus</i> )	evergreen, not thorned	rounded crown spreading canopy
<i>bourdaïne</i> syn. <i>nerprun bourdaïne</i> , <i>aulne noir</i>	F	CF	'alder buckthorn', 'glossy buckthorn' ( <i>R. frangula</i> )	deciduous, not thorned	rounded crown spreading canopy

The feminine term *bourdaïne* has been in use since the thirteenth century although with some variation in orthography and pronunciation, eg. *borzaine* (1204), *bourgène* (1775) and *bourdaigne* (1842), while the masculine term *alaterne* first appeared in documents in the sixteenth century (<atilf.atilf.fr>, 2005). The masculine term *nerprun* has a superordinate role designating the genus, and can form a compound synonym with the two older simple nouns –although distinctions between the three are generally maintained in the use of the older terms.

Buckthorns denoted by *alaterne* are evergreen; those denoted by *bourdaïne* are deciduous. In its application to a species *nerprun* has something of both since leaves stay green and remain on the plant until late into autumn, long after other deciduous plants have lost their leaves, but it is nonetheless deciduous (see image at <[www.forestryimages.org/browse/detail.cfm?imgnum=0008184](http://www.forestryimages.org/browse/detail.cfm?imgnum=0008184)>, 2005). The *nerprun* is described as 'thorned', which occurs for older stems that develop thorns at their tip, particularly growth that is more than a year old, where younger growth is tipped with a bud; plants may also be 'thorned' in the forks of branches (<[www.gov.on.ca/OMAFRA](http://www.gov.on.ca/OMAFRA)>, 2005). The presence of thorns is suggested in its feminine synonym *épine noire*. The masculine *alaterne* is thornless, as is the feminine *bourdaïne*.

Both bark and berries of these trees are mildly toxic and have been used for centuries in the making of dyes and purgative medicaments. These three European species *nerprun*, *alaterne* and *bourdaïne* are so alike that they commonly give rise to confusion in much the same way as

'azalea' and 'rhododendron, as observed in the following quotation regarding 'buckthorns':

... (a)nciennement, les rhamnacées étaient souvent confondues entre-elles  
(*nerprun et bourdaine surtout*)

... in olden days, species of 'buckthorn' were often confused with each other  
(particularly 'common buckthorn' and 'alder buckthorn')

(<[www.encyclopedie-universelle.com](http://www.encyclopedie-universelle.com)>, 2005) (trans. M. à Beckett)

Only in winter would differences between them be appreciated since the *nerprun* and *bourdaine* are deciduous and the *alaterne* evergreen.

However, for two of these three trees, *nerprun* and *alaterne*, branching is rigid and upright, while the branching of the *bourdaine* is not only horizontal but supple enough to be harvested and used in basket-weaving (<[www.plantencyclo.com](http://www.plantencyclo.com)>, 2005) – particularly as an alternative to the 'basket willow' or 'purple osier' (<[hcs.osu.edu/hcs/TMI/Plantlist/sa\\_purea.html](http://hcs.osu.edu/hcs/TMI/Plantlist/sa_purea.html)>, 2005) with which it would once have shared feminine gender assignment.

Thus while the contrast in 'rigid' and 'flexible' branching may account for different gender assignments among the three species *nerprun*, *alaterne* and *bourdaine*, two issues require some explanation. The first is the use of the masculine term *nerprun* as the 'unmarked' superordinate term that incorporates all three 'buckthorns'. Given the variations between them in relation to thorns, in the contrast between 'upright/rigid' and 'flexible/horizontal' branching, and between 'evergreen' and 'deciduous' leaves, the use of *nerprun* as a superordinate must revert to some shared attribute – possibly their dense 'woody' composition.

The second issue is the use of a masculine term *nerprun* to denote the 'thorned' *Rhamnus cathartica* rather than a feminine term, particularly given the presence of a feminine synonym.

In that thorns are irregular, new growth is left unprotected, and thorns situated in forks of branches are not particularly effective, masculine gender is not unexpected, and in their combination, it is not surprising that together these characteristics motivate masculine gender assignment, consistent with similar findings elsewhere, particularly for birds. However, its 'upright' and 'rigid' branching is unquestionable, and its this masculine noun is thus consistent with others where these attributes are salient.

From the different applications of *nerprun*, and different gender assignments for *nerprun*, *alaterne* and *bourdaine*, it would appear that saliency of an attribute depends on a number of different conditioning environments, as in (4) to (6):

- (4) a property that is irregular, particularly where it leaves younger growth unprotected
- (5) a distinctive characteristic that is shared by all members of a kind
- (6) a distinctive characteristic that is not shared by any other members otherwise like in kind, which makes it unique.

It would appear that the 'thorned' *nerprun* (*R. cathartica*) is governed by (4), and 'thorned' is thus unable to become salient. The use of *nerprun* as the unmarked term for a genus of extraordinarily similar plants is interesting, and possibly relates to its more widespread presence over the *alaterne*, identified in English as the 'Italian' buckthorn. The only other available term, *bourdaine*, is feminine and is not appropriate since the three species demonstrate neither (5) nor (6).

Different word-final pronunciation patterns for these 'buckthorns' appear to relate to contrasting crown shapes, the 'irregular' crown of *nerprun* and the broad, spreading 'rounded' crowns produced by *alaterne* and *bourdaine*. At a more superordinate level of meaning, however, vowel-final pronunciation of *nerprun* is consistent with the suffixed *-ier* and *-ia* forms which are argued to relate to a class of living things with no capacity for independent movement.

Nonetheless, different gender assignments and word-final pronunciation patterns for the three nouns denoting various 'buckthorns' suggest that speakers were once able to recognise different properties of these closely-related plants, although that knowledge today may be less widespread.

A full explanation awaits other 'thorned' trees – *campêche* (M) 'bloodwood', *zanthoxylum* (M) 'yellowwood', *osager orange* (M) 'osage orange', and *prunellier* (M) 'blackthorn'/'sloe'. The noun *campêche* applies to a 'bloodwood' that is only 'often thorny' although other members of the same genus such as 'brazilwood' are thorned. For *zanthoxylum* 'thorny' depends on regional variation since 'yellowwoods' in Australia, Africa, China are 'thorny' but the American

'yellowwoods' are not. The increasing use of *rosier* at the expense of *rose* to denote the shrub may relate to a growing number of 'thornless' roses bred for today's market.

The compound masculine loan word *osage orange* has its origins in Osage, the name of the Indian tribe located in its native region, Arkansas. Original plantings of this North American native *osage orange* were very limited – to the Red River valley in southern Oklahoma and northern Texas, according to one source ([mdc.mo.gov/nathis/exotic/vegman/nineteen.htm](http://mdc.mo.gov/nathis/exotic/vegman/nineteen.htm)), 2008), and to eastern Texas, south eastern Oklahoma, and south western Arkansas elsewhere ([www.ipm.iastate.edu/ipm/hortnews/1997/10-10-1997/hedgeapple.html](http://www.ipm.iastate.edu/ipm/hortnews/1997/10-10-1997/hedgeapple.html)), 2008). The trouble-free multi-stemmed growth could be planted as a stand and pruned into a hedge, which led to widespread plantings in a row to form a living fence, a practice that only came to an end with the introduction of barbed wire. Descriptions of the *osage orange* usually refer to the presence of 'thorns'. However, on mature, slow-growing trees 'spines may be infrequent or absent', although they will return on shoots of these trees ([mdc.mo.gov/nathis/exotic/vegman/nineteen.htm](http://mdc.mo.gov/nathis/exotic/vegman/nineteen.htm)), 2008). These various examples suggest that unless 'thorned' is a property of all members denoted by the noun, 'thorned' is not able to become salient – for *osage orange* 'typically thorned' is not sufficient to bring about feminine gender assignment.

The term *prunellier* is also described as 'thorned' shrub and has a feminine synonym *épine noire*. Yet, like *rosier* it is more commonly identified by masculine noun formed with the vowel-final suffix *-(i)er*. Descriptions of the *prunellier* identify it as 'thorned' but more detailed descriptions ([www.saps.plantsci.cam.ac.uk/trees/blackthorn.htm](http://www.saps.plantsci.cam.ac.uk/trees/blackthorn.htm)), 2007) reveal that some short branches at right angles to the stem lose their leaves in winter and persist as thorns while others remain thornless, and contrasting twigs can be observed images on this site and elsewhere ([www.hainaultforest.co.uk/3Winter%20twigs.htm](http://www.hainaultforest.co.uk/3Winter%20twigs.htm)), 2007). In this context 'thorned' for *prunellier* is not unlike 'thorned' for *nerprun* in that some twigs are smooth and others develop thorns, but even so, the change only occurs at the end of the growing season when the time for protection is less urgent. Thus, apparent inconsistencies among 'thorned' woody plants can be seen as regular when compared with each other and with living entities in other fields.

## 7.6 Summary - count nouns denoting 'woody plants'

The analysis above suggests that, with some exceptions, plants that produce stems that are 'hard' or 'dense' or 'rigid' have masculine gender assignment, eg. *bouleau* (M) 'birch', *aulne* (M) 'alder', *cyprès* (M) 'cypress', *orme* (M) 'elm', *pin* (M) 'pine', *sapin* (M) 'fir/spruce', *daphné* (M) 'daphne', with certain exceptions, while plants whose new stems are caney, 'hollow' or 'flexible', or 'fleshy', or 'wiry' have feminine gender assignment, eg. *airelle*, *hydrangée*, *russélie*, *airelle*.

Comparison of these attributes in (7) shows that they form binary oppositions according to features associated with contrasting masculine and feminine classifications:

(7) Masculine	Feminine
• 'upright'	• 'recumbent'/'horizontal'
• 'hard'	• 'fleshy' or 'soft'
• 'dense'	• 'hollow'
• 'rigid'	• 'flexible'/'wiry'

Exceptions relate to the presence of certain attributes that appear to be associated with feminine gender assignment, including:

- 'thorned', eg. *sauterelle noire* (F) 'locust tree', *aubépine*, (F) 'hawthorn', *bougainvillée* (F) 'bougainvillea', when it is typical
- 'seasonal' foliage growth and fall where it forms a division with 'evergreen' plants eg. *ketmie* (F) 'deciduous hibiscus'/'*hibiscus* (M) 'evergreen hibiscus', *azalée* (F) 'deciduous rhododendron'/'*rhododendron* (M) 'evergreen rhododendron'
- capable of abundant regeneration, eg. *bruyère* (M) 'heath', *callune* (F) 'heather', *lavande* (F) 'lavender', and historically, *saule* (M) 'willow'.

Feminine gender assignments of *badiane* (F) 'star-anise tree', *épinette* (F) 'white spruce' and *pruche* (F) 'Canadian spruce'/'hemlock', and historically feminine nouns *mélèze* and *lierre* are yet to be accounted for. They are discussed further below. Evidence presented above suggests also that 'thorned' becomes salient when it is shared by all the various members of the same kind. The challenge to the once-feminine *rose* (F) 'rose bush' upon the appearance of rose stems without thorns, or flowers without perfume, may have led to the gradual increase in the use of *rosier* (M) 'rose bush' when 'variable' became more apt. It is also possible masculine



gender assignment may be associated with the loss attributes – perfumed, thorned – that gave greater assurance of survival. Flowers remain to be analysed in the future.

### Word-final pronunciation

Vowel-final pronunciation of derivational suffixes *-ier* and *-ia* of plants, eg. *magnolia*, *genévrier*, synonym of *genièvre/cade*, is suggested to be associated with 'immobile' as living entities without any potential for movement, unlike aquatic 'legless' and 'footless' entities that can at least undulate, or change location pushed by waves and tides.

Analysis of word-final pronunciation patterns for the corpus of 'woody' plants suggests that vowel- and consonant-final pronunciation for trees and many shrubs relates to the typical canopy shape of a plant, according to certain crucial attributes that become salient in relation to proximity – from afar and nearby/underneath. From a distance, attributes that appear to relate to the canopy shape include:

- 'irregular', 'pointed' or 'open' canopy, associated with vowel-final pronunciation, eg. *bouleau* (M) 'birch', *pin* (M) 'pine'
- 'smooth curved' canopy or crown, associated with consonant-final pronunciation, eg. *if* (M) 'yew', *cèdre* (M) 'cedar', *charme* (M) 'hornbeam', *aubépine* (M) 'hawthorn'.

At close quarters, attributes of the canopy that appear to be salient include:

- 'narrow', 'thin' and 'flat' and thus without a canopy, associated with vowel-final pronunciation, eg. the 'conical' *cypres* (M) 'cypress', *balsa* (M) 'balsa'
- 'broad' spreading overhead canopy, associated with consonant-final pronunciation, eg. *campêche* (M) 'campeachy', *chêne* (M) 'oak', *orme* (M) 'elm', *if* (M) 'yew', *cèdre* (M) 'cedar', *platane* (M) 'plane tree', *teck* (M) 'teak'.

Support for the saliency of these attributes emerges from regularisations of word-final pronunciation that have occurred for loan words entering the lexicon that have changed to reflect that crown shape, eg. *campêche*, *teck*.

For smaller shrubs, other contrasting attributes appear to distinguish between vowel-final and

consonant-final pronunciation:

- *évasé*, a 'concave' shape produced by slender upward-growing branching from crown base which then fall, eg. *russélie* 'fire-cracker fern/coral plant', or 'open' and irregular branching, eg. *azalée* (F) 'azalea', *romarin* (M) 'rosemary' or 'scraggly' branching, eg. *thym* (M) 'thyme, which attributes are associated with vowel-final pronunciation
- *en touffe*, where outward-curving branches emerge from the crown base in a 'convex' shape, eg. *lavande* (F) 'lavender', *sauge* (F) 'sage', *géranium* (M) 'geranium', which attribute is associated with consonant-final pronunciation.

While palms are not dealt with as a set in this analysis, various word-final pronunciation patterns of palms also appear to fit this paradigm since the vowel-final *tallipot* (M) 'fan palm' has a form that is *évasé*, or 'open', while the consonant-final *pandanus* (M) 'pandanus palm', is described as *couronné d'une touffe* (<nature.jardin.free.fr>, 2005) and *doum* (M) 'doum palm' becomes 'broad' and 'spreading' since crowns of multiple branches from the trunk come to form one large crown.

Consonant-final pronunciation of nouns *bruyère* (M) 'heath', *callune* (F) 'heather', *myrtille* (M) 'bilberry', and *symphorine* (F) 'snowberry' still requires explanation. As individual plants, *bruyère* and *callune* produce a tangled convoluted growth of intertwining stems that form a rounded mass, a shape not unlike the *chèvrefeuille* (M) 'honeysuckle', that is associated with consonant-final pronunciation. However, these two plants are better known for their capacity to 'spread' – a different sense than the application of 'spreading' to a tree canopy. Nonetheless, 'spreading' for both is consistent in its association with consonant-final pronunciation. For the latter two plants *myrtille* and *symphorine*, their intertwining stems form a widening mat or carpet over their rocky terrain. Although the precise nature of the association between this attribute and consonant-final pronunciation is unclear, it can be argued that attributes 'widening' or 'spreading' identify different semantic oppositions with 'narrow', oppositions that are consistent in their association with contrasting word-final pronunciation patterns. The potential association between these attributes 'widening' and 'spreading' and consonant-final pronunciation will continue to be explored.

## Counter-examples

Counter-examples remain to be accounted for. They include:

- five vowel-final nouns denoting tropical trees with a rounded crown and/or spreading canopy, *bélimbé* (M) 'beauty leaf', *pois doux* (M) 'ice-cream bean tree'/'monkey tail'
- consonant-final nouns *mélèze* (F) 'larch', *pruche* (F) 'Canadian hemlock' and *épinette* (F) 'Eastern hemlock', and *saule* (M) 'willow' that are either spire-like or irregular
- vines such as *lierre*, *vigne*.

### 7.7 Woody plants - further issues

Gender assignments of certain nouns remain to be accounted for, including the two tall Canadian conifers that are feminine, and the historically feminine *mélèze* (M) 'larch'. In addition, various nouns denoting 'vine' found in the different sets of masculine and feminine nouns above also require explanation, including the historically feminine *lierre* (M) 'ivy'.

#### 7.7.1 Counter-examples *épinette* (F) 'white spruce', *pruche* (F) 'Canadian spruce'/'hemlock'

The corpus includes two feminine nouns denoting 'tall' evergreen Canadian 'spruces', *épinette* and *pruche*, even though other nouns denoting evergreen conifers are masculine (the historically feminine noun *mélèze* (F) 'larch' denotes a deciduous conifer). For such entities, feminine gender assignment is thus highly unusual and requires an explanation – as does their consonant-final pronunciation since evidence suggests that it is related to a 'rounded' crown or a 'spreading' canopy where the Canadian conifers have spire-like crowns.

In mainland France until the eighteenth century, distinctions between evergreen conifers for the most part related to differences in their needles – *pin* (M) 'pine' with its long fine flexible needles in bunches, *cyprès* (M) 'cypress' where leaves have a flattened scale-like form, and *sapin* (M) 'spruce/fir' applying to conifers with short flattened rigid needles. Other nouns in the lexicon appear to differentiate between conifers according to equally fine distinctions in cones, leaf form or growth in some way, nouns such as *cèdre* (M) 'cedar', *genévrier* (M) 'juniper' (which has two masculine synonyms, *genièvre* and *cade*), *if* (M) 'yew', and *mélèze* (M) 'larch'. Not until the eighteenth century was a new term coined for the 'spruce' – *épicéa* (possibly from

its botanical name *Picea*), finally differentiating it from the *sapin*. This older term was then restricted to 'fir', specifically the European 'silver fir' (*Abies pectinata/alba*) – except in familiar expressions such as *sapin de Noël* 'Christmas tree', which in fact identifies a 'spruce'. The new term *épicéa* appears to have had some difficulty in obtaining broad acceptance since it was first admitted into the (1932-5) *Dictionnaire de L'Académie française* (8th Ed. in <[www.lib.uchicago.edu/efts/ARTFL/projects/dicos](http://www.lib.uchicago.edu/efts/ARTFL/projects/dicos)>, 2005).

Of the two Canadian feminine terms, the earliest is *pruche* (F) 'Eastern/Canadian hemlock', or 'hemlock spruce' (*Tsuga canadensis*). The term *pruche* is first documented in 1544 upon a French voyage to Canada (in 1535) emerging in the compound noun (*sapin de*) *Prusse*, that is, a kind of conifer with flat needles similar to a European 'fir'/spruce'. The range of available documentary evidence suggests that the simplified form *pruche* must have come about after that date but well before 1605, the date of the first permanent French settlements in Canada (<[www.wellesley.edu/Biology/Web/Species/psprucewhite.html](http://www.wellesley.edu/Biology/Web/Species/psprucewhite.html)>, <[www.atilf.fr](http://www.atilf.fr)>, 2005). The Canadian *pruche*/hemlock' is estimated to grow up to a height of 90 m. where the European 'spruce' grows to some 18 m.

The second feminine noun *épinette* (F) 'white spruce' (*Picea glauca*) was first recorded more than 200 years later, 1765 (<[www.atilf.fr](http://www.atilf.fr)>, 2005), which suggests that in Canada it was still 'acceptable' for a tall imposing tree to have feminine gender assignment. The *épinette* was once named *mélèze du Canada* 'Canadian larch' – which could not have related to deciduous needles, is more likely to relate to a property strongly associated with feminine gender. Another rare synonym for *épinette* was *sapin du Canada*, suggesting a relatedness to conifers with short, flat needles.

However, the enormous height of the *pruche* appears to come at a cost since growth at the top is reduced to a narrow nodding crown and its branching is slender and flexible; branches *poussent à l'horizontale et retombent à leur extrémité* 'grow out horizontally and droop downwards at the tip' (<[www.mnr.gov.on.ca](http://www.mnr.gov.on.ca)>, 2005), not as a result of their being heavily weighed down, because stems are relatively unbranched at the tip. This drooping form contrasts with the

curved upswept branching of the 'Norway spruce' (*Picea abies*). However, the reduced strength along the trunk and thin wispy branching of the *pruche* give it a natural flexibility; at the top the slender leader 'droops and waves in the breeze' (<[www.floridata.com/ref/T/tsug\\_can.cfm](http://www.floridata.com/ref/T/tsug_can.cfm)>, 2005) while branches swing and sway easily (<[www.plantcare.com/encyclopedia/canadian-hemlock-2144.aspx](http://www.plantcare.com/encyclopedia/canadian-hemlock-2144.aspx)>, <[mobot.org](http://mobot.org)>, 2005) and this 'nodding' of both leader and branches can be recognised at great distances. The flexibility and loss of hardness and rigidity for the *pruche* as growth extends up and out is more typical of some of the shrubs or smaller trees examined earlier, such as *bourdaine* (F) 'alder blackthorn', *viorne* (F) 'wayfaring tree', etc. and reflects a similar characteristic of another tall tree, *saule* (M) 'willow'. For *pruche*, the flexibility in both the leader and its *minces tiges souples* 'thin supple stems' (<[www.cas.vanderbilt.edu/bioimages/species/tsca.htm](http://www.cas.vanderbilt.edu/bioimages/species/tsca.htm)>, 2005) may account for its feminine gender assignment. Historically, of course, there would once have been a consistency between 'woody' plants sharing this property and feminine gender assignment.

No such loss of hardness occurs for the *épinette* (F) 'white spruce' even though branches are slender and emerge horizontal to the ground. The leader remains erect, twigs are not pendent, and branches eventually turn upwards at the tip in much the same way as the European 'Norway spruce'. The *épinette* grows to approximately 30 m. and has a steeple-like crown. Only three French synonyms for this conifer can be found, while English synonyms abound:

'white spruce, cat spruce, skunk spruce, pasture spruce, western white spruce,  
Labrador spruce, Porsild spruce, Alberta white spruce, northern spruce'

(<[www.nrcan-mcan.gc.ca](http://www.nrcan-mcan.gc.ca)> 2007)

Other sites produce these and yet more synonyms, 'single spruce', 'Black Hills spruce' (<[www.conifers.org/pi/pic/glauca.htm](http://www.conifers.org/pi/pic/glauca.htm)>, 2007). It is the State tree of both Manitoba, Canada, and South Dakota, USA. The extent of these synonyms and its designation as the plant emblem of two states in two different countries does not quite identify the extraordinary range of the *épinette* (*Picea glauca*) which is found in Canada from the Yukon, North West Territories, British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, to Quebec, Prince Edward Island, New Brunswick, and Newfoundland, Nova Scotia, and in the USA from Alaska, Montana, Wyoming, South Dakota, Minnesota, Wisconsin, and Michigan, to New York,

Vermont, New Hampshire and Maine (<[www.conifers.org/pi/pic/glauca.htm](http://www.conifers.org/pi/pic/glauca.htm)>, 2007). This range demonstrates its adaptability across vastly different habitats – from muskegs, bogs and river banks to subalpine and altitudinal tree limits of the high summits, even maritime regions (<[www.florelaurentienne.com](http://www.florelaurentienne.com)>, 2007). It will grow in a variety of soils – *frais, léger, lourd, pauvre, riche* (<[www.psn3.com/Picea.glauca/fiche.detaillée.html](http://www.psn3.com/Picea.glauca/fiche.detaillée.html)>, 2007). Its spatial extent is equally extraordinary since it crosses one hundred degrees of longitude (<[www.myspace.com/gdelafontaine](http://www.myspace.com/gdelafontaine)>, 2007). Its tolerance of changes in soil and climate give it a competitive advantage and, combined with its adaptability, has allowed it to become a dominant tree of interior forests over vast expanses of Canada, Alaska and northern states of the USA, illustrated in maps showing its distribution (<[www.conifers.org/pi/pic/glauca.htm](http://www.conifers.org/pi/pic/glauca.htm)>, 2007). In some cases this expanse can form into 'spruce waves', an extraordinary vegetation formation found only for one other conifer, *Abies balsamea*, the 'balsam fir' and thus called 'fir waves' (see images @ <[www.conifers.org/pi/pic/glauca.htm](http://www.conifers.org/pi/pic/glauca.htm)>, 2007). However, while adaptability and the ability to spread in a continuous way are salient for other plants, its name points to some quality of its needles. While other 'spruces' and 'firs' have dark green needles, the needles of the *épinette* are pale green to greyish white, distinguishing it not only from the Canadian companion tree *sapin baumier* (M) 'balsam fir' (*Abies balsam*) but 'unique' among other firs and spruces. For this second Canadian conifer, feminine gender is thus both fitting and predictable.

Not yet accounted for are consonant-final pronunciations that are incompatible with spire-like crowns of both *pruche* and *épinette*. The French term *épinette* and the English name 'white spruce' point to the crucial nature of its 'unique' needles, an outstanding quality that makes 'superlative' and its associated consonant-final pronunciation equally regular and predictable. While the flexible and slender growth of the *pruche* might suggest that it is weak, it is immensely strong and is able to survive the force of strong winds of northerly latitudes that would tear down more rigid growth. The notion 'strong' has been observed previously, eg. *bœuf* (M) 'ox', *cheval* (M) 'horse', beasts of burden also denoted by consonant-final nouns. It may also be salient for *saule* (M) 'willow' since 'strong' trunks can be turned into cricket bats, 'strong' stems are used as ties, and 'crack' willow canes are woven into baskets.

7.7.2 Historically feminine noun *mélèze* (M) 'larch'

The noun *mélèze* was historically feminine. As the only Old World conifer with deciduous leaves, it could well have been accounted for by this 'unique' attribute. There is a general awareness in the community that the *mélèze* is unlike the other conifers, as observed in the running joke 'And now for something completely different – the larch!' in Monty Python's Flying Circus, the British comedy series. Previous evidence in earlier chapters provides evidence of a crucial association between a 'unique' attribute and feminine gender that continues today in examples such as *orque* (F) 'orca', 'killer whale', *frégate superbe* (F) 'frigate bird', *autruche* (F) 'ostrich' and historically, feminine gender for *mélèze* would once have been consistent with these current examples. Consonant-final pronunciation of *mélèze* is yet to be unaccounted for. Its pyramidal form has a spire-like crown when young and opens with age, but various images (@ <fr.wikipedia.org>, <www.cirrusimage.com>, <www.uvm.edu>, <www.henriettesherbal.com>, 2005) show that it is neither rounded nor canopy-like.

Motivation for reclassification from feminine to masculine

In 1765 this feminine noun denoting *mélèze*, a deciduous conifer, was reclassified as masculine – a change suggested in ATILF (<atilf.atilf.fr>, 2005) to relate to a broader 'regularisation' in relation to trees. This 'regularisation', however, did not extend to nouns denoting other deciduous trees, such as *aubépine* (F) 'hawthorn', *bourdaine* (F) 'alder buckthorn', or the mostly deciduous *viorne* (F) 'witherod viburnum/wayfaring tree (etc.)'. Their different treatments cause one to question the basis on which 'regularisation' did occur. Perhaps the association between an 'imposing' presence of a tree that can reach some 35 m. was felt to be inappropriate in relation to feminine gender assignment in a way that did not extend to taller shrubs, as shown in Table 7.16 below.

Table 7.16 Differences in height amongst 'deciduous' trees

<i>mélèze</i>	M	'larch'	35 m.	changed to masculine
<i>aubépine</i>	F	'hawthorn'	6-9 m.	remained feminine
<i>bourdaine</i>	F	'alder buckthorn'	5 m.	remained feminine
<i>viorne</i>	F	'wayfaring tree', 'viburnum'	2-5 m.	remained feminine

Some resistance to masculine gender assignment for *mélèze* can still be found, as recorded in

ATILF (<atilf.atilf.fr>, 2005), ... *souvent fém. dans les parlers région* 'often feminine in regional dialects' (of the *Dauphiné* region). It may well relate to their awareness of its 'unique' status since it loves the cold, which this region also enjoys. It is possible that other nouns denoting trees were reclassified to masculine and it will be interesting to see if further examples are brought to light in the future. As a masculine noun, however, it fits with other trees that are also constructed of hard, dense woody matter.

Consonant-final pronunciation for *mélèze* that once related to a property that allowed it to stand out from all others of its kind – thus 'superlative' – cannot be accounted for today.

### 7.7.3 Further counter-example - *badiane* (F) 'star-anise tree'

The noun *badiane* (F) 'star-anise tree' is one of only four feminine nouns in the corpus denoting a tall tree. It is derived from the Persian *badyan* 'star', and was coined in the late seventeenth century to denote the fruit of the 'star anise'. By the end of the nineteenth century this name had come to apply also to the tree as well as to its wood, used for inlay work in cabinet-making (<atilf.atilf.fr>, 2005). This tree is 'unique' in the star-shaped fruit it produces and as such, feminine gender assignment for this noun is consistent with nouns denoting other entities that are 'unique'.

### 7.7.4 Counter-examples – word-final pronunciation

The analysis of nouns denoting trees and shrubs demonstrates that certain forms appear to be associated with specific classifications and certain shapes with word-final pronunciation. A number of counter-examples in relation to the association between specific shapes and specific word-final pronunciations remain unaccounted for, in particular:

- *acajou* (M) 'mahogany', a genus of tropical evergreen trees with a rounded crown
- *cajou* (M) 'cashew nut tree', a tropical evergreen tree with a spreading canopy
- *bélimbé* (M) 'canary wood', a tropical evergreen tree with a 'rounded' crown
- *galba* (M) 'beauty leaf'/'kamani' (*Antilles calophyllum*), a tropical evergreen tree with a 'rounded' crown
- *pois doux* (M) 'ice cream bean'/'monkey tail', evergreen with a broad spreading crown.



Each of the trees denoted by these five nouns has a crown whose shape would otherwise be associated with consonant-final pronunciation, yet four – *acajou*, *bélimbé*, *cajou* and *galba* – are clearly vowel-final. Although orthographic representations offer no potential alternative, the elision of the final vowel that could occur does not in the case of these nouns. The fifth noun, *pois doux*, cannot change word-final pronunciation since the semantic connection established by the term *pois* (M) 'pea' would be lost.

The 'mismatch' between the rounded and spreading shapes of the above trees, and their vowel-final pronunciations requires some explanation. To this end it is interesting to compare these tropical evergreen trees with other tropical trees:

- *ailante* (M) 'tree of heaven', deciduous, native to Asian regions, with its *cîme étalé* 'spreading crown' (1788)
- *cédrèle* (M) 'cedrela', 'red cedar', deciduous Asian tree with spreading crown (1751, in <[danis-assy.blogspot.com/2007/07/ailanthus-altissima-et-toona-sinensis.html](http://danis-assy.blogspot.com/2007/07/ailanthus-altissima-et-toona-sinensis.html)>, 2007)
- *teck/tek* (M) 'teak' (syn. *vêne*), deciduous, native to monsoonal Asia/SE Asia with open multi-branching crown, changed from *teca* (1770, earlier *teca* (1614), in <[atilf.atilf.fr](http://atilf.atilf.fr)>, 2005).

Each of these four deciduous trees has consonant-final pronunciation, while the evergreen trees above are vowel-final. Taken together, these various examples suggest that, for some time, a different paradigm for word-final pronunciation seems to have existed for tropical trees in the New World and in Asia using a distinction between evergreen and deciduous. It is noted that *pois doux* has a synonym, *pomme-macaque*, which is consonant-final. This tree is found in Martinique, a French-speaking territory, and it is not surprising to find a synonym whose consonant-final pronunciation reflects the older paradigm.

This second paradigm does not appear to have had universal application but seems to have operated alongside the older paradigm – as shown in documentary evidence relating to coinings for nouns in Table 7.17.

Table 7.17: Coinings reflecting the older word-final paradigm

Vowel-final'			Leaf fall	Crown shape	Date
<i>ginko</i>	M	'ginkgo biloba'	deciduous	irregular crown	1786
<i>nyssa sylvestre</i>	M	'black gum, tupelo' (Southern Ontario, Eastern USA)	deciduous	pyramidal crown	1765
Consonant-final					
<i>eucalyptus</i>	M	'eucalyptus'	evergreen	spreading crown	1815
<i>hibiscus</i>	M	'hibiscus'	evergreen	rounded crown	1826
<i>liquidambar</i> syn. <i>copalme d'or</i> (1753)	M	'liquidambar'	deciduous	rounded in maturity	1602

More recent lexical coinings shown in Table 7.18 also appear to reflect the old paradigm.

These nouns denote three recently identified, named or studied trees indigenous to a wide range of areas including dry and wetlands of Central and South America including the Antilles (Boshier, 2003), as well as Hawaii, China, India, etc.

Table 7.18: Modern coinings reflecting the older word-final paradigm

<i>bojon</i>	M	'Spanish elm' Ecuador laurel' ( <i>Cordia alliodora</i> )	deciduous	• unrounded crown • vowel-final
<i>kou</i>	M	'cordia' (Hawaii) ( <i>Cordia subcordata</i> )	evergreen	• unrounded crown • vowel-final
<i>azadirac de l'Inde</i>	M	'azadirachta, bead tree' ( <i>A. indica</i> )	evergreen	• rounded crown • consonant-final

That is, regardless of differences evergreen and deciduous leaf growth and fall, the two trees with unrounded crowns are vowel-final and the one with a rounded crown is consonant-final.

The crucial nature of crown shapes that operated for most of the European trees became muddled when the feminine *mélèze* (M) 'larch' was reclassified to masculine without effecting any change in its consonant-final pronunciation. Without its crucial association to 'unique', speakers were left with a distribution among European conifers between 'deciduous' and consonant-final pronunciation for *mélèze*, and 'evergreen' and vowel-final pronunciation for *pin* (M) 'pine', *cypprès* (M) 'cypress' and *sapin* (M) 'fir'/spruce'. Findings suggest that a contrast between 'evergreen' and 'deciduous' becomes salient only under two conditions, in (8) and (9):

- (8) • in comparison with all others that are similar, eg. *mélèze*, the 'deciduous' conifer
- (9) • as a means of dividing a large set into two smaller sets, as occurs in the division between members of genres *Rhododendron* and *Hibiscus*.

With the loss of feminine gender for *mélèze* that might have made its association with 'deciduous' apparent, it seems that distinctions between evergreen and deciduous in tropical and sub-tropical climates came to be associated with different word-final pronunciation patterns of conifers. The newer coinings suggest that the older paradigm was later able to reassert itself.

### 7.7.5 Vines and bines

One set of nouns that is only touched on in the analysis above relates to vines and vine-like plants and their gender assignments are yet to be explored. This set includes true 'vines', plants that use tendrils and suckers to assist upright growth of tips, and bines that have stout stems and stiff hairs that help the lighter growth at the tips of stems stand upright. Both kinds produce an abundance of long slender stems in a single growing season, but only some have a permanent above-ground woody stump or trunk, the set of plants concerned with this thesis. For much of its history, the warm and cooler climates of the Old World landscape included only a limited number of such plants and they are listed below in Table 7.19.

Table 7.19: European 'woody' vines and bines

Masculine nouns				
<i>chèvrefeuille</i>	M	'honeysuckle', syn. 'woodbine'	stem tips stand upright	deciduous bine
<i>jasmin</i>	M	'jasmine'	stem tips stand upright	evergreen bine
<i>lierre</i> (formerly feminine)	M	'ivy'	stem tips recumbent	evergreen bine
Feminine nouns				
<i>clématite</i>	F	'clematis'	stem tips recumbent	deciduous vine
<i>garance</i>	F	'madder'	stem tips recumbent	deciduous vine
<i>vigne</i>	F	'grapevine'	stem tips recumbent	deciduous vine

While the *jasmin* is not native to Europe, documentary records indicate that it had come to be

included in the French lexicon at least as early as the 1500s (as *jassamin*), while oils from the flower of this plant (*oile de jasmin*) were known at least as early as the thirteenth century (<atilf.atilf.fr>, 2005). Early forms of the noun *clématite* appear as *clématide*, having a voiced final phone. The noun *garance* is drawn from a very ancient Gallic past, in the Old French form *wratja*, meaning 'red' due to the bright red colour of its root, and is first found as *warance* and later as *garance*, occasionally *garence* (<atilf.atilf.fr>, 2005). As noted, this set of nouns includes one of the historically feminine nouns, *lierre* (M) 'ivy'.

All of these plants have flexible stems, an attribute that might have given rise to feminine gender assignment for every noun. However, among these 'vines' and 'bines' one can observe a distinction between stem tips of bines, which can stand upright, and stem tips of vines that cannot. This difference between 'bines' and 'viaes' results from a difference in construction of their stems. Those of bines are formed in sections, joined together at nodes or joints, and the nodules formed along the stem are strengthened or supported with tufts of stiff retroflexed hairs, allowing new tips to stand erect – sometimes to several metres in height.

No such support is offered for the flexible stems of 'vines' such as *clématite*, *garance*, *vigne* and the historically feminine *lierre*, and they cannot stand erect. The best that stem tips of vines can achieve is to curve out from their recumbent position so that touch-sensitive tips might come across some support structure to which they can quickly bind or twine around or adhere.

If one adds two common rhizomes, plants whose permanent but underground 'woody' bases produce vine-like stems annually, eg. *houblon* (M) 'hops' grown in the north of France and a part of the French lexicon at least as early as the fourteenth century, and *liseron* (M) 'bindweed' found across Europe, a larger picture can be built up.

Table 7.20: Two further bines

<i>houblon</i>	M	'hops'	bine (upright tips)	annual stems
<i>liseron</i>	M	'bindweed'	bine (upright tips)	annual stems

Taken together, the various masculine and feminine nouns suggest that prior to the 'regularisation' of the feminine *lierre* to masculine (discussed below), the paradigm amongst

'vines' and 'bines' would have been based on a distinction between those whose stem tips are supported and can thus stand upright – *jasmin*, *houblon* and *liseron*, the masculine 'bines' – and those whose stem tips cannot stand upright – *clématite*, *garance*, *vigne*, the feminine 'vines' whose stem tips are recumbent – as well as the historically feminine 'vine', *lierre*.

This paradigm for plants not only reflects distributions between the three buckthorns, but also distinctions for fish between those that maintain an 'upright' orientation, such as the masculine *hippocampe* (M) 'sea horse', *saint-pierre* (M) 'Atlantic John Dory', and those that turn over and swim on their sides in a 'recumbent' orientation, such as feminine the *feuille* (F) 'Atlantic spotted flounder', *limande* (F) 'dab', *sole* (F) 'Dover sole', *cardine franche* (F) 'megrim'. The use of the same schema in such different domains suggests that speakers saw the world in a holistic way.

#### 7.7.5.1 Word-final pronunciation of vines and bines

Darwin's observations of climbing plants were published in his 1875 work, 'The movements and habits of climbing plants' (at <[pages.britishlibrary.net/charles.darwin.texts/climbing\\_plants](http://pages.britishlibrary.net/charles.darwin.texts/climbing_plants)>, 2005). He was able to show that the long, slender stems of some of these plants can move in an upward direction with the aid of various adaptations that allow them to grip, eg. *clématite*, *garance*, *lierre*, *vigne*, or use other means of support, eg. *liane*. For other similar plants without these adaptations, however, stem tips make their way towards the sun using spiral revolutions to seek out and then wrap around any support structure that they come across, creeping plants such as *houblon*, *jasmin* and *liseron* spiralling in an 'anticlockwise' direction while the *chèvrefeuille* spirals in a clockwise direction. These stems can maintain their upward momentum by repeating the same process over and over again. Where no support structure is found, the upright stems eventually lose stability and if they are not tied up they fall back down – either onto the plant itself, such as the *chèvrefeuille*, forming a larger and larger ball, or else stems trail along the ground, eg. *houblon*, *jasmin*.

In French, however, distributions appear to mirror members of the animal kingdom in that stems that have adapted in a way that enables them to 'walk' up walls, eg. *lierre*, or have developed prehensile apparati that allow them to a grip on in mid-air, eg. *clématite*, *garance*, *vigne*, have

consonant-final pronunciation. Stems without such adaptations, eg. *houblon*, *jasmin*, *liseron* have vowel-final pronunciation. These findings reflect oppositions between 'motile' and 'immotile' and they are consistent in their association with contrasting consonant- and vowel-final pronunciation patterns in the same way as for 'other living creatures'.

However, still unaccounted for is *chèvrefeuille* (M) 'European honeysuckle' (*Lonicera periclymenum*), which has consonant-final pronunciation – but not in relation to any touch-sensitive 'prehensile apparati'. This plant is well-known for its abundant production of long slender stems that stand upright above the crown line only to fall back onto the plant. Since these plants typically stand apart from other plants, the abundant growth and repetition of this process eventually creates a tight, dense, convoluted mass that causes it to be described as a 'climbing shrub with a rounded crown', and its consonant-final pronunciation can thus be seen as consistent with other trees and shrubs that come to develop a rounded shape.

Thus, contrasts in gender assignment and in word-final pronunciation patterns of nouns denoting vine-like plants can be accounted for in the following paradigm:

- masculine gender assignment related to 'upright' stem tips and feminine gender assignment related to 'recumbent' stem tips
- presence and absence of adaptations that provide motility associated respectively with consonant-final and vowel-final pronunciations
- massing in a way that produces a rounded crown, associated with consonant-final pronunciation.

Until the 'regularisation' of *lierre* to masculine, these broad principles would have been much like distinctions that have largely accounted for nouns denoting 'woody' plants. That noun is examined below.

#### 7.7.5.2 Historically feminine noun *lierre* (M) 'ivy'

The first documented reference to this plant appears as the possibly masculine noun *edre* (first half of the tenth century), said to be derived from the Latin noun *hedera* (F) 'ivy', derived from the verb *prehendo/prendere* 'to grip' (ELD, 1966:363) which is not unreasonable given its

ability to grip hold of any surface. Documents in the eleventh century show it as *iedre*, followed by simplification of syllable structure to *ierre* (twelfth century) and then absorption of the definite article to become *lyere*, and eventually *lierre*. At some point during this extensive period *lierre* must have been feminine, although we can only ascertain this through an entry in the on-line dictionary ATILF (<atilf.atilf.fr>, 2005), stating that its gender assignment was 'regularised' to masculine – and must, therefore, have previously been feminine:

... (qui) peut s'explique par assimilation au genre masculin des noms

d'arbres et d'arbustes en fr. (*Französisches etymologisches Wörterbuch*, t. 4, p.398)

... (which) can be explained in its assimilation to masculine gender in the same way as names of other trees and shrubs in French

(<atilf.atilf.fr>, 2005, trans. M. à Beckett)

No more precise date of this change has been established.

It is noted that this *assimilation* to masculine gender assignment for *lierre* did not occur for *vigne*, an equally *arbustive* 'woody' plant, nor for *garance* or *clématite*. Thus, some other motivating force seems to have pertained to *lierre* in a way that excluded these two other European vines. It is difficult to consider that it might have been related solely to its 'evergreen' foliage, particularly since the same 'regularisation' process saw the 'deciduous' *mélèze* (M) 'larch' associated with masculine gender assignment. The analysis above regarding *mélèze* suggests that the change may well have been inspired by height, particularly since the long stems of the 'ivy' can extend some 30 m. or more, an amazing length that gave them an extraordinary reach.

However, the 'regularisation' of *lierre* to masculine gender assignment not only removed it from its natural set – vines with recumbent tips – and instead suggests that they are able to stand erect in the same way as *houblon* (M) 'hops', *jasmin* (M) 'jasmine' and *liseron* (M) 'bindweed' – which is incorrect. One is left to ponder the coining of *vigne vierge* (F) 'Virginia/Boston creeper', a compound formed from *vigne* which suggests the presence of the same prehensile tendrils as for the 'grapevine' but whose adventitious roots and adhesive tips resemble those of the '*lierre*'. The botanical connection with 'ivy' is, however, recognised in the less common masculine synonym, *lierre de Boston*, which not only suggests 'evergreen' but its masculine

gender suggests a 'bine' rather than 'vine'. It will be interesting to observe gender assignment for *lierre* in the future.

This analysis of these very early nominal classifications suggests that, historically, French speakers seem to have understood and been familiar with characteristics of these woody plants with flexible stems that later came to be studied by Darwin. It is noted that in the English language distinctions were maintained by lexically distinct superordinate terms to differentiate between 'vines' and 'bines', while the French language made these distinctions at a more specific level of meaning, employing a contrast between feminine and masculine gender assignments.

For *lierre* masculine gender assignment appears to have been motivated by one of three potential attributes – the length of its stems, the height they can reach, or its evergreen growth. The first is not salient in gender assignments of any other living thing. The second is more closely associated with feminine gender. The third is only salient in a division into two based on a contrast with 'deciduous', between plants with otherwise so similar that they can be mistaken for each other and cause considerable confusion, eg *rhododendron* (M) 'rhododendron' and *azalée* (F) 'azalea'. Given the example of *chèvrefeuille* (M) 'honeysuckle', which is deciduous, no such division occurs for vine-like plants and this third potential explanation does not hold. No explanation can be offered that might make masculine gender assignment compatible with this plant.

#### 7.7.5.3 Effect of reclassification on nouns for vines more newly coined

The extent to which the change in gender assignment for *lierre* may have affected the overall paradigm for vines is not examined in this study. However, given the few examples of vines in the European context and the countless nouns that would have entered the French lexicon in the last four hundred years following the change in gender assignment for *lierre*, even more dramatic confusion in the schema for vines might be anticipated. This era saw discoveries of New World vines as well as vines from tropical regions of Asia and the Southern Hemisphere. Without the large pool of nouns to allow the system to reassert itself, as occurred for trees, one can imagine that there have been some uncomfortable combinations. No evidence has arisen



during the course of this work of any analysis along these lines by botanists, and it may provide an interesting area of future study.

#### 7.7.6 Summary

Evidence from the analysis of nouns in this section dealing with counter-examples, trees and vines whose gender assignments and/or word-final could not be accounted for in the previous section reveals the presence of certain attributes already identified in relation to plants, and others that appear to be consistent with attributes identified earlier in other lexical fields.

That is, feminine gender assignment for the immensely tall *pruche* (F) 'Canadian/Eastern hemlock/spruce' relates to a flexible and sparse growth habit that allows trunks and branches to sway where more rigid or denser growth for such tall trees might cause them to break or fall, particularly in violent winds. For the *épinette* (F) 'white spruce', feminine gender is argued to relate less to an adaptability that has allowed it to form forests that spread over vast areas of the landscape particularly across inhospitable terrain, but to a quality that makes an individual tree 'unique'. The *épinette* can be distinguished from every other conifer by the shape and colour of its needles – flattened in the same way as spruces and firs, but where their needles are dark green, those of the *épinette* are pale green to whitish grey. Both of these attributes, 'adaptable' and 'unique', are also salient elsewhere and are both associated with the same feminine gender. For *badiane* (F) 'star-anise tree', feminine gender is argued to relate to the 'unique' shape of its fruits that are star-shaped and unlike any other. The attribute 'unique' also appears to account for the historical feminine gender of *mélèze* (M) 'larch', a term designating any cone-bearing tree that has 'unique' deciduous needles – both in the Old World and in the New World. Only one other deciduous conifer has been found in the world, the 'Western larch' or 'tamarack' of Eastern USA. The 'larch' is not unlike *allache* (F) 'sardinella', a fish that is unique in having deciduous scales, and alongside these 'unique' entities historical feminine gender assignment for *mélèze* would once have been consistent and regular.

For Old World woody plants with long slender fleshy stems, contrasts in gender assignment appear to relate to botanical differences:

- 'bines' whose stem tips can stand erect up to several metres since nodules are supported and stabilised at the joints with reflexed hairs, eg. *chèvrefeuille* (M) 'honeysuckle', *jasmin* (M) 'jasmine', each of which is masculine
- 'vines' whose stem tips cannot stand erect but are recumbent, eg. *clématite* (F) 'clematis', *garance* (F) 'madder', *vigne* (F) 'grapevine', each of which is feminine, the same gender as the historically feminine-now masculine *lierre* (M) 'ivy'.

While the historical feminine gender assignment for *lierre* is consistent with the above paradigm, no explanation can be offered in relation to masculine gender for this noun, and its attribute are incompatible with masculine gender. It remains the single example that cannot be accounted for.

Word-final pronunciation patterns for these plants are suggested to relate to a contrast between:

- 'motile', where touch-sensitive stem tips have adapted in special ways that allow them to grip or cling to support structures or surfaces and propel themselves upwards, eg. *clématite*, *garance*, *vigne*, associated with consonant-final pronunciation
- 'immotile', since stems have no prehensile ability, eg. *jasmin* (M) 'jasmine' (as well as rhizomes *houblon* (M) 'hops', and *liseron* (M) 'bindweed'), associated with vowel-final pronunciation.

This latter attribute 'immotile' is also argued to account for vowel-final pronunciation of suffixes *-ia* and *-ier* in their general application to names of trees and plants.

For *chèvrefeuille* (M) 'honeysuckle', consonant-final pronunciation is argued to relate to the convoluted mass of branches since stems fall in on the plant, and eventually comes to produce a rounded crown in much the same way as for trees. Its consonant-final pronunciation is consistent with other 'woody' plants that come to form a rounded crown, eg. *bourdaine* (F) 'alder buckthorn', *aubépine* (F) 'hawthorn' and *charme* (M) 'hornbeam'.

The association between consonant-final pronunciation and attributes 'strong', 'rounded' and 'motile' in this set is consistent with findings identified in entirely different lexical fields, not only for superordinate terms such as *animal* (M) 'animal' and *être* (F) 'living being' (Chapter 6),

but among count nouns. This consistency suggests a level of integration between semantic attributes and the classification process, regardless of the lexical field.

Inconsistent with the above findings are *mélèze* (M) 'larch' and *lierre* (M) 'ivy'. Regularisations to masculine gender cannot have been related to differences in their leaf growth, but given the explanations offered in ATILF and the heights attained by these three 'woody plants', it may have been motivated by an assumed association between great stature and masculine gender – or, perhaps, a perceived incompatibility with feminine gender. Further research into historical reclassifications is required not only for *lierre*, *mélèze*, and *saule* but for other potential examples not identified during this analysis. It will also be interesting to observe gender assignments for these three nouns in the years to come.

## 7.8 Conclusion – 'woody plants'

This analysis of different gender assignments and word-final pronunciation of trees, shrubs and vines does not include a number of other plant categories, trees such as palms, non-woody plants such as below-ground bulbs and rhizomes, ferns, annuals, etc. and they await future analysis. However, the explanation provided above can account for differences in both gender assignment and word-final pronunciation patterns for nouns in the database denoting woody plants, even tropical trees classified according to a different paradigm, and historical feminine gender assignments of nouns *mélèze* (M) 'larch', *saule* (M) 'willow' and *lierre* (M) 'ivy'. However, the change to masculine gender assignment for these nouns must be accounted for, particularly *lierre* since the deciduous vine-like *chèvrefeuille* (M) 'honeysuckle' is also masculine. The only explanation that can be offered is that those in charge of the regularisation process may have considered the imposing height of this climbing plant as similar to the imposing height of trees and, as for *mélèze* (M) 'larch', thus stereotypically inappropriate in relation to feminine gender assignment. As mentioned above, as a masculine term *lierre* now finds itself in the same set as *chèvrefeuille* (M) 'honeysuckle', *jasmin* (M) 'jasmine', *houblon* (M) 'hops' and *liseron* (M) 'bindweed' – all of which have 'reinforced' stem tips that can stand upright, but not *lierre*. Consonant-final pronunciation for *mélèze* (M) 'larch' also remains unaccounted for.

## Attributes, gender assignment and word-final pronunciation – woody plants

The analysis suggests that, with certain exceptions, a woody plant whose growth is dense, hardy, and rigid, enabling it to survive from season to season has masculine gender assignment, eg. *bouleau* (M) 'birch', *pin* (M) 'pine', *nerprun* (M) 'common buckthorn', etc. as well as those nouns formed with suffixes *-ier* and *-ia*. This attribute also exists for the *mélèze* (M) 'larch', although it is not its most remarkable attribute. 'Certain exceptions' applies to trees that are 'unique', eg. *badiane* (F) 'star anise tree', or 'adaptable', eg. *épinette* (F) 'white spruce', or 'flexible', eg. *pruche* (F) 'Eastern/Canadian hemlock' or 'hemlock spruce', or reproduce abundantly, eg. the historically feminine *saule* (M) 'willow' – for the most part in conditions where the ability to survive and flourish is against the odds. An attribute shared by all three 'buckthorns' is a dense, hard growth that is maintained through to the outermost extent of their subdivision. For such growth, masculine gender is consistent with other cases where 'dense' and 'hard' are salient. The use of *nerprun* as the 'unmarked' term denoting all three 'buckthorns' may relate to its more widespread nature over *alaterne*, the other masculine term.

For smaller woody plants similar attributes apply. Growth that is hard and rigid is associated with masculine gender, eg. *daphné* (M) 'daphne', *romarin* (M) 'rosemary', *thym* (M) 'thyme' – again with certain exceptions. They include 'thorned' woody plants that can repel predators, denoted by feminine nouns, eg. *aubépine* (F) 'hawthorn', *épine* (F) 'thorn bush'. 'Woodiness' may be reduced and branching can become 'hollow', or 'flexible', or 'wiry' or 'recumbent', and each of these is associated with feminine nouns, eg. *hydrangée* (F) 'hydrangea', *spirée* (F) 'spiraea', *viorne* (F) 'wayfaring tree' (a viburnum). For vines – all of which produce slender, flexible stems – we find a contrast between stem tips that can stand upright, eg. *chèvrefeuille* (M) 'honeysuckle', *jasmin* (M) 'jasmine', and those that are recumbent, eg. *clématite* (F) 'clematis', *vigne* (F) 'grapevine', and the historically feminine *lierre* (M) 'ivy'. These contrasts are found previously for fish and are associated with the same specific gender assignments.

The classification process to a large extent appears to be motivated by antonymous attributes associated with contrasting classifications according to attributes that appear in earlier chapters. Finer distinctions can be made according to similar attributes identified in previous chapters,

particularly those associated with feminine gender assignment, such as:

- 'thorned' – an attribute that repels predators, but only where it is typical for all species, eg. *aubépine* (F) 'hawthorn', *sauterelle noire* (F) 'locust tree' and, potentially, *rose* (F) 'rose bush'
- 'unique' – having an attribute shared by no other similar plant, eg. *badiane* (F) 'star-anise tree' with its unique star-shaped fruits, and *épinette* (F) 'white spruce' with its 'unique' needles (in shape and colour, flattened, pointed, pale green to greyish-white)
- 'flexible' for *pruche* (F) 'Canadian spruce', and *bourdaine* (F) 'alder buckthorn'
- capable of abundant regeneration, eg. *bruyère* (F) 'heath', *callune* (F) 'heather', *lavande* (F) 'lavender', and the historically feminine noun *saule* (F) 'willow', particularly across difficult landscapes.

The various conditions identified above under which 'thorned', 'deciduous' and 'unique' become salient are clear, and not unlike:

- 'thorned' becomes salient when it is regular (and, possibly, effective) over a single plant and where the same characteristic is found on all closely-related plants
- 'deciduous' is salient only when it is 'unique', eg. the historically feminine *mélèze* (M) 'larch', or where it divides into two a set smaller sets in a contrast with 'evergreen', eg. *rhododendron* (M) 'rhododendron' and *azalée* (F) 'azalea'
- 'unique' where one is unlike every other, eg. *badiane* (F) 'star anise tree', or where an attribute distinguishes one from all other similar entities with which it might be compared, eg. the historically feminine noun *mélèze* (M) 'larch'.

Word-final pronunciation for trees and shrubs for the most part relates to the growth produced by branching and the shape at the crown for tall trees, or growing form from the base for smaller shrubs, can account for differences in gender assignment:

- 'irregular' or 'spire-like' or 'narrow' or 'concave' form, or 'part' of a plant appear to be associated with vowel-final pronunciation
- 'smooth/rounded' or 'broad' spreading, or convex form, or 'whole' of a plant, or having a growing habit that produces a tangled mass, appear to be associated with consonant-final pronunciation.

The lack of fit between consonant-final pronunciation and the spire-like crowns of *mélèze* (M) 'larch', *épinette* (F) 'Canadian spruce' and *pruche* (F) 'hemlock spruce', and the irregular crowns of trees denoted by *saule* (M) 'willow' draws attention to other potential attributes for two – immensely 'strong' flexible growth of the *pruche*, and 'superlative' in relation to needles of the *épinette*. For *saule* and *mélèze*, consonant-final pronunciation remains unaccounted for.

Evidence suggests that another paradigm in word-final pronunciation patterns emerged some time during the late eighteenth century in relation to tropical and sub-tropical trees, based on a contrast between 'deciduous' and 'evergreen' foliage of conifers – properties dealt with differently in the earlier paradigm but lost with the reclassification of *mélèze* to masculine. Modern coinings suggest that this secondary paradigm is no longer in use.

The older paradigm appears to account for contrasts in word-final pronunciation patterns for Old World 'vines' and 'vine-like' plants, since there is an association between consonant-final pronunciation and 'vines' whose stem tips are 'motile', able to grip or cling to a support structure, eg. *clématite* (F) 'clematis', *garance* (F) 'madder', and *lierre* (M) 'ivy', while 'bines' without such adaptations have vowel-final pronunciation, eg. *jasmin* (M) 'jasmine', *bougainvillée* (F) 'bougainvillier'. This same paradigm also appears to account for rhizomes *houblon* (M) 'hops' and *liseron* (M) 'bindweed'. While the *chèvrefeuille* (M) 'honeysuckle' is without such adaptations, in its case consonant-final pronunciation is argued to relate the 'rounded' shape that it eventually produces. Consonant-final pronunciation of *symphorine* (F) 'snowberry', *saule* (M) 'willow', and *bruyère* (F) 'heath' and *callune* (F) 'heather', is argued to relate to a growth form where individual plants, or stems, cannot be separated out since they form an indivisible whole. Further evidence is required for this latter notion.

#### Comparison with explanations offered in other languages

It is again noted that in the language of Dyirbal, discussed in Chapter 2, while most trees, vines and shrubs are in class IV, some – including stinging trees and stinging nettle vine are included in class II along with other 'harmful' things. Such differences in the distribution of fish was noted in Chapter 5, in that most fish are in gender I but 'harmful' fish such as 'stonefish' and 'gar

fish' are in gender II, a set that includes other 'harmful things' and also sun, fire, and female humans. Similar distributions emerge in Harvey's analysis of a range of Australian Aboriginal languages in the Northern Territory and Western Australia (1997), and Reid's (1997) analysis of Ngan'gityemerri, another Northern Territory Aboriginal language, in that their analyses also place 'harmful' or 'pain-inflicting' flora and fauna in the same class as 'female' – a different class from other similar entities that are considered 'not harmful' (many of which are typically in the same class as 'male').

The current findings suggest that a very different explanation may account for these varying distributions. Rather than any contrast between 'harmfulness' and 'harmless', there may be some association between entities having life-enhancing adaptations and those otherwise similar but without such adaptations – or, potentially, with adaptations that are endangering. Implications of these findings for such languages are considered further in Chapter 9 (Discussion, Conclusions and Theoretical Implications). The analysis above also identifies other areas in which the classification process appears to operate – inanimate objects, terms related to movement, acts, etc., where various attributes and their association with specific classifications also appear to account for differences in gender assignment and word-final pronunciation amongst them. Further evidence is required in relation to the potential association between the attribute 'strong' and consonant-final pronunciation suggested by superordinate terms *arbre* (M) 'tree', *arbuste* (M) 'smaller tree'/'shrub with single trunk', and *pruche* (F) 'Canadian hemlock', and the precise nature of certain attributes in relation to a layer that forms across a landscape for plants such as *bruyère*, *callune* and *épinette* – particularly 'continuous', 'broad', 'spreading' potentially associated with consonant-final pronunciations of these nouns.

## PART II – FRUITS

### 7.9 Analysis of general terms and loan words denoting fruits

The second part of the botanical world addressed in this thesis relates to fruit. Nouns at a more general level of meaning in this field, and loan words denoting a specific fruit that have entered the French lexicon are examined below.

### 7.9.1 Superordinate terms

The database contains six superordinate terms denoting 'fruit', some general, some specialised 'botanical' terms, and they are presented below in Table 7.21 with their various meanings.

Table 7.21: General terms denoting 'fruit' (botanical, vernacular)

Masculine			
<i>agrumes</i>	M	'citrus fruits'	identified as collective noun (LRPT, 1994:23) a count noun used only in the plural, applying to fruits of any citrus tree (oranges, lemons, limes, mandarins, grapefruit, tangerines, etc.)
<i>fruit</i>	M	'fruit'	any fleshy part produced by transformation of (M) flowering plants that protects the seed/s; typically in reference to those which are edible and sweet (<fr.wikipedia.org>, 2006, LRPT, 1994:500)
Feminine - vowel-final			
<i>baie</i>	F	'berry'	any fleshy fruit with two or more seeds (LRPT, 1994:89); small, <i>oblong</i> (longer than wide), fleshy, acidic (<atilf.atilf.fr>, 2005)
<i>noix</i>	F	'nut' (drupe)	<i>coque</i> (green shell) containing 'walnut' kernel; more generally, any kernel enclosed in a wooden wall (CED, 1986:1058, <fr.wikipedia.org>, 2006)
Feminine - consonant-final			
<i>drupe</i>	F	'drupe'	fruit which has outer layer or skin, fleshy middle layer and single nut (almond, peach, apricot, plum, cherry) (LRPT, 1994:349)
<i>gousse</i>	F	'pod, shell'	fruit of leguminous plants, elongated, which forms a layer around the seeds and splits in two when ripe (LRPT, 1994:527)
<i>pomme</i>	F	'pome,' 'cone'	enlarged round receptacle containing ovary and seed, typified by fleshy fruit of apple trees, (<atilf.atilf.fr>, 2006, CED, 1986:1191)

Variations in both gender assignment and word-final pronunciation for nouns with very similar meanings suggests that they might well relate to semantic features or attributes, associated with different classes, and definitions provide an insight into the nature of attributes they share and attributes that distinguish them from each other.

The term *agrumes* is quite specific in its application to citrus fruits, but it applies regardless of flavour, shape, colour, texture. It does not necessarily imply 'variety', unlike *bouquet* (M) 'bouquet', but any detail regarding kind of fruit is left 'indefinite'. The term *fruit*, a generic term that encompasses all others of its kind, identifies the part produced by a plant following



flowering. In lay terms it most commonly applies to a fruit that becomes soft, sweet and juicy (LRPT, 1994:500), but fruits vary in their form, flavour, texture and solidness, from 'sweet' to 'sour', and from 'fleshy' to 'crisp' or 'hard' – even on the same plant. Given that such attributes are in binary opposition and are thus mutually exclusive, it seems likely that some other attribute is more salient, one that allows the broadest possible application. The term *fruit* is discussed above in its collective sense, but it also has a singular/plural role, eg. *Voici des fruits, des fleurs, des feuilles et des branches* 'Here are fruits, flowers, leaves and branches' (Verlaine, in LRPT, 1994:458), where it appears to be a plural count noun. In its role as a count noun this superordinate term must designate 'any' one – an 'indefinite' attribute – but one would expect that it might also point to the 'varied' nature of such a part in both form and structure. These two attributes also occur for other masculine superordinate terms, from *mollusque* (M) 'mollosque', to *oiseau* (M) 'bird', *poisson* (M) 'fish' to *animal* (M) 'animal' in previous chapters.

The noun *drupe* denotes an individual fruit with a single stone protected by a fleshy or fibrous layer all of which is covered by another outer skin, and they typically have a rounded or oval shape, as for the various 'stone fruit' such as peach, plum and cherry. The term *gousse* denotes the fruit of leguminous and other plants composed of seeds protected by a two-sided pod or shell – in some cases woody, as for *cacahouète* (F) 'peanut', in others fleshy, as for *fave* (F) 'broad bean', *pois* (M) 'pea' and *vanille* (F) 'vanilla (bean and seeds)'. They are commonly elongated in shape. While *pomme* (F) 'pome' applies very specifically to an 'apple', the notion 'fleshy' is less applicable here since it also applies to 'cone', a 'hard' receptacle that also protects the seeds and ovary until they are sufficiently mature and it, too, then opens to release the seeds. It seems that, for terms that include the kernel or seed/s, flesh and skin, what is salient is that the flesh and outer layer protect the new life within. This attribute can account for feminine gender of *drupe*, *gousse* and *pomme*. It is less applicable for *baie* since the flesh of berries may be very fragile and the protection is lost, and for *noix* since not all 'nuts' are completely enveloped and protected by any casing (such as the 'acorn').

The feminine noun *noix* originally denoted 'walnut', fruit of the *noyer* (M) 'walnut tree' containing a single seed – and thus a 'drupe'. Over time this noun has come to serve in a

generic sense as 'nut', that is, a drupe whose seed is protected not by layers of flesh and skin but by an outer layer in the form of a woody shell or wall. In that sense any physical resemblance to the original shape of the *noix* 'walnut' no longer holds. While 'woody' in the sense of 'hard' is typically associated with masculine gender as for nouns denoting trees and shrubs, not all outer shells of nuts are 'hard'. However, regardless of whether the outer layer is hard or soft, it provides considerable protection for the seeds *à l'intérieur*. There is considerable similarity between this attribute and others that are also protected by an other shell, eg. *tortue* (F) 'tortoise'/'turtle' and they are consistent in their association with feminine gender.

The term *baie* has a generic sense in its application to a fruit with more than two seeds, distinguishing it from *noix*, any fruit with only one seed. The earliest documented meaning of *baie* is in its application to the small oblong fruit of the *laurier* 'bay laurel tree' – shiny, oval, green, ripening to purplish-black (<fr.wikipedia.org>, 2006), where a layer of skin around flesh protected the seed at the centre. In European cultures, 'bay laurel berries' were once highly significant, used in religious festivals, competitions (the source of the word '*baccalauriat*'), etc. By the thirteenth century *baie* had come to serve as the generic term for small fruits of trees and shrubs, denoting any multi-seeded fruit similar to the original 'bay berry' in size, shape or colour, whether of trees or shrubs, particularly those which are plump and fleshy while it retains those original properties of a fleshy fruit with a thin skin. The association between 'fleshy' and feminine gender for *baie* is consistent with 'fleshy' in its application to stems of ground-cover plants such as *airelle* (F) 'mountainberry plant', and *symphorine* (F) 'snowberry', which nouns are also feminine. It is also noted that the term denoting 'flesh' itself, *chair* (F), is also feminine.

Differences in word-final pronunciations among these terms remain unaccounted for at this stage, but are explored later.

#### 7.9.2 Loan words denoting 'fruit'

A number of loan words in the corpus denote a 'fruit' of some kind, and some are masculine while others feminine. Nouns are set out in Table 7.22 below, with some description.

Table 7.22: Loan words denoting fruit

## Masculine nouns - vowel-final

<i>ananas</i>	M	'pineapple'	large rounded fruit, <i>oblong</i> (longer than wide, with hard rough exterior, sweet flesh, and tuft of leaves (Tupi-Guarani) (LRPT, 1994:39, CED, 1986:1164)
<i>avocat</i>	M	'avocado'	fruit, Spanish from (Mexican Indian language) from Nahuatl word <i>ahuacatl</i> (CED, 1986:103)
<i>durion</i>	M	'durian'	hard spiny rind, oval shaped fruit (Malay) (CED, 1986:475)
<i>grapefruit</i> syn. <i>pomélo</i>	M	'grapefruit'	yellow slightly bitter citrus fruit larger than a lemon, rounded shape (American English)
<i>kaki</i>	M	'kaki', 'persimmon'	round orange-coloured fruit smaller than an orange, tomato-like in form (Japanese) (<environnement.ecoles.free.fr>, 2006, LRPT, 1994:643)
<i>kiwi</i>	M	'kiwifruit'	hairy-skinned small ovoid fruit, green pulp (Maori) (CED, 1986:846)
<i>kumquat</i>	M	'kumquat'	from Cantonese (LRPT, 1994:646)
<i>litchi</i>	M	'li-tschi/lychee'	small fruit with leathery skin and whitish flesh (Cantonese) (CED, 1986:896)
<i>longane</i>	M/F	'longan'	fruit, from Chinese <i>lung yen</i> (CED, 1986:905)
<i>luffa</i>	M	'dishcloth gourd'	hard fruit of climbing plant with fibrous interior (Arabic) (LRPT, 1994:677)
<i>mangostan</i>	M	'mangosteen'	hard-skinned fruit with small, juicy white pulp (Malay) (CED, 1986:936)
<i>pomélo</i> syn. <i>grapefruit</i>	M	'grapefruit'	large yellow fruit of <i>Citrus paradisi</i> (identified in LRPT, 1994:870 as syn. <i>pamplemousse</i> ) (<www.troptrees.com>, 2006) (English, from Dutch)
<i>ramboutan</i>	M	'rambutan'	bright red edible fruit covered with hairs (Malay)(CED, 1986:1265)
<i>tamarin</i>	M	'tamarind'	from Arabic <i>tamr hindī</i> (LRPT, 1994:1088)

## Feminine noun - vowel-final

<i>canada</i>	F	'Canada rennet'	variety of apple, with red or greyish-coloured skin, fragrant aroma (LRPT, 1986:150, <atilf.atilf.fr>, 2006)
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## Feminine nouns - consonant-final

<i>cacahouète</i>	F	'peanut'	fruit of groundnut plant, also its seeds (usually) two edible kernels in a rough case or pod (Aztec) (LRPT, 1994:142)
<i>caroube</i>	F	'carob'	long, blackish sugary pod (Arabic) (LRPT, 1994:157)

<i>golden</i>	F	'Golden apple'	smooth, yellow-skinned crisp apple (English)
<i>goyave</i>	F	'guava'	smooth, yellowish-skinned fruit with pink pulp (Spanish, from Arawak (Amer-Indian) (LRPT, 1994:528)
<i>granny smith</i>	F	'Granny Smith'	green smooth-skinned apple, slightly bitter (Australian) (CED, 1986:663)
<i>longane</i>	M/F	'longan'	similar to but smaller than lychee, <i>globuleuse et lisses</i> 'globe-shaped, smooth, glossy' (<atilf.atilf.fr>); rough caramel-coloured shell (<home.hawaii.rr.com/tropicalfruit>, 2006) (Chinese)
<i>mangue</i>	F	'mango'	ovoid, smooth rind, orange-yellow flesh (Malay) (CED, 1986:936)
<i>nectarine</i> syn. <i>brugnon</i>	F	'nectarine'	smooth-skinned variety of peach, red or orange coloured skin, yellow or white flesh (English)
<i>pacane</i> syn. <i>pécan</i>	F	'pecan'	fruit of the pecan, similar to the walnut, enclosed in hard ridged shell (Algonquin or Cree) (<fr.wikipedia.org>, 2006, LRPT, 1994:824, CED, 1986:1130)
<i>papaye</i>	F	'papaya'	green smooth-skinned fruit, yellow sweet pulp (Spanish, from Amer-Indian Caribbean language) (LRPT, 1994:808, CED, 1986:1111)
<i>pastèque</i>	F	'water-melon'	from Arabic
<i>quetsche</i>	F	'Quetsch plum'	German, variety of plum (LRPT, 1994:925)
<i>starking</i>	F	'starking'	variety of red apple (English, from Stark, surname of American breeder) (LRPT, 1986:531)

The noun *longane* is attributed with both genders – not as alternatives but differently identified in various sources. Some web sites offer masculine gender (<www.fao.org>, <www.tahitifruits.com>, 2005) while another offers feminine gender (<www.les.arbres.free.fr>, 2005). A third source, ATILF (<atilf.atilf.fr>, 2005), suggests that *longane* is generally identified as masculine – although in the one example sentence provided it is feminine; it gives the name of the tree as *longanier*, which would suggest that name of the fruit – which forms the stem for this loan word – is consonant-final. The fruit is described differently according to different sources, from *baie lisse* 'smooth berry' to 'rough shelled fruit'. This loan word is further discussed below. All other vowel-final nouns are masculine, with one exception – *canada* – which is surprising given that when this term applies to the country it is masculine. It is noted that *grapefruit* is consonant-final while *fruit* is vowel-final. The only other masculine consonant-final nouns are *ananas*, which has alternative word-final pronunciations, and the previously-

mentioned *longane*. All the rest are feminine. The noun *granny smith* is included with consonant-final nouns since it is regarded as a single lexical item with the pronunciation /granismis/ (LRPT, 1994:531).

### Gender assignment

Descriptions of these fruits identify attributes observed earlier in relation to 'woody' plants. For instance, some fruits have a 'hard' or 'rigid' form even when ripe enough to eat, eg. *ananas*, *durion*, *litchi*, *grapefruit*, *kiwi*, *luffa*, *mangostan*, *potémo*, *ramboutan*, which all have masculine gender assignment. However, these attributes do not apply to the masculine *kaki*, which is soft and fleshy. Some fruits soften as they ripen, eg. *goyave*, *mangue*, *nectarine*, *papaye*, and these nouns are all feminine. However, the attribute 'soft' cannot apply to nuts such as *cacahouète*, *pacane*, nor other feminine fruit, particularly apples since it would imply that the fruit has started to rot. Alternative gender assignments for *longane* may relate to specific attributes associated with contrasting classifications. Since 'hard' and 'soft' are mutually exclusive, they cannot account for both, and an explanation awaits.

These results suggest that while contrasting attributes 'hard' and 'soft' may be salient in relation to different gender assignments for some of these loan words, other attributes would also appear to be crucial in accounting for gender assignment, particularly in the case of alternative gender assignments, and among synonyms. Further, four loan words denote specific varieties of 'apples' – *api*, *canada*, *golden*, and *granny smith*, yet they differ in both gender assignment and word-final pronunciation patterns. In other cases loan words denote a very different kind of fruits, eg. *cacahouète* and *caroube*, which have 'shells' or 'pods' that form a layer around the seeds. The different growth forms would be expected to draw on different attributes as occurs in relation to the different forms of growth among 'woody' plants.

These nouns are further examined below in certain related sets.

### Word-final pronunciation

It is noted that three of the superordinate terms have vowel-final pronunciation, eg. *fruit* (M)

'fruit', *baie* (F) 'berry' and *noix* (F) 'nut', while three have consonant-final pronunciation, eg. *drupe* (F) 'drupe', *gousse* (F) 'pod/shell' and *pomme* (F) 'pome'. These contrasts do not necessarily suggest mutually exclusive oppositions but the possibility of different salient attributes, associated with contrasting word-final pronunciations. While all of these entities denote a 'part' of a plant, given the sense in which *fruit* applies as a count noun at this most superordinate level, it is possible that 'part' of a whole may be salient, and its possible association with vowel-final pronunciation will continue to be explored.

The term *fruit* applies to part of a plant, and the potential association between this attribute and vowel-final pronunciation will continue to be explored. While this also applies to *baie*, it is far more specific in both its original application and its use in extension. It applies to an enormous variety of shapes and sizes (the 'pumpkin' is in fact a 'berry'), as does *noix* which comes in a myriad of shapes and textures. It may be that 'polymorphic' or 'irregular' are more accurate descriptives in relation to these entities than 'varied' – since shape, colour and size change according to stages in their development, and the final outcome can differ – even if very slightly – in a single species, or on a single branch. It is more likely that such notions may be associated with vowel-final pronunciation since other crucial attributes require closer contact.

In its application to a more restricted set of fruits, *drupe* denotes the whole – outer skin, fleshy middle and inner stone. This attribute 'whole' may possibly be associated with its consonant-final pronunciation. Since it applies to a sub-set of fruits, this attribute does not create any mutually exclusive contrast with *fruit*. Remaining superordinate terms *gousse* and *pomme* also apply to more restricted sets of fruits and in each case their meanings apply to the 'whole' – for *gousse* as an outer layer and the seeds within, for *pomme* as the receptacle containing the ovary and seeds. In the analysis of superordinate terms in Part I of the plant kingdom, the notion 'whole' is suggested to be salient in relation to *plante* (F) 'plant' and *flore* (F) 'flora', and both have consonant-final pronunciation. These contrasting attributes 'part' and 'whole' and their potential association with contrasting word final pronunciations will continue to be explored.

However, among loan words, a comparison of forms in the French lexicon with forms in the

original languages reveals certain changes in word-final pronunciation. Some nouns that were originally consonant-final are now vowel-final, eg. *avocat* (M), a fruit first identified in French in 1684 as *avocate* (<atilf.atilf.fr>, 2009); others with a terminal vowel-final /a/ in their original forms are consonant-final as French nouns, eg.

- *goyave* from the Spanish *guayaba*
- *mangue* from the Malay *manga*
- *papaye* from Spanish *papaya* formed from the American Indian *ababai*.

Among loan words whose original form is consonant-final, treatments are also irregular, particularly those with the word-final phone /n/. In some cases it coalesces to form a nasal vowel and is subsequently elided, eg. *durion*, *mangostan*, *pécan* and *ramboutan*, but in other cases its pronunciation is maintained, eg. *longane* (from Chinese *lung yen* 'dragon's eye, CED, 1986:906) and *golden*. In each case these loan words might just as easily have maintained the pronunciation of their original consonant- or vowel-final forms. Word-final pronunciation thus cannot account for gender assignment, nor can gender assignment provide any certainty in regard to word-final pronunciation, particularly whether or not a word-final orthographic consonant is pronounced.

The different treatments of word-final pronunciations among these loan words, when set alongside certain aspects related to surface texture and taste, as in Table 7.23 suggest that they may be related.

Table 7.23: Distributions of loan words and certain physical characteristics

Masculine nouns				
<i>ananas</i>	M	'pineapple'	rough skin, sweet	VF/CF
<i>durion</i>	M	'durion'	spiny rind	VF
<i>litchi</i>	M	'lychee (also litchi)'	rough-skinned	VF
<i>kiwi</i>	M	'kiwifruit'	hairy or fuzzy	VF
<i>mangostan</i>	M	'mangosteen'	leathery skin	VF
<i>ramboutan</i>	M	'rambutan'	fruit covered with hairs	VF
<i>kumquat</i>	M	'kumquat'	smooth-skinned, sour	VF/CF

## Feminine nouns

<i>canada</i>	F	'apple'	smooth skin	VF
<i>golden</i>	F	'Golden Delicious apple'	smooth skin	CF
<i>goyave</i>	F	'guava'	smooth skin	CF
<i>granny smith</i>	F	'Granny Smith'	smooth skin	CF
<i>mangue</i>	F	'mango'	smooth skin	CF
<i>nectarine</i>	F	'nectarine'	smooth skin	CF
<i>pastèque</i>	F	'watermelon'	smooth skin	CF
<i>papaye</i>	F	'papaya'	smooth skin	CF
<i>starking</i>	F	'apple'	smooth skin	CF

This distribution suggests that loan words denoting fruits that have a 'rough', 'hairy' or 'fuzzy' or 'leathery' outer layer are vowel-final, eg. *ananas*, *kiwi*, *litchi*, *mangostan*, *ramboutan*, etc.

However, this attribute is not present for the vowel-final *canada*, *kaki* and *kumquat*, three fruits that have smooth skins. Many of those fruits with a 'smooth' skin or outer layer are consonant-final, eg. *golden*, *goyave*, *mangue*, *nectarine*, *pastèque*, *payaye*, etc. However, this association cannot account for the consonant-final alternative for *ananas*.

Earlier evidence shows that attributes 'rough' and 'smooth' can account for contrasting word-final pronunciation patterns, particularly among fish (Chapter 5) where the *requin* (M) 'shark' and *turbot* (M) 'turbot' have 'rough' skins and are vowel-final, while the three eels, *aiguille* (F) 'freshwater eel', *congre* (M) 'conger' and *murène* (F) 'moray eel', have scaleless, smooth skin and are consonant-final. These contrasts can also be observed among closely-related animals, eg. the consonant-final *grenouille* (F) 'frog' is noted for its *peau lisse* 'smooth skin' while the vowel-final *crapaud* (M) 'toad' has 'rough', 'warty' skin.

It is possible that regularisation of *mangue*, *goyave*, etc. from their vowel-final origins to consonant-final pronunciation may be associated with this attribute 'smooth', and the maintenance and elision of the final consonant /n/ may relate to contrasting attributes 'rough' and 'smooth'. However, alternative pronunciations for *kumquat* and *ananas* need to be accounted for, as do vowel-final pronunciations of *canada* and *kaki*. Further, some of these loan words have synonyms, in the case of *grapefruit* another loan word, *pomélo*, both of which



are English, while *nectarine* is an English term for the native French noun *brugnon*. Any explanation must also account for these different word-final pronunciation patterns.

The example set by *canada* suggests that either proper names are not subject to these conditioning environments, or that the *canada* apple has some other property, one associated with vowel-final pronunciation, that is more crucial than its 'smooth' surface. The conditions under which regularisation occurs for some loan words but not others in maintaining or eliding word-final phones as they enter the French lexicon can help identify crucial semantic attributes in the classification system of the French language. These nouns are examined further in wider sets of fruits explored below in botanical sets related to nuts, berries, and drupes or pomes.

### 7.9.3 Alternative word-final pronunciations of loan words

Noted above are alternative word-final pronunciations for two loan words shown below:

<i>ananas</i>	M	'pineapple'	Spanish, from Tupi-Guarani	/anana/	/ananas/
<i>kumquat</i>	M	'kumquat'	Cantonese	/kumk(w)a /	/kumk(w)at/

While oppositional attributes 'rough' and 'smooth' can account for alternative pronunciations in some cases, they cannot both occur for the same fruit since they are mutually exclusive. This would suggest the presence of other attribute/s, associated with different word-final pronunciation, that are not mutually exclusive.

Historical records (<atilf.atilf.fr>, 2005) indicate that *ananas* appears to have entered the French lexicon in a sixteenth century manuscript with an orthographic representation that suggests consonant-final pronunciation:

*aultres fruitz qui semblent a artichaulx, ung peu plus grandz, et s'appellent amanatz*

other fruits that resemble an artichoke, a little larger, that are called /amanatz/ 'pineapple'

(<www.atilf.fr>, 2005, transl. M&B).

Nineteenth century dictionaries transcribe it as consonant-final but offer alternative vowel-final pronunciation. During the twentieth century vowel-final pronunciation became more significant and today, although vowel-final pronunciation is more common, both pronunciations are

accepted. Significantly, the term «ananas» is not only an English synonym for 'pineapple' (CED, 1986:53) but forms part of the lexicon denoting 'pineapple' in Italian, German, Spanish, Portuguese (<[www.pourshins.com](http://www.pourshins.com)>, 2005) and Indonesian.

For *kumquat*, acceptance of an alternative vowel-final pronunciation is a recent development. The word is not present in COFED (1985) and the earliest transcription indicates a certain instability in pronunciation, but only in relation to the vowel in the first syllable, ie.

/kumkwat/ or /kamkwat/ (LRPT, 1994:646)

These early pronunciations have invariable consonant-final pronunciation. Some years after that date another source (<[www.atilf.fr](http://www.atilf.fr)>, 2005) shows further developments, eg.

/kumk(w)a(t)/ or /kymk(w)a(t)/

The brackets indicate sets of variants one of which relates to the vowel in the first syllable, the others offering alternative pronunciations in the second syllable in pronouncing or avoiding the consonant cluster /mkw/, or in maintaining or eliding the word-final consonant. Together they suggest a considerable level of insecurity in the pronunciation of this noun.

Explanations for word-final alternations of *ananas* and *kumquat* would appear to relate to the presence of further crucial properties of these two fruits. Beyond its rough, thick outer layer, the most crucial aspect of *ananas* is its sweet juicy flesh, and while the skin of the *kumquat* is flavoursome, the flesh of this citrus fruit is not only acidic but bitter. Earlier evidence finds an association between 'delicious' or 'good to eat' and consonant-final pronunciation. This association may provide an explanation for consonant-final pronunciation of *ananas*, and in this respect vowel-final pronunciation for the bitter *kumquat* is hardly surprising. Consonant-final pronunciation for *kumquat* may relate to its smooth shiny skin.

#### 7.9.4 Summary

Gender assignments of superordinate terms and loan words denoting a 'fruit' appears to be strongly associated with form. For the most general term *fruit*, as a count noun its masculine gender is argued to relate to a 'singular' or 'distinguishable' status of one from others around it.

For feminine superordinate terms *drupe*, *pomme* and *noix*, the salient attribute is suggested to relate to a form that protects the seed/s or kernel/ within. However, for *baie* (F) 'berry' feminine gender is suggested to relate to a fleshy if not 'soft' form/

Other attributes included in descriptions are suggested to relate to word-final pronunciations of these superordinate terms, eg. 'part of a whole' in relation to *fruit* (M) 'fruit' – although this notion has not been identified elsewhere. The term *baie* covers entities that vary enormously in their shapes, colours and sizes, and while the shape of any *noix* varies with individual species – even within a species. Since colour can change, and taste is more dangerous, these circumstances would seem to give greater weight to shape. Given the range of shapes for both *baie* and *noix*, it can be argued that the notions 'irregular' or 'polymorphic' as they relate to shape may account for vowel-final pronunciations of both – particularly since 'polymorphic' applies to changes in shape due to interbreeding within a species (CED, 1986:1189). 'Irregular' is identified in Part I above in relation to the outline or shape of trees. The notion 'irregular', however, excludes 'rounded' where 'polymorphic' includes it. The notion 'whole' is suggested to account for consonant-final pronunciation of *drupe*, *gousse*, *pomme* in their application – seeds and all. It is also suggested in Part I to be associated with consonant-final pronunciation of other superordinate terms *plante* (F) 'plant' and *flore* (F) 'flora'. Notions 'part' and 'whole' form a binary opposition and their association with contrasting word-final pronunciation patterns appears to account for variations in three of these superordinate terms. Although they have not been identified earlier, they will continue to be of interest in the analysis of superordinate terms in the following chapter.

Among loan words, variations in word-final pronunciation appears to be associated with certain attributes some of which also form binary oppositions that are associated with contrasting word-final pronunciations. Evidence suggests where the skin of a fruit is 'rough', or 'furry', denoting nouns are vowel-final, eg. *litchi* (M) 'lychee', *durion* (M) 'durion' and *ananas* (M) 'pineapple', and where the skin of a fruit is 'smooth', denoting nouns are consonant-final, eg. *mangue* (F) 'mango', *kumquat* (M) 'kumquat'. Another set of attributes in binary opposition is that of 'bitter', which appears to be associated with the vowel-final alternative for *kumquat*, and

'sweet', which is associated with the consonant-final alternative for *ananas*.

Among loan words denoting fruits that enter the French lexicon, evidence suggest that they also appear to be regularised according to certain attributes associated with specific word-final pronunciation patterns. While various the gender assignments and word-final pronunciations of some nouns in the set await are not fully accounted for, the analysis so far reveals a consistency between nouns in this set and the semantic principles that can account for their different classifications and those identified in previous chapters. Nouns not yet accounted for will be explored with other count nouns below.

#### 7.10 Count nouns denoting 'fruit'

The database contains 96 French nouns denoting fruit. Many of these nouns denote fruits that are related in a botanical sense in that they specify a 'nut', or 'berry', or 'drupe', and the initial analysis relates to these botanically different sets. A number of nouns identify very similar fruits, eg. citrus fruits, apples, even cherries, etc. and they are examined in their own sets further below.

The analysis seeks to identify the precise nature of gender assignments and word-final pronunciation patterns and attributes that can account for them, particularly those which may not have been observed elsewhere. Also of interest are the principles that underpin their associations with specific classifications.

##### 7.10.1 Nuts

The corpus includes a number of nouns denoting 'nut', a dry, one-seeded fruit that usually possesses a woody wall, and does not open to release the seed. As a superordinate term, the noun *noix* (F) 'nut' is also used in extension where specific nuts have no separate lexical term of their own, eg. *noix de coco*, *noix de cajou*, *noix muscade*. Some of these compound nouns have become accepted in a simplified form, eg. *muscade*, but as the following list shows, a simplified form does not necessarily maintain the original gender of *noix*.

### 7.10.1.1 Nouns denoting 'nut'

The database contains 14 such terms and they are set out in Table 7.24 below, with certain information taken from descriptions.

Table 7.24: Nouns denoting 'nut'

Masculine nouns			
<i>anacarde</i> syn. <i>noix de cajou</i>	M	'cashew nut'	smooth fleshy receptacle covering inner shell and green kernel that protrudes from end; turns brown when mature; edible when roasted (CED, 1986:245) (<www.survivaliq.com>, 2006)
<i>gland</i>	M	'acorn'	fruit of oak tree, thick-walled nut sitting in woody, scaly, cup-like base (CED, 1986:13)
<i>pécan</i> (syn. <i>pacane</i> )	M	'pecan'	contraction of <i>noix de pécan</i> , fruit of <i>pacanier</i> , (LRPT, 1994:824, <atilf.atilf.fr>, 2006)
<i>pignon</i>	M	'pine nut'	tiny edible kernel ( <i>pigne</i> , <i>pignolat</i> ) released from pine cone (also <i>pigne</i> ), esp. cones of <i>pin pignon</i> (<atilf.atilf.fr>, 2006, LRPT, 1994:848)
Feminine nouns			
<i>amande</i>	F	'almond'	the oval-shaped green velvety fruit of the almond tree enclosing one or two edible kernels (<atilf.atilf.fr>, 2006)
<i>arachide</i>	F	'peanut'	<i>graine</i> , nut-like 'seed' of leguminous plant that ripens underground (LRPT, 1994:54)
<i>cacahouète</i>	F	'peanut (in shell)'	fruit or 'pod' of ground nut plant containing edible seed/s enclosed in a rough-walled shell
<i>chataigne</i>	F	'chestnut'	edible kernel of chestnut tree enveloped in shiny skin (LRPT, 1994:178, CED, 1986:273)
<i>faîne</i>	F	'beechnut'	hard fruit of beech tree ( <i>hêtre</i> ) (LRPT, 1994:452)
<i>muscade</i>	F	'nutmeg'	hard, slightly wrinkled, aromatic seed of the nutmeg tree fruit, the size of a small walnut, with a peach-coloured fleshy aril (<atilf.atilf.fr>, 2006, LRPT, 1994:752)
<i>noix</i>	F	'walnut'	fruit of <i>noyer</i> 'walnut tree', spherical drupe with hard, wrinkled shell, released from greenish outer husk as it darkens and turns black; containing wrinkled kernel (<www.muhlenberg.edu/depts/biology/nsf>,<atilf.atilf.fr>, 2006, CED, 1986:1708)
<i>noisette</i>	F	'hazelnut'	fruit of <i>noisetier</i> 'hazel tree, smooth, shiny, round nut containing edible kernel (LRPT, 1994:769, CED, 1986:704)
<i>pacane</i>	F	'pecan'	fruit of <i>pacanier</i> similar to 'walnut', a single wrinkled kernel contained within hard-shelled smooth wall (<fr.wikipedia.org>, 2006)
<i>pistache</i>	F	'pistachio'	fruit of <i>pistachier</i> 'pistachio tree', composed of a green kernel enclosed in a smooth shell (<atilf.atilf.fr>, 2006, CED, 1986:1168)

There are some differences in meanings of these nouns. In most cases nouns designate the outer shell and the *graine*, the 'seed' or 'kernel' inside, eg. *amande*, *cacahouète*, *noisette*, *noix*, *pignon*, *pistache*. In some cases terms are restricted to the 'kernel' and do not apply to the fruit, eg. *pignon/pignolat* (M) 'pine nut', and *arachide* (F) 'peanut', which term distinguishes it from *cacahouète* 'husk and seed', although 'peanut' in English can mean both 'shelled' and 'unshelled'.

The entity denoted by the masculine noun *gland* (M) 'acorn' – both shell and nut – is hard, and the kernel sits inside a scaly cup-shaped shell base that extends only half way up the sides. The outer layer of the masculine *anacarde* (M) 'cashew nut' is in the form of a soft, pear-shaped fruit and the hard, green, kidney-like bean or kernel protrudes from its end. Thus, while the surrounding layer of a nut typically fully protects the kernel inside, in these two cases it does not – the 'outer' layer surrounds only a part of the kernel and leaves the rest unprotected.

Descriptions of nuts denoted by feminine nouns show that kernels are completely surrounded by a hard, woody shell, eg. *amande*, *cacahouète*, *châtaigne*, *muscade*, *noisette*, *pacane*, in fact, every feminine noun denoting 'nut', with the exception of *arachide*, a term that refers only to 'peanut' kernel and does not include the husk. It is examined further below.

These oppositional attributes can account for most of the masculine terms, and all of the feminine terms denoting a 'nut' that denote both shell and kernel. However, this explanation does not account for the masculine noun *pécan*, nor its more common use over the feminine *pacane*. The term *pécan* identifies the fruit of a 'hickory' tree native to southern USA that remained relatively unknown until more recent times. However, the kernel of this nut is extraordinarily similar to the more widespread and very popular native European *noix* (F) 'walnut' – a comparison commonly found in descriptions of this nut, although it is an entirely different nut and comes from a different tree. These attributes 'different' and 'comparative' are previously identified in their association with masculine gender and vowel-final pronunciation, and these same classifications for *pécan* are consistent with those previous examples. Since the two nuts *pécan* and *noix* are also very similar in size, the example provided by *pécan* suggests that 'comparative' is not always related to size. The different 'smooth' texture of the *pécan* can

be identified as much through sight as through touch since placing them side by side reveals very different outlines rather than textures.

Among terms denoting a 'kernel' or 'seed' are the feminine noun *arachide* and the masculine noun *pignon*. The tiny *pignon*, kernel of the *pin pignon* released from its cones, is irregular in form but has a smooth surface and delicious flavour. However, the most salient attribute of this kernel is its very much smaller size in comparison with other edible nuts, and in these circumstances masculine gender assignment and vowel-final pronunciation are regular and predictable.

In regard to *marron* (M) 'roasted chestnut' and *châtaigne* (F) 'chestnut', these two forms are distinguished by their 'cooked' or 'raw' states – the cooking process having rendered it edible, as occurs also for the masculine *anacarde* since toxins are removed by the cooking process. It is possible that these oppositional attributes may account for the contrasting gender assignments of *marron* and *châtaigne*, and the masculine *anacarde* and feminine *arachide*, as kernels that are inedible and edible in their 'raw' state.

#### 7.10.1.2 Word-final pronunciation

Variations in word-final pronunciation patterns amongst these nouns must be accounted for. Despite the woody cases surrounding the kernels being very hard, most of these shells are 'smooth', eg. *anacarde*, *faine*, *muscade*, *noisette*, *pacane*, *pistache*, etc. and, for the most part the kernels of these nuts are delicious and flavoursome, eg. *amande*, *anacarde*, *cacahouète*, *faine*, *muscade*, *noisette*, *pacane*, *pistache*, etc. The *gland* (M) 'acorn' is not only 'inedible' but the scaly cup is 'rough', and it has contrasting vowel-final pronunciation. Evidence in previous chapters shows that these attributes are consistent in their associations with specific and contrasting word-final pronunciations – particularly 'rough' and vowel-final pronunciation, and 'flavoursome' and 'smooth' with consonant-final pronunciation, and these nouns are consistent with examples occurring elsewhere. While it is not possible to identify which of the two attributes 'edible' and 'smooth' is salient, in their association with the same consonant-final pronunciation pattern they are at least consistent. The comparative nature of the *pécan* and

*pignon* is suggested above to account for their vowel-final pronunciations.

The contrasting word-final pronunciations associated with 'edible' and 'inedible' above are not reflected in the consonant-final but 'inedible' *châtaigne* and vowel-final but 'edible' *marron*. However, these contrasts may well relate other contrasts, the 'smooth' skin of *chataigne* and the 'roughened' blistered papery state of *marron* produced by roasting. The notions 'rough' and 'smooth' can account for other contrasts in word-final pronunciations, the vowel-final *noix* (F) 'walnut' with its rough, deeply furrowed shell, and the otherwise similar but consonant-final *pacane* (F) 'pecan' with its smooth casing. For *noix* as the generic term, it is possible that its vowel-final pronunciation may relate to the 'thin' or 'slender' outside skin or casing that typically encloses the kernel, and there is considerable evidence of an association between 'thin' or 'slender' and vowel-final pronunciation. However, it is also the case this term also applies in the case of 'varying' attributes in sets of mutually exclusive properties – including 'partly' and 'wholly' enclosed, 'rough' and 'smooth', and vowel-final pronunciation may perhaps indicate in a subtle way that not all *noix* are edible.

#### 7.10.2 Berries

The term 'berry' typically applies to fruits with two or more seeds. In some cases seeds are surrounded by flesh, eg. *raisin* (M) 'grape', but in other cases seeds are external, eg. *fraise* (F) 'strawberry'. Further, while some berries are rounded and simple in form, others have a more complex structure made up of a dense cluster of small drupelets in a composite or aggregate form, eg. *framboise* (F) 'raspberry'.

##### 7.10.2.1 Background

As noted earlier, the term *baie* in its historical sense, certainly between the twelfth and nineteenth centuries, denoted a specific fruit – the 'berry' of the *laurier*. This relationship is conveyed in expressions such as *dimanche des baies* 'berry Sunday' (the English 'Palm Sunday') when branches of laurel covered with berries were offered instead of palm fronds (<atilf.atilf.fr>, 2006). While the leaves of the *laurier* are edible and are used extensively in cooking, the berries of the *laurier* are inedible.



However, *baie* also came to apply to the 'cone' of the 'juniper', a berry-like fruit (fr.wikipedia.org>, 2005). The current definition of *baie* emerges from this application:

*baies acides, acuminées, aromatiques, charnues, oblongues*

'berries acidic in flavour, narrowing to sharp point, aromatic, plump, oblong

<atilf.atilf.fr>, 2006, trans. M. à Beckett

The form in this definition matches that of the laurel berry – point-tipped, oval-shaped, and dark violet – as illustrated in botanical drawings (<www.illustratedgarden.org/mobot/rarebooks>, 2006, <fr.wikipedia.org>, 2005, although one source (<florawww.ccb.uconn.edu>, 2006) describes it as 'round').

The initial extension of *baie* from its origins as the 'laurel' berry, which ripens to dark violet, to that of the 'juniper' in *baie de genièvre*, which ripens to a similar colour, then allowed it to extend further until it eventually became the generic term, 'berry'. Today, *baie* also lends itself to the term 'bacciform', meaning 'berry-shaped', although there is no general understanding or indication as to what that shape might be. Definitions now identify *baie* in that generic sense to denote any small, plump, brightly-coloured fruit of trees and woodland shrubs (temperate), even mountain ground-cover plants although many berries of these plants have their own individual lexical terms. Various nouns denoting a 'berry', botanical and vernacular, are examined below.

Precise identification of the fruit denoted by each of these nouns is crucial since, as for *baie*, a single noun can apply to different fruits. The term *cenelle* can denote both the round bright red 'berry' of *houx* 'holly', but it can also apply to the fruit of the *aubépine* 'hawthorn' (<www.treecouncil.org.uk/images/gallery.htm>, 2006). The term *mûre* once applied only to the 'mulberry', the very fragile fruit of the *mûrier* 'mulberry tree' (LRPT, 1994:751) but it then came to denote 'blackberry', ... *fruit de la ronce des haies* 'fruit of bramble bushes'. Today its meaning has extended further, applying to any berry similar to the 'mulberry' – oblong, composite, ripening from red (or green) to any dark variation of red – violet, dark purplish or blackish (*noir violacé*), including 'loganberry' – leaving it to consumers to identify more precisely which berry is indicated by *mûre* in any specific case.

There are also examples of different terms denoting the very same fruit, eg. 'bilberry', which has as many names as the different regions in which it is found – *airelle* in the Midi, *myrtille* in the North, *brimbelle* in the Vosges region (<atilf.atilf.fr>, 2005) and this source also provides other regional names, including *moret*, *raisin des bois*, *teint-vin*, *vaciet* which terms are dying out as the popularity and spread of *myrtille* and *airelle* increases.

#### 7.10.2.2 Count nouns denoting 'berry'

The database contains 21 nouns denoting a 'berry' of some kind, and these nouns are set out in Table 7.25 below.

Table 7.25: Nouns denoting 'berry'

Masculine nouns			
<i>bleuet</i>	M	'blueberry', 'huckleberry'	soft largish blue-black berries covered in bloom (fine whitish coating (gen. <i>Vaccinium</i> ) (<atilf.atilf.fr>, 2005)
<i>cassis</i>	M	'blackcurrant'	soft small shiny round black berry ( <i>Ribes nigrum</i> ) (CED, 1986:159)
<i>grain</i>	M	'grape'	soft small 'berry' of the grapevine, sweet and juicy, firm, that forms in bunches ( <i>raisin</i> )
<i>gratte-cul</i>	M	'hip'	<i>baie</i> of <i>églantier</i> , small, oval, hard, brightly coloured, smooth shiny berry (<atilf.atilf.fr>, 2005)
<i>mûron</i> syn. <i>mûre</i>	M	'blackberry' (but <u>not</u> 'mulberry')	soft, composite, oblong blackish berry of prickly bramble gen. <i>Rubus</i> (<atilf.atilf.fr>, 2005)
Feminine nouns			
<i>airelle</i> syn. <i>myrtille</i>	F	'whortleberry', 'bilberry'	any soft, small, shiny dark violet-coloured shiny round fruit from mountain shrubs (<atilf.atilf.fr>, 2005, LRPT, 1996:26)
<i>arbouse</i>	F	'arbutus berry'	soft red sour strawberry-shaped fruit of <i>arbutus</i> (<atilf.atilf.fr>, 2005)
<i>baie</i>	F	'bay laurel berry'	fleshy <i>oblong</i> -shaped oval fruit of bay laurel, shiny, ripens to dark purple (<floridata.com>, <florawww.eeb.uconn.edu>, 2006)
<i>busserole</i>	F	'bearberry'	small red berry ( <i>Arcostaphylos uva ursi</i> ) of Arctic regions (<www.herbosante.com>, 2005)
<i>camarine</i>	F	'crowberry'	small purplish-black berry-like fruit ( <i>Empetrum nigrum</i> ) (CED, 1986:373)

<i>canneberge</i> syn. <i>airelle</i> <i>canneberge</i>	F	'cranberry'; any similar berry found damp regions	soft round red berry of ericaceous shrub ( <i>Vaccinium</i> ) of <i>marais</i> 'boggy' areas (<atilf.atilf.fr>, 2005)
<i>cenelle</i>	F	'holly berry', 'haw'	(pome) small fleshy scarlet egg-shaped holly or hawthorn berry, yellowish and pulpy inside (<atilf.atilf.fr>, <ip.aaas.org/tekindex.nsf>, 2005)
<i>cornouille</i>	F	'dogwood berry'	shiny red edible oval fruit of dogwood, the size of an olive which softens on ripening (<atilf.atilf.fr>, 2005)
<i>fraise</i>	F	'strawberry'	sweet red fruit, plump, conical-shaped (<atilf.atilf.fr>, 2005)
<i>fraise des bois</i>	F	'wild strawberry'	sweet red edible strawberry-shaped woodland fruit
<i>framboise</i>	F	'raspberry'	soft, dark pink, sweet aromatic fruit LRPT, 1994:402) formed of drupelets (CED, 1986:1268)
<i>groseille</i>	F	'currant'	soft small edible round berry of gen. <i>Ribes</i> typically red or white, growing in bunches (<fr.wikipedia.org>, 2005, LRPT, 1994:538)
<i>mûre</i>	F	'mulberry, any other similar fruit in form and colour, eg. 'blackberry ( <i>Rubus</i> )'	soft composite red fruit ripening to purple-black, fruit of mulberry tree (<fr.wikipedia.org>, 2005, CÔFED, 1986:367)
<i>myrtille</i> syn. <i>airelle</i>	F	'whortleberry', 'bilberry'	soft sweet dark violet-coloured berry of mountain shrubs ( <i>Vaccinium</i> ) (LRPT, 1994:755, <atilf.atilf.fr>, 2005)
<i>ronce-framboise</i>	F	'loganberry'	purplish-red acid fruit of a prickly hybrid rosaceous plant
<i>sorbe</i> syn. <i>corme</i>	F	'sorb-apple'	'berry' of <i>sorbier</i> 'sorb tree', round, red-orange (LRPT, 1994:1049), edible when left to 'blet' (over-ripen/soften, ie. 'rot')
<i>symphorine</i> ( <i>blanche</i> )	F	'snowberry'	soft small round white berries of gen. <i>Symphoricarpos</i> and other white berries (CED, 1986:1445)

The *fraise* and *fraise des bois* are not strictly berries since their seeds are borne on the outside, but they are included here since their English names suggest some association.

Sixteen of these nouns are feminine, and all but one, *baie* have consonant-final pronunciation. Three of the five masculine nouns have vowel-final pronunciation while two, *cassis* and *gratte-cul*, have consonant-final pronunciation. These results reflect even more strongly the statistical preferences identified in the phonological analysis but, again, they are of little help in identifying

precisely which noun will be the 'odd one out'.

The extent of the different gender assignments and word-final pronunciation patterns amongst these nouns suggests that differences in gender assignment and in word-final pronunciations indicates the presence of a number of attributes that are associated with contrasting classifications.

#### 7.10.2.3 Gender assignment

Analysis of masculine nouns shows that one, the masculine *gratte-cul* (M) 'hip' is 'hard' while most berries in this set are 'soft', eg. *airelle*, *arbose*, *busserole*, *camarine*, *canneberge*, *cornouille*, *framboise*, *groseille*, *mûre*, *myrtille*, *symphorine*, even *sorbe*, which nouns are all feminine. Together these contrasting attributes 'soft'/'fleshy' and 'hard' can account for gender assignment for 13 of the 19 nouns in this set denoting 'berry'. The remaining nouns are analysed below. It is noted that the term *grain* denotes a single 'grape', an individual amongst the many forming in bunches on the grapevine that is used instead of *raisin* since the latter is a collective term (although in English it can also refer to a dried 'grape').

Gender assignments that cannot be accounted for by these attributes include the 'soft' *bleuet*, *cassis* and the regional synonym *mûron*, which are masculine, and the firm *fraise* and 'hard', eg. *cenelle* (F) 'holly berry'/'haw' and *cornouille* (F) 'dogwood berry' which are feminine. In these latter cases 'soft' would indicate that they have passed their best and are rotting. Gender assignments of these nouns need to be accounted for.

#### 7.10.2.4 Counter-examples - gender assignment

Identified above are three masculine counter-examples – *bleuet* (M) 'blueberry', *cassis* (M) 'blackcurrant' and *mûron*, a regional synonym for the feminine *mûre* as fruit of a 'bramble'. Each denotes a berry that is *noir* or 'dark-coloured' berry that softens as it ripens.

Literary records show that two of these counter-examples are very old masculine nouns – *cassis* (16th C.), and *mûron* (late 14th C.) (<atilf.atilf.fr>, 2006) – which suggests that their gender

assignments respond to firmly established principles. These three berries are described in similar terms, either *noir*, or *noirâtre*, 'black', and 'blackish' or 'dark-coloured':

<i>bleuet</i>	M	'blueberry'	'blue-black'
<i>cassis</i>	M	'blackcurrant'	'dark'
<i>mûron</i>	M	'blackberry'	ripens to 'dark'

The regularity demonstrated here suggests that 'dark' may be an attribute associated with masculine gender assignment for these nouns. (The possibility that this association underpins masculine gender assignment for *prunellier* (M) 'blackthorn', a masculine term for a 'thorny' tree with black twigs should also be considered.)

Other fruits that ripen to black also have masculine gender assignment, eg. *avocat* (M) 'avocado', and *fruit de la passion* (M) 'passionfruit', and although masculine gender assignment for these fruits is accounted for by other attributes, 'leathery' in the case of *avocat*, 'hard' in the case of *fruit de la passion*, there is some consistency between masculine gender for these 'dark' berries.

The different gender assignments of *mûre* and *mûron* can be accounted for by different attributes 'soft' and 'dark' in their association with contrasting masculine and feminine gender assignments. Where the salient attribute for speakers is 'soft', one might anticipate that they would use the feminine noun *mûre*, but where the salient attribute is 'dark', it would suggest the use of a masculine term. The different saliencies of these attributes may also depend on other berries within the vicinity.

For two feminine nouns denoting the brightly-coloured *fraise* (F) 'strawberry' and *fraise des bois* (F) 'wild strawberry', it is possible that the contrasting notion 'bright' may be related to their feminine gender assignments. As contrasting properties, 'dark' and 'bright' are so harmonious that they are regularly used as literary devices, eg. '...And all that's best of dark and bright ...', where the presence of one draws a contrast with the other. The attribute 'bright' may also be salient for the scarlet-coloured *cenelle*, particularly against the dark green foliage in which it is found. While 'bright' may account for feminine gender assignment for these nouns in a

contrast with 'dark', the principle underpinning the semantic link between 'scarlet' and 'bright' is not well understood.

### Colour terms

It is noted that almost all colour terms are masculine, eg. *noir* (M) 'black', *blanc* (M) 'white', *rouge* (M) 'red', *crimson* (M) 'crimson', *orange* (M) 'orange', etc. The exception is *écarlate* (F) 'scarlet', defined as *couleur d'un rouge éclatant* (LRPT, 1994:354) 'colour of a brilliant red'. The noun *écarlate* is derived from Persian via medieval Latin, the same source as the English 'scarlet'. It suggests the most extreme kind of red in its brightness – not just *rouge* 'red', or *rouge vif* 'bright' red, or even *crimson* 'crimson', each of which is masculine. That is, *écarlate* indicates the brightest possible red, a superlative, and while this might account for consonant-final pronunciation it would not be expected to account for its feminine gender assignment.

It is interesting to note changes in gender assignments among colour terms, eg. *rose* is masculine as a colour term, and is feminine in its application to the 'flower' or 'shrub', while *orange* is masculine as a colour term and is feminine in its application to the 'fruit'. It is also noted that *éméraude* (F) 'emerald' is feminine, and while its meaning originates in the brilliant green precious stone, its use in extension is found in expressions such as ... *sur l'herbe d'éméraude* 'on grass of emerald green' (LRPT, 1994:377). Thus, feminine gender for this most brilliant of greens appears to be closely related to *écarlate*, the most brilliant of reds. , although the reflection of meanings that suggest 'superlative' in my translations are expressed in gender and not in word-final pronunciation. The basis for these classifications is not yet fully explained.

One possible explanation for masculine colour terms is that they identify specific but different points on the spectrum – the continuum of colour from white to black. In identifying the furthest extent of intensity out from different points on the spectrum for feminine terms *écarlate* and *éméraude* in fact makes each unique in its level of intensity – *écarlate* unique amongst all the various reds for its brightness, and *éméraude* unique among all the various greens for its brightness. This association between 'unique' and feminine gender is regular and

consistent across various lexical fields covered so far.

Many of the colour terms also have consonant-final pronunciation, eg. *vert* (M) 'green', *jaune* (M) 'yellow', *orange* (M) 'orange', *rose* (M) 'pink', even *noir* (M) 'black', while others are vowel-final, eg. *bleu* (M) 'blue', *blanc* (M) 'white', *violet* (M) 'violet'. These differences in word-final pronunciation patterns suggest that they are unlikely to be associated with any 'comparative' distinction for some but not others, and an explanation awaits.

#### 7.10.2.5 Regional synonyms, different gender assignments

Many synonyms for *airelle/myrtille* (F) 'mountainberry', exist.

Table 7.26: 'Mountainberry' – masculine and feminine synonyms

Feminine		Masculine		English translation	Colour
<i>airelle</i>	F	<i>vaciet</i>	M	'bilberry', 'whortleberry'	dark
<i>brimbelle</i>	F	<i>moret</i>	M	'bilberry', 'whortleberry'	dark
<i>myrtille</i>	F	<i>teint-vin</i>	M	'bilberry', 'whortleberry'	dark

These are but a few of the regional synonyms for the same berry (gen. *Vaccinium*), but the extent of synonyms is not surprising given the separation between locations in the mountainous terrains in which they grow and the lack of outside contact in such environments that would have existed for so long. In fact, *bleuet* (M) 'blueberry' also once had a feminine synonym, *luce* (F) (<atilf.atilf.fr>, 2005). It is the different outcomes amongst related but separated populations that is interesting since these forms do not sit side by side within the same community; rather, different communities have lexically distinct ways of denoting the same item.

However, as the above analysis shows, the different gender assignments of these synonymous terms can be accounted for by different attributes of the same fruit that are associated with different classifications, in the same way as occurs not only for *mûre* and *mûron* but amongst other 'living' entities. In the lexical field 'berry', evidence suggests that the attribute 'soft' is associated with feminine gender of synonyms, and the attribute 'dark' with masculine gender of synonyms. The different outcomes in relation to gender assignment suggest that external

factors such as other fruits, or other plants, in the immediate vicinity may play some role. It is interesting that word-final pronunciations in relation to gender assignments for these nouns reflect distributions found earlier.

#### 7.10.2.6 Word-final pronunciation

Variations in word-final pronunciation patterns among these nouns also need to be accounted for. Also requiring explanation are regional synonyms that vary in their word-final pronunciation patterns, particularly nouns applying to 'blackberry' and 'redcurrant'.

Most berries are delicious to eat even when they are acidic, eg. *arbrouse*, *cassis*, *fraise*, *fraise des bois*, *framboise* and *mûre*, etc., each of which has consonant-final pronunciation. It is noted that the *baie* (F) 'laurel bay berry' is not edible and is not even used in cooking although its leaves are widely used. While its 'inedible' nature is possibly associated with vowel-final pronunciation, it is oblong-shaped rather than rounded, and it is also likely that 'other than rounded' can account for vowel-final pronunciation for this berry as it does for trees. It contrasts with the *gratte-cul* (M) 'hip' which is not edible in its raw state, but has a rounded shape, an attribute also associated with consonant-final pronunciation for trees that have a rounded crown shape. It is noted that *sorbe*, syn. *courbe*, is only 'edible' once it is past its prime – *blet* 'over-ripe', a stage that for other fruits might be considered as 'rotting'. In these circumstances it is likely that its consonant-final pronunciation is also associated with its rounded shape.

Still to be accounted for are the consonant-final *cenelle* and vowel-final *bleuet* and *raisin*. Descriptions of the vowel-final *bleuet* and *raisin* identify that both fruit develop 'bloom', a fine whitish coating consisting of waxy grains (CED, 1986:166) that forms on their skins (this same term 'bloom' that is used to refer to dull areas on the surface of old gloss paint, CED, 1986:166). This coating does not occur for the consonant-final *cassis* or *canneberge*, which remain shiny and smooth. Both of these two attributes, 'shiny' and 'smooth', offer a means of accounting for consonant-final pronunciation for *cassis*, but also for *cenelle* which is bright and shiny. However, 'shiny' depends on 'smooth' and, moreover, 'shiny' can change with changing



external conditions and is not necessarily an intrinsic part of the fruit. Thus, 'smooth' can be said to be more fundamental, and there is considerable evidence of not only its salience elsewhere in the system but its association with consonant-final pronunciation, for instance, among fish such as 'eels' which are 'scaleless' and 'smooth' all of which have consonant-final pronunciation, eg. *anguille* (F) 'freshwater eel', *congre* (M) 'conger eel' (see Chapter 5, Fish).

These examples suggest that berries whose skins develop a textured covering of fine waxy grains have vowel-final pronunciation while skins that are smooth and glossy have consonant-final pronunciation. It would appear that this 'bloom' is seen not as 'dull' but as 'not smooth', a textured opposition to 'smooth' that can be ascertained through observation before touch. This would seem to be an important element in determining what attributes can become salient.

Thus, contrasting attributes 'textured' and 'smooth', and 'not rounded' and 'rounded' can account for different vowel- and consonant-final pronunciations amongst berries. The conditions under these crucial attributes become salient would be expected to depend on specific shapes and textures of individual fruits themselves, rather than on other fruits either closely related or found within the same environment.

### 7.10.3 Drupes, pomes, and other fruits

This set includes those fruits covered by two other botanical terms – 'drupe', which term applies to fruits with an outer layer or skin, fleshy middle layer and single nut or 'stone' ('stone fruit' such as almond, peach, apricot), and 'pome', a term that denotes fruits with multiple kernels and they are set out in Table 7.27. A variety of terms in the database denote related fruits but are not included here. Instead they are examined in the section to come in certain related sets – 'apples', 'cherries', and 'citrus fruits'.

Table 7.27: Drupes, pomes and other 'fruits'

Masculine nouns			
<i>abricot</i>	M	'apricot'	small, downy, round yellow-orange fruit 'resembling a small peach' (CED, 1986:72)
<i>avocat</i>	M	'avocado'	pear-shaped fruit with leathery green skin; typically becomes black as it ripens, syn. <i>poire avocat</i> , <i>poire d'avocat</i> (<atilf.atilf.fr>, 2005)

<i>beurré</i>	M	'beurre bosc'	variety of (brown) pear with dull raspy skin
<i>brugnon</i>	M	'nectarine'	variety of clingstone peach, smooth skin
<i>cantaloup</i>	M	'cantaloup'	large oval fruit with thick, ribbed warty rind
<i>coing</i>	M	'quince'	yellow, hard, pear-shaped
<i>concombre</i>	M	'cucumber'	elongated cylindrical fruit, smooth skin
<i>cornichon</i>	M	'cornichon'	tiny <i>concombre</i> , cut before maturity for pickling (LRPT, 1994:240)
<i>fruit de la passion</i>	M	'passionfruit'	edible sweet pulp inside leathery, wrinkled casing turns black as it ripens
<i>melon</i>	M	'melon'	round or oval fruit, smooth or ribbed skin ( <i>écorce lisse ou striée</i> ), sweet juicy usu. orange flesh (<atilf.atilf.fr>, 2005)
<i>melon d'eau</i>	M	'watermelon'	large fruit with hard shiny rind and juicy flesh
<i>pample-mousse</i>	M	'shaddock'	citrus fruit similar to grapefruit, pear-shaped, huge (30 cm. in diameter) with very thick skin (<atilf.atilf.fr>), very bitter to very sweet depending on variety, climate (<zipcodezoo.com>, 2005)
<i>pruneau</i>	M	'prune'	purplish-black partially dried plum (LRPT, 1994:912; CED, 1986:1223)
<i>potiron</i>	M	'pumpkin'	variety of marrow, larger than <i>citrouille</i> (LRPT, 1994:880)
<i>tamarin</i>	M	'tamarind'	fuzzy, cinnamon-brown, sausage-shaped pod with rounded ends, acidic fruit of the tamarind tree (<herbarium.literal.si>, 2006)
Feminine nouns			
<i>alberge</i>	F	'clingstone peach'	soft stone fruit whose flesh adheres to the stone (COFD, 1985:169, CED, 1986:298)
<i>alise</i>	F	'sorb-apple'	round, brown, apple-like fruit of 'service tree' (var. of <i>sorbier</i> ) (LRPT, 1994:29)
<i>aubergine</i>	F	'eggplant'	thin-skinned oblong smooth-skinned dark violet fruit of eggplant eaten as vegetable (LRPT, 1994:75), egg-shaped (CED, 1986:96)
<i>banane</i>	F	'banana'	smooth-skinned 'oblong' fruit, becomes soft as it ripens (LRPT, 1994:781)
<i>citrouille</i>	F	'pumpkin'	round yellow-orange coloured pumpkin with a hard dense shell, hollow inside, smaller than a <i>potiron</i> (M) 'pumpkin'
<i>coloquinte</i>	F	'colocynth'	round shiny 'fruit', shiny variegated rind as for 'watermelon' but becomes orange at maturity (CED, 1986:312, LRPT, 1994:204, <fr.wikipedia.org>, 2006)
<i>courge</i>	F	'gourd' (esp. pumpkin, marrow, etc.)	edible varieties of the gen. <i>Cucurbita</i> that produce fruit with a hard shell and dense flesh
<i>courgette</i>	F	'marrow', 'zucchini'	long slender part of the flower of a marrow with soft skin, picked before maturity

<i>datte</i>	F	'date'	fruit of date palm, yellow-brown shiny, smooth-skinned soft sweet flesh, single woody stone (CED, 1986:396)
<i>figue</i>	F	'fig'	pear-shaped fruit with soft sweet flesh when mature (CED, 1986:565), green or violet thin fragile skin (LRPT, 1996:469)
<i>grenade</i>	F	'pome-granate'	large round red fruit with tough outer skin, juicy flesh and many seeds
<i>mirabelle</i>	F	'mirabelle plum'	small round yellow plum of the Vosges region, size of a large cherry, with firm flesh (<www.pommiers.com>, 2006, <atilf.atilf.fr>, 2005)
<i>nectarine</i> syn. <i>brugnion</i>	F	'nectarine'	English loan word for a variety of peach that is smooth-skinned
<i>necte</i>	F	'medlar'	small fruit resembling crab-apple (COD, 1986:959)
<i>necte (de Japon)</i>	F	'loquat'	small downy thin-skinned fruit with sweet yellow flesh, large glossy pips
<i>olive</i>	F	'olive'	small glossy green fruit (LRPT, 1994:787) that softens and turns dark as it ripens
<i>orange</i>	F	'orange'	shiny round fruit, with orange-coloured juicy sweet-tasting flesh
<i>pastèque</i>	F	'watermelon'	syn. <i>melon d'eau</i> ; large edible fruit with glossy green skin, juicy red sweet flesh from Arabic, LRPT, 1994:819)
<i>pêche</i>	F	'peach'	round soft juicy fruit with velvety reddish skin, single hard stone
<i>poire</i>	F	'pear'	thin-skinned fruit with white flesh
<i>pomme</i>	F	'apple'	typically round, with juicy firm flesh (LRPT, 1994:870)
<i>prune</i>	F	'plum'	smooth, sometimes glossy, <i>peau fine</i> 'thin skin in a variety of colours, green, red, purple, speckled, etc. (LRPT, 1994:912)
<i>prune de Damas</i>	F	'damson'	purple or violet plum with covering of bloom
<i>prunelle</i>	F	'sloe'	small slate-blue plum, sour (<atilf.atilf.fr>, 2006)
<i>reine-claude</i>	F	'greengage plum'	yellowy-green round smooth-skinned fruit
<i>tomate</i>	F	'tomato'	shiny fruit of a tomato plant typically red, but also in a variety of colours, green-striped, yellow; plump and juicy

All but two of the masculine nouns have vowel-final pronunciation despite orthographic representations that might suggest otherwise, e.g. *cantaloup*, *cédrat*, *coing*, *melon*, *potiron*, *tamarin*, etc. Two have consonant-final pronunciation, *concombre* and *pamplemousse*. All feminine nouns have consonant-final pronunciation. Thus, it is possible to say that any fruit with vowel-final pronunciation is likely to be masculine, and any fruit that has consonant-final

pronunciation is likely to be feminine. Such associations match our intuitive sense of some relationship between them, although previous evidence suggests that they are based on very different features the precise nature of which need to be made transparent.

#### 7.10.3.1 Gender assignment – drupes, pomes and other fruits

Many of the fruits denoted by masculine nouns have a 'hard' or 'rigid' inedible outer layer that covers the flesh beneath in much the same way as 'nuts', eg. *avocat*, *cantaloup*, *fruit de la passion*, *melon*, *melon d'eau*, *potiron*. The flesh of the *pamplemousse* is acidic and is made palatable by the addition of sugar, and it is also covered in a thick layer of pith, as is the *melon d'eau*, and these attributes may be associated with their masculine gender assignments. While 'fleshy' is more typically associated with 'flexible', even soft, some fruits denoted by these masculine nouns are noted for their 'hard' or 'dense' flesh, eg. *buerré* and the fibrous *coing*, *tamarin* and *gratte-cul*, whose flesh is rendered edible through a long cooking process. Attributes 'rigid' and 'hard' and 'dense' are identified in the analysis of 'woody' plants above and are associated with the same masculine gender assignments as these nouns denoting a fruit. It is noted, however, that *potiron* is so closely related to the *citrouille* (F) 'pumpkin' that they are often confused, yet *citrouille* is feminine. An explanation awaits.

However, 'rigid' and 'hard' seem less appropriate in the case of *concombre* and *cornichon* which fruits are eaten raw, skin and all, despite their being not particularly flavoursome since their crisp flesh adds a variety to textures in the mouth that is much enjoyed. It is possible that 'crisp' forms another kind of opposition with 'soft' that may also account for masculine gender assignment of these two nouns. The term *cornichon* identifies a cucumber that is tiny in comparison with the size of mature 'cucumbers' ready for eating, and this 'different' size may also be crucial in its classification, and its masculine classification is consistent with this attribute. It is not possible to identify which is salient.

None of the various attributes mentioned so far are relevant for *avocat*, a drupe that softens as it ripens which process for most varieties is accompanied by a gradual change in colour from green to black. However, even where this outer layer turns black the flesh inside may not yet be

soft enough to eat. More importantly, while 'soft' is associated with feminine gender, the noun denoting this fruit is masculine. The soft flesh of the *avocat* is regarded as delicious but is neither sweet nor savoury; in fact, it is not particularly flavoursome – rather like two other 'flavourless' fruits that are also eaten raw, *concombre* and *cornichon*, which is pickled to give it flavour. Since fruits do not have to be 'flavoursome' to be edible, it is possible that an attribute such as 'not flavoursome' may be associated with masculine gender assignment and will continue to be explored.

Not accounted for by any of these attributes is *pruneau*, a term that designates *prune*, the fruit of the 'plum tree', a 'plum', but one that has been transformed through a drying process into a dark shrunken irregular mass quite unlike its original state. The 'black' nature of the *pruneau* is called on in the expression *être noir comme un pruneau* (LRPT, 1994:912), but what may well be salient for this form is the 'different' or 'unlike' state of the fruit when it is ripe and mature, and the same fruit when dried. The two attributes 'different' and 'unlike' both infer a comparative process, and there is considerable evidence of an association between 'different' in relation to a 'comparative' distinction with masculine gender and vowel-final pronunciation among nouns in other fields. These attributes 'different' and 'unlike' may be salient in the masculine gender assignment of *pruneau*.

Two masculine nouns yet to be accounted for are *abricot* and *brugnon*. Definitions of both nouns include a comparison with the 'peach' – the *abricot* as 'smaller in size than a peach', and the *brugnon* as a 'variety of peach', one that is smooth-skinned rather than 'furry' (LRPT, 1994:136). Given the extent of examples that whose sense relates to a comparative 'difference' with a similar entity, masculine gender assignment for *pruneau* appears to be regular and predictable. It is noted that the French term *brugnon*, an Old Provençal loan word meaning 'plum' (LRPT, 1994:136), has come to replace the feminine *nectarine*, an English loan word. Using a feminine noun to designate a variety of peach that is different in from a regular peach would have been quite uncomfortable, and its replacement by a masculine term is not unexpected.

In regard to feminine nouns denoting fruits, the analysis relating to berries suggests that 'soft' is crucial in their classification, and that it appears to be associated with feminine gender assignment. It would not be surprising for this same attribute to be salient amongst drupes and pomes many of which 'soften' as they ripen, or are 'fleshy' and develop the same 'give' (*moelleux*) as human flesh when pressed. These fruits include *alberge*, *alise*, *banane*, *datte*, *figue*, *néfle*, *pêche* and *prune*, and all are feminine. However, in some cases 'soft' indicates that fruits have started to rot, eg. *poire*, *aubergine*, and this attribute would not be expected to be salient for such fruits. Also among these fruits are those appreciated for their 'sweet' flavour, including *alberge*, *alise*, *banane*, *datte*, *figue*, *grenade*, *nectarine*, *néfle*, *néfle de Japon*, *orange*, *pastèque*, *pêche*, *poire*, *pomme*, *prune*, *prune de Damas*, *prunelle* and *reine-claude*. Some of these fruits are found in both sets, for instance *alberge*, *alise*, *banane*, etc. Given that both 'soft' and 'sweet' are both associated with feminine gender assignment, for these fruits it is not possible to identify which is salient.

It is noted that *aubergine* could not be described as 'sweet', and has started to rot when 'soft', yet it is feminine. This fruit is noted for the thin, glossy layer of skin over the flesh. Other fruits have a similar 'thin' skin over the flesh or pith beneath, including *alberge*, *alise*, *coloquinte*, *courge*, *courgette*, *date*, *figue*, *mirabelle*, *nectarine*, *olive*, *pastèque*, *pêche*, *poire*, *pomme*, *prune*, *prunelle*, *reine-claude* and *tomate*. Many of these fruits in this set are not included in either of the other two sets, those based on 'sweet' and those based on 'soft'.

This explanation can account for the feminine *courge* as the generic term for 'gourds' in its application to fruits whose thin rind is fused to the flesh beneath. However, it does not provide an explanation for the contrast between *citrouille*, a 'fruit' that is very like the masculine *potiron* which two terms are today used more or less synonymously in the *langage courant* (<fr.wikipedia.org>, 2005). Botanically, they relate to two different species of *Cucurbita* – *citrouille* denoting the fruit of *C. pepo* ssp *pepo*, and *potiron* (M) denoting fruit of *C. maxima* ssp *maxima*, the 'giant pumpkin'. It is the *citrouille* that is carved into a decorative lantern rather than the ribbed *potiron* or 'giant pumpkin', and while it is *citrouille* that is suggested in Charles Perrault's original fairy tale of *Cendrillon* 'Cinderella', the American film version uses a *potiron*

– perhaps because its large size suggests even more room inside. What appears to be most crucial for *citrouille* is its hollow interior space – although precisely how this attribute interacts with its feminine gender is not clear. There are other associations between a hollow interior and feminine nouns, eg. *boîte* (F) 'box', *salle* (F) 'reception room', *chambre* (F) 'bed-room', *pièce* (F) 'room', even *plume* (F) 'pen' which allows ink to run through, but not all 'rooms' are feminine, and not all containers are feminine. Since the *potiron* is very much bigger than the *citrouille*, its masculine gender and vowel-final pronunciation are consistent with other terms denoting others distinguished by a comparative difference in larger/smaller size. This is not an attribute that can apply to the *citrouille* since even a sub-species *citrouille de Touraine* is not small.

In fact, four attributes – a 'soft' form, a 'sweet' taste, 'thin' skin and 'hollow' interior – can account each of the feminine nouns in Table 7.27, while contrasting attributes 'hard' or 'rigid' form, 'sour/flavourless' taste, and 'thick' skin can account for all masculine gender assignments save those associated with 'different' in a comparative process.

The corpus contains a large number of other nouns denoting citrus fruits, apples and cherries, whose gender assignments are not yet analysed, and they are examined in various sets below.

#### 7.10.3.2 Word-final pronunciation – drupes, pomes and other fruits

Evidence emerging from the analysis of loan words above (Section 7.9.3) suggests that two attributes, 'rough' and 'smooth' in their various guises, can account for differences in word-final pronunciation amongst those nouns, and they may well be salient for drupes and pomes. Vowel-final pronunciation for two nouns, *abricot* and *brugnon*, are accounted for above in relation to their 'comparative' differences, in size for *abricot*, and in texture for *brugnon*.

Analysis of descriptions of the fruits in Table 7.27 above show that many of these fruits have a 'rough' (wrinkled, hairy, leathery, bumpy, raspy, warty, etc.) outer layer, eg. *avocat*, *buerré*, *cantaloup*, *coing*, *cornichon*, *fruit de la passion*, *melon*, *pruneau*, *potiron* and *tamarin*. This attribute can account for all vowel-final nouns except *melon d'eau*.

Analysis of descriptions of the various fruits in Table 7.27 show that many fruits have a 'smooth' outer surface, eg. *alise, aubergine, banane, mirabelle, olive, pamplemousse, pomme, nèfle, orange, pastèque, poire, prune, prunelle, reine-claude* and *tomate*. Other fruits have a surface that is glossy and shiny, eg. *aubergine, datte, granade, nectarine, pomme* and *pastèque*. This attribute contrasts with 'dull' that is associated with vowel-final pronunciation for berries, and it is possible that 'shiny' may relate to these contrasting consonant-final pronunciation patterns.

It is possible that a 'thin' skin of some of these drupes and pomes suggests that it is edible, and in the case of the following, the thin outermost layer surrounding the flesh is edible, eg. *alberge, alise, citrouille, coloquinte, concombre, courge, courgette, datte, figue, mirabelle, nectarine, nèfle, nèfle de Japon, olive, pêche, poire, pomme, prune, prunelle, reine-claude* and *tomate*, many of which cannot be accounted for by a 'smooth' skin. However, some other attribute must account for the vowel-final *melon d'eau*, and it remains of interest.

#### 7.11 Related sets of fruits

A number of nouns in the corpus denoting a 'fruit' have not yet been explored, particularly where they are varieties of another more superordinate term, such as cherries, apples, citrus fruits and cherries. They are discussed below in their related sets.

##### 7.11.1 Cherries

The following 11 nouns denoting cherries found in the database are set out in Table 7.28 below, with gender assignment and descriptions (from various sources including <[www.pommiers.com/cerise/cerisier.htm](http://www.pommiers.com/cerise/cerisier.htm)>, <[fr.wikipedia.org](http://fr.wikipedia.org)>, etc.).

Table 7.28: Nouns denoting cherries

#### Masculine nouns

<i>bigarreau</i>	M	'white-heart cherry' (sweet)	uniquely variegated colouration, red on one side, white on the other, sweet; firm flesh
<i>blanc de Champagne</i>	M	'cherry var.' (sweet)	yellow and pink colouration, crisp, sweet (< <a href="http://www.pommiers.com/cerise/cerisier.htm">www.pommiers.com/cerise/cerisier.htm</a> >, 2006)



<i>cœur (de marmotte)</i>	M	'cherry' (sweet)	firm, sweet <i>bigarreau</i> , brilliant red colour (< <a href="http://www.pommiers.com/cerise/cerisier.htm">www.pommiers.com/cerise/cerisier.htm</a> >, 2006)
<i>hatif (burlat)</i>	M	'sweet cherry'	firm-fleshed sweet <i>bigarreau</i> , red to dark brown in colour (after botanist <i>Burlat</i> ) (LRPT, 1994:139, < <a href="http://fr.wikipedia.com">fr.wikipedia.com</a> >, 2006)
<i>napoléon</i>	M	'sweet cherry'	kind of <i>bigarreau</i> , firm flesh, sweet, pale yellow flecked with red (< <a href="http://www.cuisine-vegetarienne.com">www.cuisine-vegetarienne.com</a> > 2006)
Feminine nouns			
<i>amarelle</i> syn. <i>Montmorency</i>	F	'morello'	soft cherry, very dark red, sour
<i>cerise</i>	F	'cherry'	<i>charnu</i> 'fleshy/plump', rounded fruit, smooth, typically vibrant dark red
<i>griotte</i>	F	'cherry'	variety of sour cherry, short stem, soft flesh
<i>guigne</i>	F	'heart cherry' (a wild cherry)	small soft shiny heart-shaped variety of cherry, dark-red to black
<i>merise</i>	F	'wild cherry', 'gean'	small, soft, gleaming, pink or very dark red colour
<i>Montmorency</i> syn. <i>amarelle</i>	F	'morello'	soft ( <i>griotte</i> ), sour variety, dark red (CED, 1986:1001)

The typical *cerise* is a small fruit whose single stone is surrounded by flesh over which lies a smooth glossy fine skin that is typically dark red in colour. Textures of flesh vary in that some varieties are 'firm', neither hard nor soft, (*ferme, ni mou, ni dur*) and crisp (*croquante*), while others soften as they ripen (*molle*). From descriptions of nouns denoting 'cherry', we can observe that those cherries whose flesh is 'firm' or 'crisp', eg. *bigarreau*, *blanc de Champagne*, *cœur de marmotte*, *hatif burlat* and *napoléon*, are denoted by masculine nouns, while those cherries that have 'soft' flesh, eg. *amarelle*, *griotte*, *guigne*, *merise* and *Montmorency* are denoted by feminine nouns.

This contrast between 'firm' and 'soft' is best exemplified by *bigarreau* (M) and *guigne* (F), two varieties of 'heart cherry'. The flesh of the *bigarreau* is described as 'firm' while that of *guigne* is described as 'soft'. Over time, these two cherries have come to convey a more general application within the cherry industry and are now used to describe any variety according to consistency of flesh – species with 'firm' flesh are identified as *un bigarreau* and species with 'soft' flesh as *une guigne* (<[www.pommiers.com/cerise/cerisier.htm](http://www.pommiers.com/cerise/cerisier.htm)>, 2006). A third noun,

*griotte* has also now come to apply more generically for any other variety that has both soft flesh and sour flavour. Its feminine gender suggests that 'soft' is more crucial than 'sour'. Thus, a contrast between 'firm' and 'soft' can account for differences in gender assignment for 10 of the 11 nouns in the above set.

Descriptions show that varieties of cherry are also judged according to sweetness, those that are *sucrée* 'sweet' and those that are 'sour', *acidulée* (<[www.cuisine-vegetarienne.com](http://www.cuisine-vegetarienne.com)>, 2006):

- sour, eg. *amarelle* syn. *Montmorency*, *griotte*
- 'sweet', eg. *bigarreau*, *blanc de Champagne*, *napoléon*, *hatif burlat*, *guigne*.

However, this paradigm provides no regularity for cherries.

However, as mutually exclusive attributes 'hard' and 'soft' would not be expected to account for feminine gender assignment of the generic term, *cerise*. And while 'sweet' and 'sour' do not appear to be salient in gender assignments of cherries, regardless of whether they are 'sweet' or 'sour' the flesh of all cherries is edible. It can be argued that in forming a further semantic contrast with 'hard', the notion 'fleshy' – an attribute of all cherries – can account for feminine gender assignment of *cerise*, the generic term.

Analysis of the descriptions shows that most have the uniform colouration typical of cherries, a shiny dark red smooth skin, eg. *cœur de marmotte*, *hatif burlat*, *griotte*, *guigne*, *merise*.

However, three cherries have 'flecked' or 'variegated' colouration, *bigarreau*, *blanc de Champagne* and *napoléon*, and each has vowel-final pronunciation. It is noted that *melon d'eau*, whose vowel-final pronunciation remains unaccounted for so far, also has a variegated colouration.

The same 'flecked' pattern of colouration of the three vowel-final cherries is identified earlier in the analysis of fish such as *morue* (F) 'cod', etc. (see Chapter 5) and its association with vowel-final pronunciation is consistent across the different lexical fields. Its association with vowel-final pronunciation may possibly relate to a pattern of colouration that is 'irregular', or 'variegated' as occurs for *melon d'eau*, while the contrasting 'regular' striped patterning is

associated with consonant-final pronunciation – although as yet no intrinsic association has been identified between this patterning and word-final pronunciation. This area remains to be explored, as does the contrast between vowel-final and consonant-final colour terms discussed above in relation to gender assignment.

However, this association between 'variegated' and vowel-final pronunciation would leave *Montmorency*, a vowel-final denoting the dark red 'morello', still to be accounted for. The noun *Montmorency* is the name of capital city of the region of *Val-d'Oise* and is the term used by Parisians as the most reputed producer of this cherry. It is interesting that in all the sources used in the research of cherries, only one identifies the colouration of *Montmorency*, 'very dark' (CED, 1986:1001) and none regarding its firmness (unknown). Since 'sweet' and 'sour' seem elsewhere to be associated with contrasts in word-final pronunciation, it is possible that 'dark' may be associated with its vowel-final pronunciation, as it is for a term denoting a dark red berry, *mûron*. Since it is so highly regarded in terms of eating, 'edible' becomes a given and its vowel-final pronunciation carries no potential to suggest that it might be 'inedible'.

## 7.11.2 Apples

There are six nouns in the database denoting apples, and they are set out below with key information from descriptions.

Table 7.29: Nouns denoting 'apples'

### Masculine noun

<i>api</i>	M	'lady-apple'	contraction of <i>pomme d'api</i> 'apple from Appius', small, bright red on one side only (LRPT, 1994:48)
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### Feminine nouns

<i>canada</i>	F	'Canada rennet'	round, blood-red skin
<i>calville</i>	F	'Calville apple'	round, pale-skinned ( <i>robe blanche</i> )
<i>golden</i>	F	'golden apple'	round, smooth yellow skin
<i>granny-smith</i>	F	'Granny smith'	round, smooth green skin
<i>pomme</i>	F	'apple'	round, typically red with crisp white flesh
<i>pomme sauvage</i>	F	'crab-apple'	small, round, dark red

<i>reinette</i>	F	'rennet apple'	red, <i>pomme très parfumée</i> 'powerful perfume' (LRPT, 1994:944)
<i>starking</i>	F	'starking'	smooth variety of red apple

Apples are fruits that form a firm layer of flesh around a hard core that protects kernels as they develop. These fruits have a thin outer skin attaching to and covering the flesh. All of these nouns are feminine, even *canada* as a fruit (although as the country, *le Canada*, it is masculine) – with one exception, *api*. In the analysis above, it is suggested that the thick outer layers that form around fruits such as *ananas* (M) 'pineapple', *melon d'eau* and *cantaloup* (M) 'cantaloup' is associated with their masculine gender assignment. It is also suggested above that this thin outer layer may be salient, and account for, feminine gender assignment of *pomme* (F) 'apple' and a number of other fruits. The feminine nouns above are consistent with the previous examples.

Some of these nouns are contractions of compound forms, eg. *reinette* for '*pomme reinette*', *canada* for '*pomme canada*'. While in most cases the contracted form retains the gender assignment of the compound noun, this does not occur for *api*. This noun was first documented in 1571 as *pomme apie*, but over the next few years shows a variety of orthographic representations – *pomme apiane* (1573), *pomme appie* (1600), and *pomme d'apie* (1615) (<atilf.atilf.fr>, 2006). The *Dictionnaire de L'Académie française* (4th Edition, 1762) records the contracted form, *api*, as masculine, while its feminine form is still shown to be in use in documents as late as 1797 (<atilf.atilf.fr>, 2006) where agreements indicate that it is feminine, eg. *L'api ... elle veut être mangée goulûment* '(t)he api ... it should be eaten with great pleasure'. Today *api* is masculine (LRPT, 1994:48, <atilf.atilf.fr>, 2006).

Evidence presented in the analysis of birds shows that gender assignment may vary between compound and simple forms, eg. *fauvette pûchou* (F) 'Dartford warbler', and the simple masculine noun, *le pitchou* – but that it relates to a change in saliency between equally crucial attributes associated with contrasting and competing classifications in terms of gender assignment.

The *api* differs from the typical apple in its comparatively small size and markedly different

colouration that produces red on one side while it remains pale on the other. There is significant evidence of associations between 'different' and masculine gender and 'smaller' in comparison with a standard model related to vowel-final pronunciation and these attributes may also account for *api* in the same way. Other potential explanations will, however, continue to be explored. It is noted that this cherry has variegated colouring that is not unlike one of the cherries, *bigarreau* (M) 'white-heart cherry', and if it is not salient it is at least consistent in its association with vowel-final pronunciation.

It is noted that the noun *canada* is feminine in most sources (<atilf.atilf.fr>, 2005, LRPT, 1994:150). Other editions of Robert (identified in <atilf.atilf.fr>) assign masculine although a supplement assigns feminine while suggesting it is masculine as a collective – exemplified in the example, '*un kilo de canada* – which does not make this point particularly clearly. One very early document (1619) records it in a compound form, *pomme de Canada* (<atilf.atilf.fr>, 2005). Thus, its gender assignment has posed some problems for dictionary makers.

Consonant-final pronunciation of other terms for apples can be argued to relate to either a smooth surface, their rounded form, or their edible skin and flesh – particularly since its flesh is firm and might well be presumed to be 'inedible'. Vowel-final pronunciation for *api* is argued to relate to its comparatively small size. But the vowel-final pronunciation of *canada* is something of an enigma. While it is possible that vowel-final pronunciation may relate to a bumpy form, or perhaps a variegated colouration, no further information has been obtained in relation to this apple. It remains to be clarified.

### 7.11.3 Citrus fruits

All citrus fruits have acidic juicy flesh, and most change colour as they ripen, some turning yellow, others turn orange, while some remain green. Those that are yellow or remain green are typically more bitter or sour while those that turn orange are typically sweeter but this is not always the case. Many nouns denoting citrus fruits are found in the corpus and their different gender assignments and word-final pronunciations are discussed below.

#### 7.11.3.1 Comparison of yellow and orange citrus fruits - gender assignment

Three similarly yellow-coloured citrus fruits have been known to exist alongside each other for nearly two thousand years in Europe, but they vary in their classifications – *bergamote* (F) 'bergamot', *cédrot* (M) 'citron', and *citron* (M) 'lemon'. It is noted that in some cultures the 'bergamot' is identified as a 'bergamot pear' and in others as 'bergamot pear'. Images at <[www.foodsubs.com](http://www.foodsubs.com)> (2006) show that the *bergamote* (M) has an elongated pear-shaped form much like an upside-down lemon but similar in size to an orange. It is unrelated in any way to the English term for a herb, 'bergamot'. The flesh of the *bergamote* is so sour and tart that it is inedible. Its origins remain unidentified so far and vary, according to different sources, from Turkey to China, but its seeds are known to have reached Rome by 100 BC (<[www.museums.org.za/bio/plants/rutaceae/citrus.htm](http://www.museums.org.za/bio/plants/rutaceae/citrus.htm)>, 2006). Its name reflects the Italian city, Bergamo, with which the production of its essential oils has become so closely associated. Italian folk medicine has long paid attention to the now well-recognised 'powerful antiseptic, diuretic, antitoxic' properties of the *bergamote* (<[www.bbc.co.uk/health/healthy\\_living/complementary\\_medicine/remedies\\_oils.shtml#bergamot](http://www.bbc.co.uk/health/healthy_living/complementary_medicine/remedies_oils.shtml#bergamot)>, 2006), while the many uses of its fragrance have long been recognised.

The most widely-found yellow citrus fruit is the elongated, sour *citron* (M) 'lemon', native to Asia, that is similar in colour and flavour to the *bergamote* but is smaller in size and less tart. Its arrival in Europe is not identified, but there is evidence of this name dating from 500 AD, some 600 years after evidence of the arrival of *bergamot* seeds. Documentary evidence from the thirteenth century identifies *citron* as the fruit of the *citronnier* (<[atilf.atilf.fr](http://atilf.atilf.fr)>, 2006).

Perhaps the best-known of the yellow citrus fruits in those early times was the third of these yellow-coloured fruits – the extremely large, extremely sour *cédrot* (M) 'citron'. It is both 'long' and 'large', growing to some 25 cm. in length and weighing around 4 kg. Like *bergamote*, it was also known to the Romans, being recorded by Pliny in the first century AD. Like *bergamote*, it has an intense perfume in its thick aromatic rind that was used to repel insects (from clothing in particular) (<[en.wikipedia.org](http://en.wikipedia.org)>, 2006). Again, this fruit could not be eaten.

For all of these yellow-coloured fruits the flesh is not eaten despite the high juice content of both the *bergamote* and *citron* in particular. The pulp of the *cédrait* and *bergamote* is removed, the outer skin of the *bergamote* is squeezed to remove the oils while the peel of the *cédrait* is removed and is treated in various ways according to its end use. The zest and juice of the *citron* have long been used in cooking. In their close handling, the nature of these fruits and their juicy, fleshy interior would have been extremely noticeable regardless of any differences in the thickness of the layer of zest and pith around it (see images at <[www.foodsubs.com](http://www.foodsubs.com)>, 2006). As suggested for nuts and many drupes, feminine gender assignment of *bergamote* is consistent with other 'fruits' whose seeds and flesh are protected by an outer layer. It is the masculine gender of the other two fruits that requires explaining. Table 7.30 shows compares these fruits.

Table 7.30: Original three yellow, sour, oblong citrus fruits

<i>citron</i>	M	'lemon'	5 cm. diameter	smaller
<i>bergamote</i>	F	'bergamot orange/pear'	7-8 cm. diameter	medium
<i>cédrait</i>	M	'citron'	25 cm. long	large

The 'rounder' *bergamote* has a larger girth and is larger in size than the *citron*, but very much larger than both of the other is the *cédrait*. The two that are different in relation to their 'smaller' and 'larger' sizes have masculine gender in the same way as other entities in other lexical fields that are 'smaller' or 'larger' – among wading birds such as *héron* (M) 'heron', taller than other wading birds, and *bécasseau* (M) 'small wading bird' (such as 'dunlin', 'stint'). In this context, masculine gender for the two sour citrus fruits that are comparatively different in their larger or smaller size can be seen as regular and consistent with examples elsewhere.

The arrival of brightly-coloured 'sweet' oranges from China would have provoked a comparison with already-existing 'sour' citrus fruits that would have continued with the introduction of further sweet citrus fruits from Asia and the USA. These sweet orange citrus fruits were edible in a way that the sour yellow ones were not. Analysis of the 'sweet' citrus fruits shows that all but two are feminine, eg. *clémentine* (F) 'clementine', *mandarine* (F) 'mandarin', *orange* (F) 'orange' and *sanguine* (F) 'blood orange'. Other sour citrus fruits are masculine, eg. *citron vert* (M) 'Persian lime', *limon* (M) 'Mexican/key lime', *calamondin* (M) 'kumquat' which requires

treatment (usually sugar and alcohol) to make it edible, as well as two synonyms *grapefruit* (M) 'grapefruit' and *pamplemousse* (M) 'grapefruit' denoting a yellow citrus fruit that, although less acidic than most, also requires the addition of sugar to make its flesh more palatable. This later contrast between sweet and sour forms a paradigm that can account for contrasting feminine and masculine gender assignments as nouns have continued to come into French. Among the 'sour' yellow citrus fruits, the feminine *bergamote* still presents the standard size as the one in the middle – others being either much smaller such as the limes, or much larger such as the shaddock or grapefruit.

However, this paradigm presents two counter-examples. One of the feminine nouns denotes the strongly acidic *bigarade* (F) 'Seville orange' whose bitter orange-coloured peel is particularly sought after in the making of marmalade. The centre of this fruit becomes hollow when the fruit is full-grown (<[www.hort.purdue.edu](http://www.hort.purdue.edu)>, 2006). Among fruits that become juicier as they ripe, a distinction of this kind might well be associated with feminine gender since it is 'unique' among citrus fruits. The second counter-example is the use of a masculine term *pamplemousse* that denotes the 'sweet' pummelo or shaddock.

#### *Pamplemousse, grapefruit and pomélo*

Today these three nouns denote the same fruit, but this was not always the case. The situation as it remained for yellow citrus fruits for nearly 1700 years became complicated by the discovery in the 17th century of the *pamplemousse* (M) 'pummelo' or 'shaddock', and the later development of the fruit known as *grapefruit* (M) 'grapefruit', which introduced further complexity to the classification of citrus fruits. Today three nouns denote the same fruit, but this was not always

Two of these terms, *grapefruit* and *pomélo*, were originally loanwords – one British, one American – denoting the 'grapefruit', a largish yellow-skinned fruit of *Citrus paradisi* less acidic than most yellow citrus fruits. Another loan word, *pamplemousse* (M) originally designated the 'pummelo', an enormous, sweet, yellow-coloured citrus fruit of *Citrus maxima*. The noun *pamplemousse* is a loan word derived from the 17th century Dutch name for this



fruit, *pampel* 'large/swollen' and (*li*)*moes* 'lemon' (<atilf.atilf.fr>, 2006) and came into French as *pampelmous* (1677), moving quickly to *pampelmousse*, an orthographic form that recognised and ensured consonant-final pronunciation, and later to *pamplemousse*. This loan word was recognised as feminine, notably in the various *Dictionnaires de l'Académie française* at least until the 1935 and is still regarded as feminine by many authors, while the *Petit Robert* provided alternative gender assignments (<atilf.atilf.fr>, 2006). While the loan word first denoted only the fruit, by the late 1700s had come to denote both fruit and tree, the spiny *C. maxima* (<atilf.atilf.fr, 2006). Nineteenth century dictionaries attributed feminine gender assignment on the noun, generally in its application to the tree. The 'shaddock' fruit itself is a huge – up to 30cm. in diameter, and weighing up to 8 kg., even more than the 'citron' (<fr.wikipedia.org>, 2006). In its native regions through SE Asia this fruit could ripen to a sweet flavour but can otherwise be extremely bitter. However, as the largest of all, its feminine gender would have been regular and consistent with others that are the largest of their kind.

After the *pamplemousse* (M) 'shaddock' or 'pummelo' fell from favour as a fruit – possibly due to the exposure of Europeans to under-ripe fruits and their consequently extremely bitter flavour – some 200 years or so later the same noun came to be applied to a newly-developed but related fruit originally discovered in Barbados (in the 1750s) – similarly yellow, less acidic than most yellow fruits, and almost round, the accidental hybrid of *C. maxima* ('pummelo') and *C. sinensis* ('sweet orange' or 'navel orange'). This new fruit eventually was eventually put under cultivation in the USA in the 1800s where it continued to be called 'pummelo' until some the 1830s. It then came to be recognised as a different fruit from the 'pummelo', which gave rise to a new name (based on its growing form, in bunches), 'grapefruit' (<www.hort.purdue.edu/newcrop/morton/grapefruit.html>, 2006). This term spread as it turned into commercially successful production by the turn of that century.

Even though *pomélo* sounds more 'French' than *grapefruit*, and perhaps even more French than *pamplemousse* in that \**pample* is a meaningless morpheme in that language, there is no doubt that *pomélo* is losing ground to both *pamplemousse* in its application to 'grapefruit' and to *grapefruit*. The fruit itself has almost completely disappeared from European cuisine, which

has probably cost the *pamplemousse* any basis for comparison as a the 'largest of all' in terms of an organising principle in its relation to the 'shaddock'. It is, however, still available in the French Antilles and is identified as *le pamplemousse* (< tous-les-fruits.com/fruit-108.html>, 2006), while Americans use the term 'pummelo'. To reduce the ambiguity we find expressions such as «*pamplemousse vrai*» 'true pummelo' or «*pamplemousse véritable*» 'real pummelo' are often used to indicate the fruit of *C. paradisi* (< fr.wikipedia.org>, 2006).

### 7.11.3.3 Word-final pronunciation

In arguing above that differences in gender assignment have their origins in the underlying 'differences' in size that once distinguished between the three citrus fruits known in Europe, it can be argued differences between 'oblong' and 'rounded' shape may well account for many of that word-final pronunciations, eg. the vowel-final *citron*, *cédrat*, *limon* are oblong-shaped fruits, while *orange*, *bigarade*, *mandarine*, *kumquat*, *clémentine*, *sanguine* are 'rounded'. The oblong-shaped *bergamote* is noted for its smooth skin, as is the *grapefruit*, while the *cédrat* is bumpy, even indented in some sub-species and the *pomélo* in its application to 'grapefruit' denotes a fruit with a 'pitted' skin. As the smallest of the yellow and orange fruits, the vowel-final *limon* and *calamondin* are regular and predictable, and while vowel-final pronunciation for *cédrat* would once have been regular as larger than the other yellow fruits, it remains consistent in its application to a fruit with an 'bumpy' surface and 'oblong' shape. Thus, for these juicy fruits, 'sweet' and 'sour' relate to gender rather than to word-final pronunciation. We note that all nouns denoting fruits whose lower acid content allow us to eat them as fresh fruit, including *pamplemousse* and *grapefruit*, have consonant-final pronunciation - bar one, *pomélo*.

While the vowel-final pronunciations of *cedrat* (M) 'citron' and *citron* (M) 'lemon' once related to their comparative 'smaller' and 'larger' size compared with the yellow *bergamote* (F) 'bergamote', given the much smaller and very much larger yellow-coloured fruits now available these attributes are less fitting. However, vowel-final pronunciation for these two oblong-shaped fruits remains consistent in its association with their 'oblong' shape, particular in its contrast with 'rounded' associated with consonant-final pronunciation among these drupes.

Of course, the one that does not fit into the paradigm is the consonant-final *pamplemousse* (M) 'shaddock'/'pummelo', since it is inconsistent with others that are the biggest of their kind. It is possible that speakers have come to associate 'sour' with 'yellow' as though there were some intrinsic relationship between them. It is interesting to note a further association between 'yellow' and 'bitter' in the French adjective *jaune* (adj.) 'yellow', which is derived from the Latin *galbinus* (LRPT, 1994:632) meaning 'bitter', the same source of the English noun 'galbanum', meaning 'bitter aromatic gum' (CED, 1986:620), a description that includes no indication of colour). Among citrus fruits, a group high in unpalatable acidic content that would render them inedible, perhaps the masculine gender and consonant-final pronunciation of *pamplemousse* identify it as a 'yellow' fruit that is palatable.

As we can see in this set, tensions between conflicting properties resulting from their association with different classifications, added to by historic changes and disconnections, are an ever-present predicament that this two-class system must deal with. One might anticipate that the discovery of an orange-coloured citrus fruit that is very bitter, elongated in shape and dimpled might test the system to the ultimate!

## 7.12 Summary

The analysis of fruits in their various groups suggests that certain attributes are associated with, and can account for, specific masculine or feminine gender assignments, while other attributes are associated with, and can account for, vowel- and consonant-final pronunciations.

### Nuts

These nouns denote kernels or seeds that are protected by a shell, either wholly, or partly.

Certain attributes appear to be associated with masculine gender assignment:

- a kernel that is left unprotected since it is only 'partly' enclosed, eg. *gland* (M) 'acorn', *anacarde* (M) 'cashew'
- 'processed' (through roasting), eg. *marron* (M) 'chestnut (roasted)
- different from another, eg. *pécan* (M) 'pecan', and from all others, eg. *pignon* (M) 'pine-nut'.

Other attributes appear to be associated with feminine gender assignment:

- a kernel that is protected by an outer layer, eg. *noix* (F) 'walnut', *amande* (F) 'almond'
- 'raw' (in a natural unprocessed state), eg. *arachide* (F) 'peanut'.

Masculine gender assignment for *pécan* (M) 'pecan' is argued to relate to the constant comparison that is made between it and the more common and better known *noix* (F) 'walnut' in form and flavour – although the *pécan* is from a different tree and has a different outer shell.

It is noted that nuts whose seeds are partially enclosed, eg. *gland*, *noix de cajou* (a synonym of *anacarde*), have vowel-final pronunciation and nuts whose seeds are fully enclosed, eg. *amande*, *cacahouète*, *faine*, *muscade*, *noisette*, have consonant-final pronunciation. Other attributes in opposition are also suggested and are associated with contrasting vowel and consonant final pronunciations, as below:

- |  |  |
|--|--|
| • 'bumpy', eg. <i>noix</i> (F) 'walnut'    | 'smooth', eg. <i>pacane</i> (F) 'pecan'    |
| • 'inedible', eg. <i>gland</i> (M) 'acorn' | 'edible', eg. <i>arachide</i> (F) 'peanut' |

It is not possible to determine the most salient given the consistency between them.

While both *noix* (F) 'walnut' and *pécan* (M) 'pecan' have vowel-final pronunciation, for the former it is related to its 'rough' surface. Since the *pécan* has a smooth outer layer, a more compelling explanation is 'comparative', particularly since its gender assignment is associated with the comparison continually made with *noix* (F) 'walnut'. Vowel-final pronunciation for *pignon* (M) 'pine kernel' relates to its 'diminutive' size against other edible nuts. Although these two accounts offer different ways of identifying a 'comparative' distinction – through vision (in outline) rather than touch (smooth texture) – the notion 'comparative' is consistent in its association with vowel-final pronunciation. The various attributes mentioned here can account for all word-final pronunciations.

## Berries

Amongst berries, certain attributes appear to be associated with masculine gender assignment:

- 'hard', eg. *gratte-cul* (M) 'hip', or 'firm', eg. *grain* (M) 'grape'
- 'dark', eg. *bleuet* (M) 'blueberry', *cassis* (M) 'blackcurrant', *mûron* (M) 'blackberry'
- 'individual', eg. *grain* (M) 'grape', one distinguished from all others in a bunch.

Contrasting attributes associated with feminine gender assignment include:

- 'soft', eg. *airelle/myrtille* (F) 'mountainberry', *arboise* (F) 'arbutus berry', *framboise* (F) 'raspberry', *sorbe* (F) 'sorb-apple'
- 'bright', eg. *cenelle* (F) 'holly berry', *fraise* (F) 'strawberry', *cornouille* (F) 'dogwood berry'.

Certain attributes appear to be associated with vowel-final pronunciation for specific berries.

Those associated with vowel-final pronunciation include:

- 'textured', covered in waxy grains, eg. *bleuet* (M) 'blueberry'
- 'inedible', eg. *baie* (F) 'laurel bay berry'.

Those attributes associated with contrasting consonant-final pronunciation include:

- 'edible', eg. *gratte-cul* (M) 'hip', *airelle* (F) 'mountainberry', *mûre* (F) 'blackberry', *fraise* (F) 'strawberry', *framboise* (F) 'raspberry', *sorbe* (F) 'sorb-apple'
- 'smooth', eg. *cenelle* (F) 'holly berry'/'haw', *arboise* (F) 'arbutus berry', *cornouille* (F) 'dogwood berry'
- 'shiny', eg. *cassis* (M) 'blackberry'
- 'rounded' shape, eg. *gratte-cul* (M) 'rose-hip', *pomme* (F) 'apple', *cenelle* (F) 'holly berry/haw'.

Drupes, etc.

For drupes, pomes and other fruits, certain attributes are associated with masculine gender:

- 'hard', 'thick' or 'rigid' (skin/outer layer), eg. *cantaloup* (M) 'cantaloup', *fruit de la passion* (M) 'passionfruit', *melon d'eau* (M) 'watermelon', *potiron* (M) 'pumpkin', *coing* (M) 'quince', *ananas* (M) 'pineapple', or 'crisp' flesh, eg. *concombre* (M) 'cucumber'
- 'different' in form, eg. *pruneau* (M) 'prune', a dried 'plum', 'different' in size, eg. *abricot* (M) 'apricot' ('smaller' than peach), *brugnon* (M) 'nectarine' (similar in form to peach), *cornichon* (M) 'cornichon', *potiron* (M) 'giant pumpkin'
- bitter/sour, eg. *limon* (M) 'lime', *calamondin* (M) 'kumquat'.

Four attributes can account for feminine gender assignment:

- 'soft'/'fleshy', eg. *banane* (F) 'banana', *date* (F) 'date', *figue* (F) 'fig'
- 'sweet flavoured', eg. *coloquinte* (F) 'colocynth', *grenade* (F) 'pomegranate', *orange* (F)

- 'orange', *pastèque* (F) 'watermelon' (otherwise having a 'hard' shell)
- 'thin' skin, eg. *courgette* (F) 'zucchini', *date* (F) 'date', *olive* (F) 'olive', *pêche* (F) 'peach', *poire* (F) 'pear', *prune* (F) 'plum'
- 'hollow', eg. *courge* (F) 'gourd', *citrouille* (F) 'pumpkin'.

Word-final pronunciation for drupes, pomes and other fruits appears to be associated with another set of contrasting attributes. Those associated with vowel-final pronunciation are:

- 'rough' (wrinkled, hairy, leathery, bumpy, raspy, warty, etc.) eg. *avocat* (M) 'avocado', *buerré* (M) 'beurre bosc (pear)', *cantaloup* (M) 'cantaloupe', *ananas* (M) 'pineapple'
- 'variegated' (colour), eg. *melon d'eau* (M) 'watermelon'
- 'comparatively smaller' in size, eg. *cornichon* (M) 'cornichon', *abricot* (M) 'apricot', or larger, eg. *potiron* (M) 'giant pumpkin', *cédrat* (M) 'citron'.

Attributes associated with consonant-final pronunciation appear to be:

- 'smooth', eg. *banane* (F) 'banana', *mirabelle* (F) 'mirabelle plum', *pastèque* (F) 'watermelon' (particularly fruits with a thick or hard skin)
- 'edible', eg. *pêche* (F) 'peach', *courge* (F) 'marrow', *citrouille* (F) 'pumpkin', *courgette* (F) 'zucchini', *prune* (F) 'plum', *date* (F) 'date' (fruits whose surfaces are not smooth or have a bloom)
- shiny, eg. *coloquinte* (F) 'colocynth', *pastèque* (F) 'watermelon', *aubergine* (F) 'eggplant', *granade* (F) 'pomegranate'.

Three sets of fruits – cherries, apples and citrus fruits

The corpus contains a number of nouns that designate the same or very similar fruits but they have different gender assignments, particularly nouns denoting 'cherries', 'apples' and 'citrus fruits' and they are analysed in those sets.

While the attribute 'fleshy' is argued to relate to feminine gender assignment of the generic term *cerise* (F) 'cherry', for other nouns denoting 'cherry' gender assignments appear to be associated with the following two attributes:

- 'firm', 'crisp', associated with masculine, eg. *bigarreau* (M) 'white-heart cherry',

*cœur de marmotte* (M) 'firm cherry', etc.

- 'soft', eg. *amarelle/Montmorency* (F) 'morello', *griotte* (F) 'sour soft cherry', etc.

It is noted that the original referent of *Montmorency* is the regional city *Montmorency*, while the referent in its extension is a feminine noun, *cerise* (F) 'cherry'.

Differences in word-final pronunciation patterns for cherries appear to relate to contrasting attributes, those associated with vowel-final pronunciation including:

- 'variegated' colouration, eg. *bigarreau* (M) 'white-heart cherry (red on one side, white on the other)', *blanc de Champagne* (M) 'sweet cherry' (yellow ad pink) and *napoléon* (M) 'sweet cherry' (yellow flecked with red)
- 'sour', eg. *Montmorency* (F) 'morello cherry'.

Consonant-final pronunciation appears to be associated with a single attribute:

- 'uniform colouration, eg. *amarelle* (F) 'morello', *griotte* (F) 'sour cherry', *guigne* (F) 'sweet cherry', all of which are dark red.

The attribute 'variegated' for cherries in relation to skin colour and its association with vowel-final pronunciation, also appears to account for *melon d'eau* (M) 'watermelon', whose vowel-final pronunciation seems less than apt for a smooth-skinned fruit. It also has the same 'variegated' light-and-dark patterning as vowel-final cherries, and *melon d'eau* can be directly contrasted with *coloquinte* (F) 'colocynth', a 'melon' that develops a 'uniform' orange colouration.

The same attribute 'variegated' provides a certain consistency in vowel-final pronunciation for *api* (F) 'lady-apple', and also for *brugnion* (M) 'nectarine' since whether this fruit has white flesh or yellow flesh, its skin colour is variegated.

It is argued that feminine gender assignment for apples is possibly associated with the thin layer of skin that covers the flesh of these fruits, where masculine gender assignment for *api* is suggested to relate to the difference in its size from other apples. Feminine gender assignment for *canada* can be understood in relation to the referent fruit, *pomme*, a fruit with a thin skin.

For citrus fruits, a small set of contrasting attributes can account for their different gender assignments. Those associated with masculine gender assignment are:

- 'sour' or 'bitter', eg. *cédra* (M) 'citron', *citron vert* (M) 'Persian lime', *limon* (M) 'key/Mexican lime', *calamandin* (M) 'kumquat', *grapefruit* (M) 'grapefruit'
- 'different' in size, eg. *citron* (M) 'lemon' (smaller) and *cédra* (M) 'citron' (larger).

Attributes associated with feminine gender assignment include:

- 'sweet', eg. *orange* (F) 'orange', *mandarine* (F) 'mandarin', *clémentine* (F) 'clementine', *sanguine* (F) 'blood orange'
- 'unique', eg. *bigarade* (F) 'Seville orange'.

Vowel-final pronunciation for citrus fruits appears to relate to:

- oblong shape, eg. *citron* (M) 'lemon', *limon* (M) 'key/Mexican lime', *cédra* (M) 'citron'
- 'bumpy' or 'dimpled' outer rind, eg. *cédra* (M) 'citron', *pomélo* (M) 'grapefruit'
- comparative size – 'smaller', eg. *calamondin* (M) 'kumquat', the smallest 'orange' citrus fruit, *limon* (M) 'key lime', the smallest of all citrus fruits.

Consonant-final pronunciation appears to relate to:

- 'rounded' shape, eg. *orange* (M) 'orange', *grapefruit* (M) 'grapefruit', *clémentine* (F) 'clementine', *pamplemousse* (F) 'grapefruit/'shaddock', *sanguine* (F) 'blood orange'
- 'smooth-skinned', eg. *bergamote* (F) 'bergamot orange', *mandarine* (F) 'mandarin'.

For *pamplemousse* (M) 'shaddock', consonant-final pronunciation is argued to relate to 'palatable', a notion that is salient for drupes, rather than its 'superlative' size.

### 7.12.1 Ranking of attributes

The analysis of superordinate terms denoting 'living creatures' other than birds and fish in Chapter 6 might have been considered to suggest some hierarchical ranking in terms of gender assignment according to levels of meaning – the most general superordinate term, *créature* (F) 'creature', being followed by more specific terms *animal* (M) 'animal', even *être* (F) 'living thing', and even more specific *bête* (F) 'beast', *bestiole* (F) 'tiny living thing', etc., as a sequence of different gender assignments as contrasting frames. What is crucial, however, is that these gender assignments are associated with specific attributes constrained by the not only the level



of semantic content available for each entity but the kinds of entities they denote.

Amongst fruits there is a similar initial hierarchical sequence of contrasting gender assignments – except that in this field the most general term, *fruit* (M) 'fruit' is masculine while at the next level *baie* (F) 'berry', *noix* (F) 'nut' and *drupe* (F) 'drupe' are feminine. However, as for members of the 'animal kingdom', these results are determined according to a certain range of attributes that become salient as lexemes respond to finer distinctions.

The claim by Zubin and Köpke (1986) that German gender assignments in certain fields can be accounted for by a 'folk taxonomy' related to conceptual hierarchies at superordinate and basic level is discussed in Chapter 2. In particular, problems are highlighted concerning the different gender assignments of the neuter collective term *das Obst* (N) 'the fruit' and the feminine single term, *die Frucht* 'the fruit' as superordinate terms. However, evidence from this research shows that some superordinate terms may be feminine and others masculine depending on the lexical field. Findings suggest that gender assignment depends not so much on hierarchical aspects so much as the attributes that can become salient according to the meaning of any one term, and the constraints each field places on those attributes as finer distinctions are made.

In this research a crucial factor in the identification of attributes, and the principles that underpin their association with different classifications in the fields of fruits as in other fields, is the breadth of the database. Of particular significance are 'exceptions' and apparent counter-examples, nouns that might not appear to fit at first. They are crucial in developing an explanation that can account for all terms in a regular, even predictable, way.

#### 7.12.2 Implications of this research for other languages

Findings of this research have implications for other languages. Names of woody plants in Latin show the same variations in their classification. Some nouns are masculine, eg. *oleaster* (M) 'oleaster', *robur* (M) 'English oak/pedunculate oak', *rubus* (M) 'bramble-/blackberry bush'. Many – indeed most – are feminine, eg. *aesculus* (F) 'Italian oak', *alnus* (F) 'alder', *buxus* (F) 'box-tree', *castanea* (F) 'chestnut tree', *quercus* (F) 'oak-tree', *figus* (F) 'fig-tree', *iuglans* (F)

'walnut tree' (also 'walnut'), *iuniperus* (F) 'juniper-tree', *laurea* (F) 'laurel-tree', *palma* (F) 'palm-tree', *pinus* (F) 'pine tree', *platanus* (F) 'plane tree', *pōpulus* (F) 'poplar', *rosa* (F) 'rose tree', *salix* (F) 'willow', *spinus* (F) 'blackthorn/sloe tree', *tilea* (F) 'linden-tree', *ulmus* (F) 'elm' and *vinea* (F) 'vine'. There are also several neuter nouns, eg. *ligustrum* (N) 'privet', and *hibiscum* (N) 'marsh-mallow' which denotes a perennial herbaceous plant whose stems die down in winter. While masculine and neuter nouns above are all consonant-final, word-final pronunciations in the feminine set varies – some are consonant final, eg. *aesculus*, *spinus* and *cupressus*, and others, *olea*, *rosa*, and *vinea*, are clearly vowel-final.

Latin also has the same contrasting gender assignments for synonyms, eg. *buxus* (F) and *buxum* (N) which both designate 'evergreen box tree' in one source (the on-line Latin Dictionary & Grammar Aid at <archives.nd.edu/latgramm.htm>, 2009), although another dictionary (ELD, 1966:98) restricts the meaning of the 'tree' to the feminine form. However, entries for the feminine *buxus* and neuter *buxum* in this same source both designate 'pipe, flute'.

The variations in gender assignment and word-final pronunciation among these few Latin nouns seem to occur in a way that is not unlike French, and it is possible that, rather than being linked, they may be independent of each other. It is possible, too, that they may be accounted for in a way to the explanation that this thesis suggests for French. However, while classifications for the very same entity in these two languages may be the same, eg. the Latin *spinus* (F) and French *épine* (F) 'blackthorn' both of which are feminine, this is not always the case, eg. the Latin *pinus* (F) 'pine' is feminine while the French *pin* (M) is masculine. The possibility of a semantic explanation for these variations in Latin awaits future exploration.

In the case of fruits, variations in gender assignment among several nouns denoting fruits can be observed in a range of European gendered languages, German, Italian, Portuguese and Spanish, as laid out in Table 7.31 below.

Table 7.3: Fruits – gender assignment and word-final pronunciations in four European languages

English	German	Italian	Portuguese	Spanish
'apple'	<i>Apfel</i> (M)	<i>mela</i> (F)	<i>maçã</i> (F)	<i>manzana</i> (F)
'fig'	<i>Feige</i> (F)	<i>figo</i> (M)	<i>figo</i> (M)	<i>higo</i> (M)

'mango'	<i>Mango</i> (F)	<i>mango</i> (M)	<i>manga</i> (F)	<i>mango</i> (M)
'peach'	<i>Pfirsich</i> (M)	<i>pesca</i> (F)	<i>pêssego</i> (M)	<i>durazno</i> (M)
'strawberry'	<i>Erdbeere</i> (F)	<i>fragola</i> (F)	<i>morango</i> (M)	<i>fresa</i> (F)

Different gender assignments and word-final pronunciations occur in each row – 'apple' is masculine in German but feminine in the other three languages, 'fig' is masculine in Italian but feminine in the other three languages, etc. Despite the different gender assignments of nouns denoting the same fruit, most fruits are feminine in all four languages, eg. 'banana', 'cherry', 'olive', 'pear', 'raspberry', possibly reflecting the same 'sweet' flavour of many fruits.

Nouns in the individual languages set out in Table 7.33 vary not only in gender assignment but in word-final pronunciation. It is possible that these different classifications, too, may be motivated according to sets of semantic principles in a process not unlike that for French, but according to different, culturally specific, semantic features.

Synonyms with different gender assignments and word-final pronunciations can also be found in Italian, eg. *cocomero* (M) and *anguria* (F) 'watermelon', which two examples are similar to French synonyms *pastèque* (F) and *melon d'eau* (M). Such examples suggest that, as with French, gender assignments of a single entity may vary where more than one attribute of an entity is crucial, but they are associated with different classifications.

It is noted that in Ngalakan, an Australian Aboriginal language with four genders, most vegetable foods are in one class (*mu-* class) but 'one cannot predict that all terms for vegetable foods and products will be so assigned' (Merlan, 1983:36). It is possible that what is considered an anomaly for Ngalakan may relate to a similar process as French, where distributions between the four classes are based on sets of oppositions. It might also be that previously inexplicable anomalies discussed by Harvey (1997) in the distribution of food products (nuts, etc.) among different noun classes amongst Australian languages may be better understood in the light of relationships emerging for gender and word-final pronunciation patterns in French.

### 7.13 Conclusion - fruits

The differences and similarities between the many entities included in the term 'fruit' and their different gender assignments appear to be related to only a handful of attributes, most of which are found in binary opposition and are associated with contrasting classifications – some relating to gender assignment, and others to word-final pronunciation.

The results suggest that, in the main, attributes associated with gender assignment for the range of fruits in this analysis form binary oppositions associated with specific classifications relating to their form, as in (12).

(12) Attributes associated with 'masculine'	Attributes associated with feminine
• 'firm', hard', or 'rigid' structure etc.	• 'soft'
• 'dark' in intensity of colour	• 'bright' unique' in intensity of colour
• 'sour'	• 'sweet'
• 'diverse'	• 'unique'.

Unusual attributes that emerge from the analysis of this lexical field include oppositions 'dark:bright', which relate to hue or intensity of a colour rather than the colour itself. Other attributes are suggested at a more superordinate level, particularly where meanings lack any specifics regarding form even though other characteristics, particularly shape, are identified. In its sense as a masculine count noun, the application of *fruit* (M) 'fruit' to a single entity is suggested to relate to a 'distinct' or 'distinctive' shape – one that distinguishes it from any other/s around it. Feminine gender for superordinate count nouns appears to relate to an adaptation that surrounds and protects the life (kernel) within in the case of the single-stoned *drupe* (F) 'drupe' and *noix* (F) 'nut'. For the multi-seeded *baie* (F) 'berry', feminine gender is suggested to relate to a 'fleshy' form since it may or may not be 'soft'.

Word-final pronunciations of nouns denoting fruits appear to be associated with a different set of attributes in binary opposition associated with contrasting classifications, as in (13).

(13) Attributes associated with vowel-final	Attributes associated with consonant-final
• 'rough'	• 'smooth'
• 'irregular' or 'polymorphic'	• 'rounded'
• 'unpalatable'	• 'palatable'

- 'variegated' in colour
- 'part'

- 'uniform' in colour
- 'whole'

These attributes appear to relate to shape, colour and texture. There is evidence to suggest these attributes may also be associated with gender assignments beyond this lexical field. While contrasting attributes 'variegated' and 'uniform' are not observed previously, they bear some resemblance to the 'spotted:striped' oppositions found in the analysis of fish in Chapter 5.

These two contrasting attributes can account not only for contrasting word-final pronunciations amongst cherries but for other nouns identified as problematic – *melon d'eau* (M) 'watermelon' and *brugnon* (M) 'nectarine', as well as *api* (M) 'lady-apple'. These examples suggest that this distinction is more crucial than 'smooth' (or 'shiny') in relation to their skin.

It is particularly interesting to note differences in gender assignment for *orange* – it is masculine as a colour term and feminine as a fruit. This change in gender (or noun class) relating to a difference in meaning reflects the same changes in classification – either in noun class, or classifier – that occur elsewhere as meanings change – discussed in Chapter 2. For instance, inanimate objects in Murrin-patha are in one class (*nanthi-*) – but where they function as a weapon they are in another (*thu-*) class (Walsh, 1993:111). In Marrithiyel, another Australian Aboriginal language, class membership is mostly fixed – but noun class can change '... according to the function to which (it) is put' (Green, 1997:231). For example, *thawurr* is 'unclassified' in its generic meanings 'tree, stick, manufactured thing'. However, when meaning alter slightly we find different classifiers, such as *yelhi*, eg. *yelhi thawurr* 'digging stick', and *sjenjsje*, eg. *sjenjsje thawurr* 'fire-wood' (Green, 1997:231). Also relevant is the possible explanation for different gender assignments of two superordinate terms denoting 'fruit' in German, the count noun *die Frucht* and collective term *das Obst* (N), where contrasting attributes 'animate:inanimate' offer a means of accounting for different gender assignments. The potential relationship of findings in French to other languages is considered further in Chapter 9, Discussions, Conclusions and Theoretical Implications.

## **Chapter 8 Gender Assignment & Word-final Pronunciation – Human Beings**

### **8.0 Introduction**

The analysis below deals with nouns denoting human referents, the last of the five groups of 'animate' or 'living entities' that together can be contrasted with inanimate or inorganic objects or entities.

As previously mentioned, current research into gender in languages has demonstrated that sex and gender have 'almost no relationship' (Leiss, 2000:237) and that it is 'extremely difficult to find examples of nouns in which the male-masculine, female-feminine association is both simple and constant' (Surridge, 1995:46). French dictionaries provide enormous numbers of French nouns denoting human referents whose gender assignment will depend on and accord with the sex of the referent; however, the present research identifies countless other nouns denoting human referents which could feasibly correlate gender and sex in a similar and regular way, but which do not. Gender assignment in these such cases is thus entirely independent of the sex of any referent.

In addition, other nouns appear to be sex-specific in their gender assignments but are without any semantic or phonological explanation.

### **8.1 Gender assignment and biological sex**

There are a considerable number of nouns in the database that present a clear and predictable correlation between biological sex of referent and gender assignment. Such cases of biological sex and gender correlation on the noun are not limited to a handful of nouns denoting human referents but extend to members of non-human worlds, animate and inanimate, including certain animals, certain birds, and identities in figurative, mythological or religious sources. To consider correlation of sex of referent and gender assignment as relating primarily to humans, therefore, is to underestimate the extent of the domain of such operation. The domains over which the core semantic property of biological sex and its contrasting 'male' or 'female' distinctions operate are not well understood; neither are the motivations which allow some of the nouns to correlate in a predictable way while others to fail to do so.

Any analysis must consider and clearly identify those areas in which the core semantic property of biological sex correlates successfully with gender assignment and where it does not.

Explanations must be provided in the case of counter-examples that is:

- where gender assignments cannot predict the sex of a referent
- where sex of any referent cannot predict gender assignments.

In some cases the semantics of a noun explicitly identify 'male' or 'female', eg. *frère* (M) 'brother', *dame* (F) 'lady', and in their application to any real-world referent that sex-specific detail constrains their correlation to a real-world referent of the same biological sex. Many of these nouns identify similar family relationships to those observed among animals and birds. In some cases, the lexical semantics of a noun contain no sex-specific detail. Without any sex-specific constraints, these nouns can denote a real-world of either sex and gender is assigned by speakers to correlate with the biological sex of the real-world referent they wish to identify, eg. *cinéaste* (M/F) 'film-producer' – which is masculine when denoting a 'male' real-world referent and feminine when denoting a 'female'. For nouns in these two groups – that is, regardless of whether the semantics of nouns include or lack sex-specific detail – gender assignments can predict the sex of the real-world referent and the sex of real-world referents will correlate with gender assignment on the noun. That is, for the most part.

There is a third set, whose gender assignments – both masculine and feminine – are fixed, but they are entirely unrelated to the lexical semantics of nouns because meanings are entirely absent of any sex-specific detail, while any correlation between gender assignments of these nouns and the biological sex of a real-world referent is a matter of chance – as in Table 8.1

Table 8.1: Invariable masculine and feminine nouns denoting male or female human

<i>amateur</i>	M	'amateur'	male or female
<i>cave</i>	M	'outsider; dupe'	male or female
<i>dupe</i>	F	'dupe'	male or female
<i>majesté</i>	F	'majesty' (title)	male or female
<i>monarque</i>	M	'monarch', 'sovereign'	male or female
<i>peintre</i>	M	'painter' (artist)	male or female
<i>poète</i>	M	'poet'	male or female
<i>recrue</i>	F	'recruit'	male or female
<i>star</i>	F	'celebrity', 'film star'	male or female

For these nouns, the semantic content specifically denotes a human referent but provides no information regarding the referent's biological sex. Such nouns are found in large numbers, and their analysis reveals they are not members of one large amorphous group whose gender assignment is often inexplicable, largely arbitrary and often counter-intuitive – such as masculine gender assigned to a female referent, and feminine gender to a male referent. Nouns in this set cannot provide any identification relating to sex, yet they are constrained to a particular gender assignment. A further group includes nouns whose semantics identify a human referent without any specific detail as to biological sex, yet they are constrained in their application to one sex only, eg. *auteur* (M) 'author', which produces considerable resistance in its application to a 'female'. Other nouns denoting professional occupations are also of interest.

In such cases where such principles fail to deliver predictable correlations between gender assignment of a noun and biological sex – of (either the lexical or real-world) referent, or are restricted to one sex only, the principle/s governing these nouns must lie elsewhere. These principles remain to be identified. At the heart of the matter is the motivation for speakers and hearers to presume, or require, accuracy in cases where gender assignments would normally correlate with biological sex of the referent identified in the lexeme, or the biological sex of the real-world referent denoted by the speaker. These various sets of nouns are analysed below.

As discussed in Chapter 2, the research conducted by Tucker et al (1977) and taken up by Corbett (1991), suggested to them that word-final pronunciation in some cases could provide a significant degree of accuracy for the predictability of gender assignment (although such cases were rare). This analysis addresses the issue of consonant-final and vowel-final pronunciation patterns and their part in the classification process for nouns in this category. Evidence so far suggests that gender assignments and word-final pronunciation patterns relate to separate semantic features, although some attributes related to word-final pronunciation might be more stereotypically associated with 'male' or 'female', eg. 'rough' and 'smooth'.

Earlier analysis in Chapter 2 and in Chapters 4 to 7 suggest that certain patterns may be of interest, in particular:



- vowel-final nouns that are feminine
- consonant-final nouns that are masculine
- feminine gender nouns with male-sex referents, and
- masculine gender nouns with female-sex referents.

Distributions relating to gender assignment and word-final pronunciation are also examined here, but within different sections of the analysis in order to obtain any distinctions that might relate to collective nouns vis-à-vis count nouns. The preliminary analysis covers a narrow set of nouns, and is followed by a more detailed analysis of remaining count nouns in the corpus.

## 8.2 Preliminary analysis

This section deals with the analysis of superordinate terms, loan words and collective nouns.

### 8.2.1 Superordinate terms

The database contains three superordinate nouns denoting a single human being, and they are set out in Table 8.2 below.

Table 8.2: Superordinate nouns denoting a single human referent

Masculine nouns			
<i>être humain</i>	M	'human'	<i>ce qui est vivant et animé</i> 'that which is real, which exists' and is animate; person, human being (LRPT, 1994:427)
<i>homme</i>	M	'human'	extension from <i>homme</i> (M) 'man (male)' as <i>Être (mâle ou femelle)</i> 'being, male or female', belonging to the most to the most evolutionary advanced animate species on Earth; <i>Être humain, en général</i> (LRPT, 1994:562)
<i>individu</i>	M	'individual', 'person'	'elemental unit of human society living ... and cannot be further subdivided without destroying it; human being ... <i>différent de tous les autres</i> 'different from all others (LRPT, 1994:599)
<i>vif</i>	M	'living body'	derived from <i>vif, vive</i> in a legal sense, as distinct from the 'dead' (LRPT, 1994:1175)
Masculine/feminine noun			
<i>gens</i>	M/F	'people'	human beings in a general sense, indefinite in number, age, sex (LRPT, 1994:517), and location
Feminine noun			
<i>personne</i>	F	'person'	any one member of the human species (LRPT, 1994:836)

Amongst these six nouns are different gender assignments and different word-final pronunciation patterns, which earlier findings suggest to be associated with different attributes in their meanings.

The noun *être* is derived in extension from the infinitive verb *être* 'to be' which asserts the existence of something. As with other nouns derived from infinitive forms, it is masculine (as discussed in Chapter 3). Its meaning as a noun translates as 'being' (COFED, 1985:208) and its definition (LRPT, 1994:427) identifies certain crucial attributes – a physical reality that is '*... vivant et animé*' 'living and animate'. Analysis of nouns in Chapter 6 suggests that 'living' appears to be associated with feminine gender, but this noun is feminine while 'animate', which has some semantic association with 'motile', may be associated with the same consonant-final pronunciation pattern. In its usage *être* suggests a physical presence but not one with any specific form. Only when *humain* is added to create the compound term *être humain* is there can it identify the physical presence more specifically, as a form that is 'human'.

Given that most infinitive forms of verbs are not used in extension as nouns, and that invariable masculine gender for such nouns disallows any potential for feminine gender – particularly in a semantic context so closely identified with feminine – it suggests the presence of some crucial attribute, one that is strongly associated with masculine that feminine gender can never obtain. The simple noun *être* can apply to both non-human and human existence because it lacks any more specific form, and its distinct but undefined presence suggests two notions that may be associated with masculine. There is a semantic connection between 'distinct', 'distinguishing' and 'different' such that previous examples where each salient each appear to be associated with the same masculine gender assignment. These attributes, however, seem to be derived from a comparison with others, which is difficult given the absence of any form for *être* unless it has *humain* alongside. In fact it is this compounding that turns the absence of form into something very specific. The absence of form is raised earlier in relation to *mollusque* (M) 'mollusc' where the only attributes identified are an *animal* of some kind, 'invertebrate' and 'soft-bodied' without any defined form— these attributes are internal rather than external (see Ch 6). While the same 'undefined form' also applies to *créature* (F) 'creature', it has other more salient attributes.

We can observe this 'absence of form' elsewhere, particularly in the contrast between *chose* (F) 'thing' as a specific object in feminine expressions such as *les choses* (F) 'the facts/reality', or *la même chose* (F) 'the same thing', but for *quelque chose* (M) 'something' where form is undefined since there is no referent, this same lexeme is treated as a masculine indefinite locative – as it is for *autre chose* (M) 'something different' (LRPT, 1994:187), or in a similar context for *chose* in the expression 'what-do-you-call-it' (COFED, 1985:100). These examples suggest that, for *chose*, masculine and feminine gender assignments are related to contrasting attributes 'undefined' and 'specific'. In the case of *être*, other potential attributes – such as 'different' or 'distinctive', even 'separate', cannot apply since they arise in a comparative process with other entities, either 'alike' or 'not alike' – which is not possible in the case of *être*. However, in the case of *être humain*, the change in meaning establishes clearly a form that is different from non-human forms.

Together this evidence suggests that masculine gender for *être* in its meaning as a simple noun relates to a form that is 'undefined', and in its meaning as a compound noun to a form that is 'different' from others.

This set of superordinate count nouns includes *homme* in its application to *être* (*mâle ou femelle* 'human (male or female)' (LRPT, 1994:562). This meaning is very similar to that of *personne*, but *homme* is masculine where *personne* is feminine. Their different gender assignments suggest that they are linked to different crucial attributes associated with contrasting classifications.

It can be argued that as a singular count noun, *homme* may be understood to apply to a single member of the genus *Homo*, 'extinct and extant' – but this sense requires no distinction as to *mâle ou femelle*. Another potential application for *homme* is in denoting a single member of *Homo sapiens* 'modern man' as domesticated creature relative to early ancestors who were not – but while its masculine gender is consistent with other 'domesticated' creatures, this sense is not one that is common. There is also a consistency between masculine gender and *homme* as an 'upright' species, as occurs for other kinds that have an 'upright' posture, eg. *hippocampe* (M)

'sea horse' (Ch. 5, Fish), *arbre* (M) 'tree' (Ch. 7, Plant Kingdom), but again this sense has little to do with, or reason to call on, *mâle ou femelle*. Much less plausible is masculine gender in relation to *homme* as 'the most evolutionary advanced species on earth' (as in LRPT, 1994:562), a 'superlative' quality that implies a difference from every other one, and thus 'unique' – which attribute is associated elsewhere with feminine gender of nouns such as *autruche* (F) 'ostrich', which is unique in its size in relation to every other bird.

Although both *homme* and *personne* as single count nouns are suggested to have similar applications in their general application to a human being, there are significant differences between them. *Personne* applies to any individual member of the human species without specification for age and sex (LRPT, 1994:836), while *homme* typically relates to 'adult' referents while 'male' and 'female' are mutually exclusive antonyms and for a singular noun a one-to-one relationship with its referent will identify *mâle* at the expense of *femelle*. It seems that what is needed is *mâle et femelle*, but this is not possible for a count noun in the singular except where neither is salient, as for *personne*. Furthermore, 'male' and 'female' are non-gradable antonyms for which '(t)he assertion of one denies the other' (Crystal, 1987:60). To ensure that *homme* applies also to a 'female' would demand additional lexical material, such as '*en général*', or '*mâle et femelle*', each time (LRPT, 1994:562) – which is possible but inefficient as well as tiresome, and it is frequently omitted in definitions, leaving uncertainty.

However, *homme* is also suggested to have a collective sense as 'mankind', and it is discussed further with other collective nouns below.

The definition of *individu* as ... *différent de tous les autres* 'different from every other' (LRPT, 1994:598) suggests a 'comparative' distinction but one not so extraordinary as to be 'unique'. As for *être humain*, the association between masculine gender assignment and the attribute 'different' is regular and predictable. It is possible that a difference between one and others as to warrant the coining of a lexically distinct term may also underpin the association between masculine as the default category – not only for what Gervais (1993:122-3) considers 'genderless' nouns such as *cela* and *rien* (but not *quelquechose/autrechose* discussed above), in

fact across the system as a whole – except where that difference becomes 'unique'.

The substantive *vif* is used as technical term in law to designate a living person but in an indefinite and impersonal way, an unreal entity. It is possible that such attributes, 'impersonal' and 'unreal', in the context of a living body may be associated with masculine gender assignment, particularly given the association between 'living' and feminine gender for *créature* (F) 'creature', *plante* (F) 'plant', etc. However, any association between masculine gender and attributes 'indefinite', 'impersonal' or 'unreal' requires further substantiation.

Amongst the various nouns denoting 'person' at a superordinate level is *gens* (M/F) 'people'. This noun is grammatically distinct from other nouns, firstly, as a plural count noun, and secondly, its alternative gender assignments are associated with agreement principles relating to word order, the nature of which is discussed further below. Its dictionary entry (LRPT, 1994:517) identifies it as the plural of the feminine collective noun *gent* (F) 'race' or 'species', a sense now restricted to literary or jocular contexts. However, as a plural collective term, *gens* applies to *personnes, en nombre indéterminé*, 'people, in an undetermined number' – lying somewhere between 'several' and 'all' but without any quantifiable amount. While the different gender assignments may be understood as related to 'grammatical' agreements, they should also be accounted for as occurs for other nouns with alternative gender assignments, eg. *aigle* (M/F) 'eagle' and they are further discussed below (§8.10.1).

The last noun in this set, *personne*, denotes 'person', a single 'human' referent – a meaning that is similar to that of *individu*, but *individu* is masculine where, in this sense, *personne* is feminine. Its derivation is given as the Latin *persona* 'mask' – a 'disguise' that cannot hide the individual behind it since we are each recognisable *per sona*, 'through the voice' – each of us having a 'unique' voice that instantly identifies one from every other. *Personne* can apply to any member of the human race since its semantics contain no detail as to age or sex. It refers only to a voice. There is thus far growing evidence of an association between 'unique' and feminine gender assignment – particularly in appearance, eg. *panthère* (F) 'panther', *orque* (F) 'killer whale' (see Chapter 6). However, the explanation for *personne* is also consistent with the

explanation for *corneille* (F) 'crow', whose «ark-ark» call distinguishes it from other members of the 'crow' (all-black) family.

#### 8.2.1.1 Alternative gender assignments for *personne* 'person'

Gervais (1993:123) notes the different treatments of *personne* 'person' in that this otherwise feminine noun (2) becomes 'genderless' in negative expressions such as *personne ne ...* since feminine agreement on related words does not co-occur, as shown in (2).

- |     |                                      |                |
|-----|--------------------------------------|----------------|
| (1) | <i>une personne est <u>venue</u></i> | 'someone came' |
| (2) | <i>personne n'est <u>venu</u></i>    | 'nobody came'  |

In the first example feminine agreement occurs for *une* and *venue* (orthographic only) while the second example has no indefinite article, nor does *venue* display any orthographic agreement. Dictionaries traditionally present two entries for *personne*, one as a feminine noun and the other as an 'indefinite pronoun' (LRPT, 1994:837, COFED, 1985:441). Other meanings that suggest absence of matter include *vide* (M) 'void', *oubli* (M) 'oblivion', as well as *rien* (M) 'nil', *néant* (M) 'nothingness'. While negative constructions involving *personne* and *rien* have their own distinctive grammar - no article, and no agreement for *personne* - which has been considered to relate to its status as a pronoun in such constructions. However, pronouns *il* 'he' and *elle* 'she' motivate masculine and feminine agreements, while we find masculine agreements for another 'indefinite' pronoun *on* 'one/someone'.

We can observe another term that involves changes in gender assignment - *chose* (F) 'thing'. This noun is feminine noun, as we can observe in expressions such as *la même chose* (F) 'the same thing'. However, in expressions *quelque chose* (M) 'something different', and *autre chose* (M) 'something else' (LRPT, 1994:187), it is masculine. The possible association between 'indefinite' and masculine gender assignment is raised above in the analysis of *vif* (M), 'living body' that is 'impersonal' since it has no specific referent. The potential associations between masculine gender in relation to attributes 'indefinite' and 'impersonal' - privative notions suggested in the meanings of these various examples - will continue to be explored.

### 8.2.1.2 Word-final pronunciation amongst superordinate terms

Two of the superordinate terms are vowel-final, four are consonant-final, while *être humain* involves something of both. The two vowel-final nouns are *individu* and *gens*. The meaning of *individu* suggests an entity that is 'separate' or 'apart' from others, while the meaning of *gens* suggests 'people anywhere' – both of which suggest some locative state. It is possible that these locative notions – 'apart' for the count noun, 'anywhere' for the collective term – may be associated with vowel-final pronunciations. For *humain* in the compound form *être humain* vowel-final pronunciation may also relate to a human entity that is 'apart', 'separate' from others.

Consonant-final pronunciation for *être* is discussed in Chapter 6 in relation to its definition which includes two specific notions, *vivant et animé* (LRPT, 1994:42). Given previous examples of an association between *vivant* 'alive' and feminine gender assignment, it is possible that the notion *animé* 'animate' may be associated with consonant-final pronunciation. While *animé* suggests 'breathing' and is typically associated with 'alive' – particularly in a contrast between 'animate' and 'inanimate' – it relates to the taking of a breath and the rise-and-fall movement of the chest that occurs. The use of *vivant et animé* suggests that they are not synonymous in French. While *animé* does not extend to 'motile', both are related to movement and there is a consistency in their shared associations with consonant-final pronunciation. The meaning of the consonant-final *vif* does not imply either 'animate' or 'motile'. Rather, it suggests a 'concrete' rather than 'abstract' entity. A potential association between the attribute 'concrete' and consonant-final pronunciation is not surprising in the light of the association previously suggested between 'abstract' and vowel-final pronunciation – particularly since the notions 'impersonal' or 'unreal' related to masculine gender for *vif* might imply otherwise. Consonant-final pronunciation for *personne* might also relate to 'animate', but for a noun whose 'uniqueness' is associated with a 'voice' and might suggest some 'disembodied' sense, it is equally valid in relation to 'solid' or concrete in the same way as *vif*.

### 8.2.2 Nouns formed from various grammatical classes

The superordinate term *être* is identified above and in Chapter 3 as coined in extension from an infinitive verb form. However, nouns may also be derived from other grammatical classes.

### 8.2.2.1 Nouns derived from pre-existing nouns

A common process is the use of nouns in figurative extension to denote a human being from meanings that identify objects in other lexical fields, as the following nouns in Table 8.3 show.

Table 8.3: Nouns used in figurative extension to denote a human being

#### Nouns derived from masculine nouns

<i>butor</i>	M	'surly ill-bred person'	from <i>butor</i> (M) 'bittern' a bird which makes bull-like noises
<i>cafard/-e</i>	M/F	'hypocrite', 'sneak', 'informer'	from <i>cafard</i> (M) 'cockroach'
<i>charognard</i>	M	'vulture', pitiless exploiter of others' misery	from <i>charognard</i> (M) 'carrion eater' (LRPT, 1994:177)
<i>corbeau</i>	M	'miserly', <i>personne avide</i>	from <i>corbeau</i> (M) 'raven'
<i>cul</i>	M/F	'hypocrite'; 'imbecile'	<i>cul</i> (M) 'backside'
<i>étourneau</i>	M	'bird-brain', 'thoughtless person',	from <i>étourneau</i> (M) 'starling'
<i>fléau</i>	M	'destructive person'	from <i>fléau</i> (M) 'flail'
<i>grosse légume</i>	F	'important person'	from <i>légume</i> (M) 'vegetable'
<i>macaque</i>	M	'ugly person'	from <i>macaque</i> (M) (Asian) monkey
<i>moineau</i>	M	'nasty-looking type'	from <i>moine</i> (M) 'monk, friar'
<i>singe</i>	M	'lazy person', 'copy-cat',	from <i>singe</i> (M) 'monkey' as a cunning, clever animal
<i>tartuffe</i>	M	'hypocrite'	after (male) character in Molière play

#### Nouns derived from feminine nouns

<i>brébis galeuse</i>	F	'black sheep'	from <i>brébis</i> (F) 'ewe' (LRPT, 1994:131)
<i>courge</i>	F	'idiot'	from <i>courge</i> (F) 'variety of pumpkin' (LRPT, 1994:250)
<i>épée</i>	F	'good swordsmith'	from <i>épée</i> (F) 'sword' (LRPT, 1994:403)
<i>huile</i>	F	'important person', 'person in authority' (often in plural)	from <i>huile</i> (F) 'oil' (LRPT, 1994:568)
<i>moule</i>	F	'fool', 'imbecile', spineless person	from <i>moule</i> (F) 'mussel' (LRPT, 1994:746)
<i>pie</i>	F	'chatterbox' ( <i>personne bavarde</i> )	from <i>pie</i> (F) 'magpie' (LRPT, 1994:845)
<i>ruine</i>	F	'person degraded by old age, illness'	from <i>ruine</i> (F) 'destroyed building' (LRPT, 1994:1001)



In almost every case, the gender assigned to the noun in its original sense is maintained in its figurative application – even *épée* (F) which suggests, but is not necessarily restricted to, a male referent. The exceptions are *cul*, 'hypocrite' which can apply to both 'male' and 'female', where gender assignment correlates with biological sex of the real-world referent, and *légume* (M) 'vegetable' which changes to the feminine (*grosse*) *légume* (F) 'important person' – a change that seems to relate to the added consequence of the referent that is not otherwise there in its original sense. This example can be contrasted with the pejorative effect achieved by using a masculine vowel-final noun to denote a collective of 'humans', such as *tas*, *ramassis* (M) which otherwise apply to a heap or pile of inanimate worthless bits and pieces, or *jupon* (M) as a collective of females used in expressions such as *courir le jupon* 'to run after skirts' for a noun that otherwise denotes an inanimate object, 'petticoat' or 'underskirt'. However, among these nouns it is difficult to identify those conditions that give rise to masculine gender and those that give rise to feminine gender since even in this category it is neither fixed nor assured in every case.

#### 8.2.2.2 Nouns derived from adjectives

A number of nouns are derived from adjectives, as in Table 8.4 below.

Table 8.4: Nouns denoting a human being derived from adjectives

##### Masculine nouns

<i>familier</i>	M	'one of the family'	derived from <i>familier</i> , <i>-ière</i> (adj.) 'familiar'
<i>joyeux</i>	M	'soldier serving in Bataillons d'Afrique'	historical noun derived from <i>joyeux</i> , <i>-euse</i> 'joyful'
<i>prochain</i>	M	'alike'	derived from <i>prochain</i> , <i>-aine</i> (adj.) 'next'
<i>riche</i>	M	'someone possessed of a fortune'	derived from <i>riche</i> (adj.) 'wealthy, possessing a fortune' (LRPT, 1994:998)

##### Alternative gender assignments

<i>amoureux</i> , <i>-euse</i>	M/F	'sweetheart'	from <i>amoureux</i> , <i>-euse</i> (adj.) 'loving'
<i>fou</i> , <i>folle</i>	M/F	'mad person' (male, female)'	derived from <i>fou</i> , <i>folle</i> (adj.) 'mad'
<i>invalide</i>	M/F	'invalid', 'cripple'	derived from <i>invalide</i> (adj.) 'crippled'
<i>lâche</i>	M/F	'coward'	derived from <i>lâche</i> (adj.) 'slothful, cowardly' (LRPT, 1994:648)
<i>richard</i> , <i>-arde</i>	M/F	'wealthy person'	derived from <i>riche</i> (adj.) 'rich'

<i>semblable</i>	M/F	'fellow human being' resembling one	derived from <i>semblable</i> (adj.) 'similar' (LRPT, 1994:1026)
<i>supérieur, -eure</i>	M/F	'person directing religious community	derived from <i>supérieur/-eure</i> (adj.) 'superior'

Among these nouns derived from adjectives five have fixed masculine gender assignment, while seven allow alternative gender assignments – the latter determined by speakers as they relate to the biological sex of the designated real-world referent. Two of these seven, *lâche* and *semblable*, once had fixed masculine gender assignment since both are identified as masculine in the earlier of the two dictionaries, COFED (1985) used for this research. It is noted that while *riche* has fixed masculine gender assignment, a newer coining with a similar meaning offers alternative gender assignments – *richard*, *-arde* to correlate with the real-world referent.

It is possible that fixed masculine gender for *riche* results from centuries during which masculine gender assignments correlated with a 'male' referent as a reflection of the historical norm in which women had no place since had no legal status and could not retain ownership of property or wealth upon marriage. Other examples, substantives formed from adjectives *lâche* and *semblable* once had fixed gender assignment, but today alternative gender assignments are accepted, although there is no apparent explanation for either the former situation or the change to alternative genders.

However, alternations now offered for *lâche*, *semblable* and *richard/-arde* have not occurred for *familier*, *prochain* or *vif*, the adjectival substantive examined above with superordinate terms. In the case of *familier* and *prochain*, it is possible that some attribute in their meanings is strongly associated with and can account for fixed masculine classifications in the same way as *vif*, but is not yet clear. On the other hand, it is also possible that the social conditions that have allowed a more relaxed treatments for *lâche*, *semblable* and *richard/-arde* late in the twentieth century have not yet arrived for these *prochain* and *familier*. These derived nouns and their different treatments are explored further alongside other French count nouns in the corpus.

### 8.2.3 Loan words

A number of loan words in the French lexicon denote a human referent, e.g. *barmaid* (F)

'barmaid', *barman* (M) 'barman'. For such words, meanings that entail 'female', eg. *barmaid*, have correlating feminine gender, and meanings that entail 'male', eg. *barman*, have correlating masculine gender assignment.

However, in the case of loan words such as *star* (F) 'star', and *apache* (M) 'scoundrel'/'villain', gender assignment is fixed but is unpredictable – which suggests that gender assignments of loan words may respond to the same classification process as French nouns. These nouns are discussed with other nouns in various sets below.

The database also contains several loan words denoting human beings in a collective sense, as set out in Table 8.5 below.

Table 8.5: Loan words - collectives of human beings

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Masculine and vowel-finals

<i>clan</i>	M	'clan'	English loan word
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Masculine and consonant-final

<i>gang</i>	M	'gang'	English (LRPT, 1994:509)
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Feminine and vowel-final

<i>diaspora</i>	F	'Diaspora'	Greek loan word
<i>population</i>	F	'population'	English loanword (LRPT, 1994:982)
<i>smala</i>	F	'tribe, family'	Magreb Arabic loanword <i>ṣmālah</i>

Feminine and consonant-final

<i>cabale</i>	F	'cabal'	Hebrew <i>qabbālā</i> (LRPT, 1994:141)
<i>caravane</i>	F	'caravan'	Persian <i>kār wān</i> (LRPT, 1994:155)
<i>caste</i>	F	'caste'	Portuguese <i>casta</i>

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Some of these nouns are masculine and others feminine nouns, some are vowel-final while others are consonant-final. These collective meanings that typically include referents of both sexes, eg. *diaspora*, *population*, *smala*, and are feminine. Among nouns that would typically include male-only members, *gang* is masculine while *cabale* is feminine. These variations suggest that the sex of referents within a collective plays no role in gender assignment for collective nouns that are loan words. It is not possible, from such a small set, to observe any feature/s that might account for such different treatments.

Word-final pronunciation for loan words entering the French lexicon in some cases continues the phonological pattern of its origins, eg. the English loan word *gang* and *caravane* which has consonant-final pronunciation *kārwan* in Persian and they remain consonant-final in the French lexicon. In other cases the phonological pattern for the original noun has changed, eg. *caste* is now consonant-final where it seems originally to have been vowel-final, while *clan* is vowel-final where it seems to have been consonant-final. The unpredictability of these changes is similar to those for loan words examined in previous chapters, particularly among nouns denoting trees and plants, where findings suggested that such changes appear to be semantically motivated. The attributes associated with the loan words in this lexical field and the principles that underpin the different treatments are yet to be identified.

#### 8.2.4 Summary

Among superordinate nouns, masculine gender for both *être humain* and *individu* is argued to relate to the attribute 'different' for their meanings that are drawn from a comparison with others. For the term *vif*, masculine gender is argued to relate to 'impersonal' for a living body that lacks not so much physical form as the specific identity of a person.

Feminine gender assignment for *personne* is argued to relate to 'unique' since as individuals we have our own 'unique' voice – in accent, pitch and other qualities – that makes each of us instantly recognisable from all others around us, even where our faces cannot be seen. The analysis of the privative construction *personne ne* 'nobody/no-one' suggests that the 'absence' of feminine agreement may be better understood as masculine gender related to a meaning that identifies a body that not so much 'undefined' as entirely 'absent'. The function of the privative *ne* changes the meaning of *personne* from one that is 'unique' to one is not present and, as with other lexemes that denote absent matter, eg. *oubli* (M) 'oblivion', *vide* (M) 'void', masculine gender for *personne ne* is consistent with those nouns.

Certain issues are raised in regard to *gens* and *homme* as count nouns. Alternations in gender assignment for *gens* appear to be syntactically rather than semantically motivated. The meaning of *homme* in its sense as a count noun identifying a 'human' referent has some limitations – as

to both sex and age since it distinguishes the 'adult male' from *garçon* 'young/adolescent male'. A number of attributes are raised in relating this masculine noun to other superordinate nouns in this set, eg. 'extant:extinct' pertaining to any one in the species of *Homo*, and 'domesticated/tamed:wild', since humans have come to lead a settled existence that is very different from that of our ancestors. However, these sets contain attributes in binary opposition that could not be expected to be salient at the same time. Other notions are suggested, such as 'upright' which in earlier findings also appears to be associated with masculine – but this sense is not one that requires further clarification such as *mâle ou femelle*. The attribute 'living', which might well be salient in such a meaning is associated elsewhere with feminine gender. Comment is also made on the problem of sense relations for *mâle ou femelle* as ungradable antonyms and thus mutually exclusive properties – particularly for *homme* as a count noun. However, *homme* also has a collective sense and is discussed further in that set. Alternative gender assignments for *gens* are discussed more fully in Section 8.11 below.

The analysis of nouns formed from various linguistic processes reveals very different treatments in their gender assignments. Some have fixed masculine gender, eg. *riche* (M) 'wealthy person', some have alternative masculine and feminine genders, eg. *richard/-arde* 'wealthy person', and some nouns that once had fixed masculine gender in one dictionary (1985) are now offered alternative genders in another (later) dictionary (1994), eg. *lâche* (M/F) 'coward'. These nouns are discussed in their different sets below.

Among pre-existing nouns used in extension, gender assignment in extended meanings typically follows the original noun, eg. *corbeau* (M) 'greedy person', is a masculine noun derived from *corbeau* (M) 'raven', also masculine, while the noun *épée* (F) 'swordsmith', extended from *épée* (F) 'sword', remains feminine even though it is more likely to apply to a male than a female referent. However, this concurrence of gender assignments for these examples does not follow in every case, eg. the noun *légume* (M) 'legume' is masculine but when used in extension as *grosse légume* (F) 'important person', it is feminine. The change in gender assignment in its different applications is argued to be linked to an amelioration in its connotation from 'common/not highly regarded' expressed in the original meaning to 'someone

extraordinary/highly regarded' in this new application. The precise conditions under which these changes occur forms part of the research below.

The analysis of loan words shows that some gender assignments are fixed and predictable, eg. *barmaid* (F) 'barmaid', *barman* (M) 'barman', since their lexical semantics identify a sex-specific referent. In these cases gender assignments correlate with the sex identified in their meanings, eg. 'female' and thus feminine gender for *barmaid*, 'male' and thus masculine gender for the *barman*. However, there are other cases where gender assignment is fixed but not predictable, eg. *apache* (M) 'scoundrel' is masculine, while *star* (F) 'star' is feminine.

Certain loan words are also collective nouns, and in these cases neither gender assignments nor word-final pronunciations are predictable within the French lexicon – even those that might entail 'male-only' referents but which are feminine, eg. *cabale* (F) 'cabal'. Word-final pronunciations also vary, eg. *clan* (M) 'clan' is vowel-final while *gang* (M) 'gang' is consonant-final. Variations in the classification of collective loan words are consistent with other nouns examined in this section in that the sex of referents does not play a significant role in gender assignment amongst these nouns.

Discussion of variations in word-final pronunciation amongst superordinate nouns suggest that vowel-final pronunciation of *individu* is associated with 'separate', 'apart', while vowel-final pronunciation for *gens* remains unclear at this time and remains of interest. Its semantics suggest 'people' without any restrictions in age, sex, or location. Consonant-final pronunciation for *personne* and *homme* is suggested to be related to 'motile' but for *vif* is argued to relate to 'concrete' in its contrast with 'abstract', associated with contrasting vowel-final pronunciation. It can be argued that the compound form *être humain* suggests an attribute associated with consonant-final pronunciation, perhaps 'animate', and one attribute associated with vowel-final pronunciation, perhaps 'separate' as for *individu*.

It is noted that some loan words retain the pronunciation pattern of their original form as they enter the French lexicon, eg. consonant-final pronunciation of *gang*, while others are altered, eg.

the noun *clan* becomes vowel-final from its consonant-final origins. These changes are examined further in the analysis of count nouns below.

### 8.3 Collective nouns denoting human beings

This section includes nouns whose basic meaning and/or typical application denotes a collective of human beings. The grammatical notion 'collective' typically refers to singular nouns that denote a plurality of things as a single mass, a whole of itself – of persons, things, both concrete and abstract. The 'whole' for collective nouns can be formed in different ways, shown in (3).

- (3)
- indivisible unit forming a whole
  - all the component parts, in quantity (number) or extent (range) forming a whole
  - mixture, an 'aggregate' of individual elements combined, assembled, or considered together.

In some cases 'whole' can be deemed as an indivisible mass. In other cases 'whole' suggests a physical connection between individual components that may or may not be alike, particularly since aggregates may be composed of very different matter. Another feature of collectives is location of individual parts in time and space. Also important is the duration in collectives of humans as entities with a capacity for independent movement, since a collective are easily formed and can just as easily break up. Members must remain together for long enough to be regarded as a collective, but some collectives continue regardless of time and space. Collectives can also be formed around entities that are not located together in the same time or space.

Togetherness and separation from others are not necessary conditions in relation to the formation of a collective whole. These quite different contexts would very likely draw on a number of different attributes in their classification.

#### 8.3.1 General and non-specific collective terms for humans and non-humans

The French language has many general or non-specific collective terms some of which may apply as easily to human referents as to non-humans, eg. *classe* (F) 'class', *groupe* (M) 'group', while others typically apply to sets of non-human entities, eg. *assortiment* (M) 'assortment', *catégorie* (F) 'category', *mélange* (M) 'mixture'. Other meanings can be extended from their original meaning to denote a collective of humans, eg. *monde* (M) 'world', and *homme* (M) 'male

adult human'. Although some of these nouns are not included in the analysis below, nonetheless, for the system to be demonstrated as regular and predictable, any explanation must show some consistency among them.

Some collective nouns can apply to both humans and non-humans but are restricted to entities capable of independent movement, eg. *gent* (F) 'species', 'race', and more specific applications require additional lexical information such as *gent canine* (F) 'canine species' (LRPT, 1994:517). The collective noun *bande* (F) 'band' was discussed in Chapter 6 in its application to a 'pod' of whales, while its application to a collective of humans (LRPT, 1994:94) brings it into this set.

### 8.3.2 Predictability according to frequency

There are 81 nouns in the database denoting collectives of human beings. Distributions relating to gender assignment and word-final pronunciation patterns are set out below in Table 8.6.

Table 8.6: Distribution patterns for collective nouns denoting human referents

	Vowel-final	Consonant-final	Total
Masculine	8	11	19
Feminine	21	41	62
Total	29	52	81

Nouns in this set, as with others, are drawn from the database of nouns gathered randomly for the purpose of this thesis, and the list not exhaustive. Nonetheless, it is difficult not to observe the considerable imbalance in these distributions. It seems remarkable that 62 of these 81, nearly 80%, are feminine. In addition, there are more feminine nouns with 'irregular' vowel-final pronunciation than masculine nouns with 'regular' vowel-final pronunciation. Some of the nouns in the above set have alternative gender assignments, eg. *gens* (M/F) 'people' and *couple* (M/F) 'couple', and these variations are discussed below.

The different gender assignments and variations in word-final pronunciation – feminine nouns with vowel- and consonant-final pronunciations, and masculine nouns with vowel- and consonant-final pronunciations – are discussed below in relation to meanings of these nouns.



## 8.4 Semantic analysis of collective nouns

The 81 nouns in this set are examined in groups according to the most numerous and regular distributions. That is, an analysis of a large group feminine consonant-final nouns pronunciation is followed by a smaller group of less regular feminine vowel-final nouns and an even smaller set of masculine nouns. The full list of nouns is included in Appendix XIV.

### 8.4.1 Feminine consonant-final collective nouns

The following collective nouns in database are have consonant-final pronunciation.

Table 8.7: Feminine consonant-final nouns denoting human referents

<i>bande</i>	F	'group of people (especially rebels, miscreants) fighting together under the same leader' (syn. <i>horde, troupe</i> ) (LRPT, 1994:94)
<i>basoche</i>	F	'(pej.) legal fraternity'; also, 'basoche, a body of clerks attached to courts of justice' ( <i>ensemble de gens de justice</i> , LRPT, 1994:99)
<i>bousculade</i>	F	'crush' of people, <i>remous de foule</i> 'surging crowd' (LRPT, 1994:127)
<i>brigade</i>	F	'brigade' (tactical unit, or small detachment) of soldiers; also, 'volunteers fighting on the side of the Republicans in Spanish civil war' (LRPT, 1994:133)
<i>cabale</i>	F	'secret group of several people' plotting together (LRPT, 1994:141, <atilf.atilf.fr>, 2006)
<i>canaille</i>	F	(coll.) 'rabble', 'the most wretched' (particularly criminals); also, (sg.) scoundrel, villain, someone dishonest (LRPT, 1994:150)
<i>caravane</i>	F	'caravan', company of mounted traders, travellers, journeying together particularly through unsafe or difficult desert regions (LRPT, 1994:155)
<i>caste</i>	F	'caste', fixed hereditary social class of people of Hindu religion, from Portuguese 'race' (LRPT, 1994:161)
<i>clique</i>	F	(military) band of drums and bugles; (fam., pej.) 'riffraff', group of people of little value who come together with criminal intent (earliest meaning (1694) as <i>société de gens</i> 'social group of people' (LRPT, 1994:197, <atilf.atilf.fr>, 2006)
<i>cohorte</i>	F	(antiq.) division of ancient Roman Legion, 600 armed men; (mod.) 'band of warriors'; also, group of varied importance inspired, at least in the short term, by a common purpose, where they act in concert (<atilf.atilf.fr>, 2006)
<i>descendance</i>	F	'offspring', all the immediate descendants of someone, from one generation to the next (LRPT, 1994:309)
<i>église</i>	F	'church', community of Christians forming an organised social body instituted by Jesus Christ and based on faith in him; gathering of Christians (<atilf.atilf.fr>, 2006, LRPT, 1994:367)
<i>élite</i>	F	'the élite ( <i>les plus remarquables</i> 'the most remarkable' in any group, community) (LRPT, 1994:371)
<i>équipe</i>	F	'crew', 'gang', 'team', group of people facing <i>une finalité commune</i> 'a common end' (<atilf.atilf.fr>, 2006)

<i>famille</i>	F	'family', (legal) parents and offspring; formerly (antiq.) all the members of one household; individuals descended one after the other from generation to generation (LRPT, 1994:455)
<i>foule</i>	F	'crowd', multitude of people gathered in one place; 'the masses' (in contrast with <i>élite intellectuelle, morale, sociale</i> ) (<atilf.atilf.fr>, 2006, LRPT, 1994:489)
<i>fripouille</i>	F	(old) collective term meaning 'rabble, riff-raff'; (mod.) singular noun meaning 'dishonest person' (LRPT, 1994:497)
<i>grappe</i>	F	gathering of people bunched together ('packed in like sardines')
<i>horde</i>	F	'horde', nomadic tribe; also, disciplined band committing acts of mayhem and violence (<atilf.atilf.fr>, 2006, LRPT, 1994:565)
<i>jurande</i>	F	(hist.) 'jury', those elected to serve as members of the jury (LRPT, 1994:639)
<i>marmaille</i>	F	group of <i>jeunes enfants</i> crying, agitated (usu. pej. or condescending), 'noisy brats'; ext. to mean 'children' in large numbers (<atilf.atilf.fr>, 2006)
<i>multitude</i>	F	'multitude', huge numbers of people gathered together (LRPT, 1994:750)
<i>pègre</i>	F	'criminal class' (formed by thieves, swindlers, pimps, etc.); formerly a singular (M) noun (argot) denoting a single referent, 'thief', 'swindler' (<atilf.atilf.fr>, 2006)
<i>peuplade</i>	F	(antiq.) group of people sent to populate a new region; (mod.) 'weakest and less important humans in a primitive society' (LRPT, 1994:840, <atilf.atilf.fr>, 2006)
<i>plèbe</i>	F	'(Roman) second order of common people'
<i>populace</i>	F	'(pej.) low people, 'rabble' (LRPT, 1994:873)
<i>progéniture</i>	F	'progeny', the immediate offspring from a person (or animal) in a continuing line of descent (LRPT, 1994:903)
<i>quadrille</i>	F	'group of riders in a tournament; team of <i>toreros</i> working with <i>matador</i> (principle bullfighter) (COFED, 1985:448)
<i>race</i>	F	'distinguished family', particularly in its continuity'; ethnic group differentiated from others by hereditary physical characteristics (LRPT, 1994:928)
<i>secte</i>	F	'group of people who follow the same religious doctrine'
<i>suite</i>	F	'retinue', 'train', attendants following
<i>tourbe</i>	F	(pej.) 'rabble, mob'; also, group of people of no account (syn. <i>populace</i> ) (<atilf.atilf.fr>, 2006)
<i>troupe</i>	F	'group of people journeying together'; secondary meanings: regular organised group of soldiers (not including officers), group of artists who perform together (LRPT, 1994:1143)
<i>valetaille</i>	F	menials, flunkys

Evidence from literary sources (<atilf.atilf.fr>, 2004) indicates that many of these feminine nouns are very old, including eleventh century *caravane* and *tourbe*, twelfth century *élite*, *foule* and *troupe*, thirteenth century *setets* (now *secte*), fourteenth century *famille*, fifteenth century *équipe*, sixteenth century *cabale* and *horde*. It is noted that the French and English meanings of *horde* differ in relation to size, the French meaning focussing on a small nomadic group and

its undisciplined activities (LRPT, 1994:565), while the English meanings include 'vast crowd', a 'large moving mass' (of people, animals, CED, 1986:738).

Some of these collective nouns are also count nouns and have comparable meanings, eg. the collective *canaille* (F) 'rabble' (especially criminals) and the singular/plural count noun *canaille* (F) 'dishonest person'. In most cases this grammatical distinction has no impact on gender assignment. Any changes found will be noted and discussed since it is important to draw out principles that can account for these different treatments.

There is a single instance of a collective whose meaning identifies a particular age group, *marmaille* (F) 'brats' as *jeunes enfants*, but this distinction at lexical level seems unrelated to its gender assignment since it is the same as other feminine collectives that include adults and children, eg. *famille* (F) 'family'. This noun is of particular interest in that count nouns in the corpus denoting 'child' are masculine, eg. *enfant* (M) 'baby', *populo* (M) 'chubby tot' (an older meaning, <atilf.atilf.fr>, 2004). In fact, these collective nouns are remarkable for the absence of any distinctions relating to differences in either age or sex. The meaning of one of these collective terms, *famille* 'family' would typically entail both sexes both in its core meaning and in its application to all those living in the same 'household'. On the other hand, for many other collectives, sex of referents is not only unknown but referents are as likely to be male as female, eg. *caravane*, *caste*, *descendance*, *foule*, *marmaille*, *multitude*, *plèbe*, *populade*, *progéniture*, etc. Sex of referents also appears to be irrelevant among collective terms that deal with class, eg. *élite*, *tourbe*, since *élite* might once have been expected to incorporate 'males' only but has always been feminine. Thus, where sex of referents appears to be crucial to distinctions in duals *paire* (F) 'pair' and *couple* (M) 'couple', the combination of 'male' and 'female' appears to be irrelevant for collectives since it does not appear to have any bearing on gender assignments in this set.

Some groups would historically have related exclusively to males, eg. nouns in Table 8.8 below.

Table 8.8: Feminine collective nouns denoting male referents

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<i>basoche</i>	F	'(pej.) legal fraternity'; body of clerks attached to courts of justice'	all male
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<i>brigade</i>	F	'brigade' (tactical unit, or small detachment of soldiers)	all male
<i>cohorte</i>	F	(antiq.) division of ancient Roman Legion, 600 armed men; (mod.) 'band of warriors'	all male
<i>jurande</i>	F	(hist.) 'jury', those elected to serve as members of the jury	all male
<i>quadrille</i>	F	'group of riders in a tournament; team of <i>toreros</i> working with <i>matador</i> (principle bullfighter)	all male
<i>troupe</i>	F	'troop', regular, organised group of soldiers	all male

Like *élite*, over hundreds of years of usage these terms have remained feminine in the same way as the other feminine collective nouns composed of both males and females. For these nouns, where speakers would have been well aware of their 'male-only' membership, one might have expected correlating masculine gender assignment. Further, the kinds of social change that could allow them to include both male and female might have been expected to 'resolve' to masculine as occurs in agreement principles, but feminine gender prevails. These feminine collective nouns denoting male-only referents can also be contrasted with count nouns where the sex of the referent is expected to be reflected in correlating gender assignment. Membership of other collectives, eg. *cabale*, *clique* (in its sense of 'military band'), *jurande*, would similarly have been restricted to adult males.

The consistency of their feminine gender assignment draws attention to the failure of both resolution to masculine for grammatical gender assignment and correlation of gender assignment that would bring about masculine gender where expected or warranted. Feminine gender assignments in such cases require explanation.

As mentioned above, feminine collective nouns denoting male-only referents can be compared with a single masculine noun in (4) below which, in its collective sense is restricted to female-only referents (LRPT, 1994:639).

- (4) *jupon*                      M            'women', 'young women'                      (fig., coll.) from *jupon* (M) 'petticoat, underskirt'

As identified above, this French collective term is the equivalent of the English word 'skirts', both expressing sexuality through an article of clothing. The earlier dictionary (COFED, 1985:303)

has a similar (informal) meaning as a count noun, 'girl, woman, bit of skirt', which suggests a one-to-one basis with a single referent but in the later French dictionary (LRPT) it has developed a collective application. Nonetheless, this mis-match between a masculine term that denotes a group of 'females' needs some explaining. It is discussed further below.

Such examples nouns serve a dual purpose. They demonstrate that a collective composed of a single sex is not sufficient to bring about correlation between that sex and masculine or feminine gender assignment. Clearly, such nouns do not meet all the requirements necessary by which male/female sex and masculine/feminine genders will correlate, and the precise nature of the combination of the conditions necessary to generate sex and gender correlation are explored in the next section. Secondly, the presence of males, or both males and females, in any collective fails to bring about grammatical resolution in favour of masculine gender assignment. Gender assignments of all these nouns require explanation.

Analysis of meanings amongst these collective nouns shows that they have conceptually different foundations which may be significant in relation to gender assignment and word-final pronunciation. One set draws people together according to *la condition sociale* 'social class' in certain levels related to particular divisions of society in which any individual acquiring the qualities or meeting the conditions of a certain division – even those based on culture, or merit – becomes a member of that division. Regardless of level – the lowest, eg. *pègre*, or highest, eg. *élite* – nouns are feminine. Collectives dealing with various-ranked groups in society, eg. each of the nouns *caste*, *clique*, *pègre*, *plèbe*, *populace* are also feminine. Thus, while 'superlative' and 'unique' are salient for count nouns and can be observed in the sense of *élite* as the 'very brightest' of a society, the extent of feminine gender assignment among collectives relating to social rank suggests that they are not salient for collective terms.

Some of the attributes of these feminine collective nouns are somewhat contradictory. Some groups may be massed together, eg. *bousculade* (F) 'crush', *foule* (F) 'crowd', *multitude* (F) 'multitude', *tourbe* (F) 'mob'. Others may be widely dispersed, eg. *caste* (F) 'fixed hereditary social class', *élite* (F) 'the elite' since they do not require individuals to assemble together in

order for the collective to exist. These cases show that speakers make cognitive connections between individuals through relationships beyond physical or proximal aspects. Some collectives can continue as a group even while they are on the move, eg. *bousculade* (F) 'crush of people', *caravane* (F) 'caravan', *troupe* (F) 'fellow travellers'. Certain sets involve individuals engaged in the same task or activity, eg. *cabale* (F) 'cabal', *cohorte* (F) 'cohort', *équipe* (F) 'team', *horde* (F) 'horde', *jurande* (F) 'jury', *quadrille* (F) 'group of riders in tournament', even *caravane* (F) 'caravan' and *troupe* (F) 'troop'. For some the collective lasts only so long as physical closeness between individuals is maintained – and when individuals disperse the collective no longer exists, eg. *caravane*, *équipe*, *jurande*. Some collectives are formed around a common goal – 'safety' for *caravane*, 'winning' for *équipe*, 'called to deliver a verdict' for *jurande*. For others, *basoche*, *cabale* the collective is based on a common task or aim, and until the common task or aim is achieved or the group agrees to disband beforehand, the collective continues. While there is a difference in physical togetherness for these groups, the 'common' task unites them.

The connections amongst these groups that include 'shared space', 'shared goal', 'shared activity', also include 'shared blood', the same bloodline that passes through from one generation to the next, eg. *descendance* (F) 'offspring', *race* (F) 'distinguished family in its continuity', *progéniture* (F) 'progeny'. Such connections are typically continuous, difficult to break or lose.

Within the range of found among these nouns, several key characteristics can be found:

- same origins, source, or bloodline, eg. *descendance*, *progéniture*, *race*
- same leader, eg. *bande*, *quadrille*
- same task, activity, eg. *cabale*, *caravane*, *horde*, *peuplade*, *troupe*
- related through the same social organisation, social conditions
  - religious, eg. *caste*, *secte*
  - social, eg. *canaille*, *clique*, *élite*, *famille*, *pègre*, *plèbe*, *populace*, *tourbe*
  - professional, eg. *basoche*, *brigade*, *clique*, *jurande*
- uncountable mass gathered in the same location, eg. *bousculade*, *foule*, *multitude*.

The different foundations of collectives are linked to the various attributes by which they can be

recognised as a group, such as 'acting in concert', or 'continuous line', 'common ancestors', etc. The precise nature of the interaction between these properties with either gender assignment or word-final pronunciation cannot be further clarified at this stage. They will be of interest in the analysis of the second set of feminine collective nouns as well as masculine collective nouns.

#### 8.4.2 Feminine vowel-final collective nouns

There are 21 feminine vowel-final collective nouns among which are those set out in Table 8.9, alongside information related to their meanings and usage taken from various dictionaries.

Table 8.9: Feminine collective nouns denoting humans - vowel-final

<i>assemblée</i>	F	'assembly', people regularly gathering together from different areas for a common purpose, eg. <i>Assemblée nationale</i> of the UN (LRPT, 1994:65)
<i>cohue</i>	F	(pej.) 'mob', <i>assemblée nombreuse et tumultueuse .... en désordre</i> , 'tumultuous, disorderly' (hustling, jostling crush of people); (pej.) <i>ensemble de choses d'une même catégorie</i> (LRPT, 1994:201, <atilf.atilf.fr, 2006)
<i>colonie</i>	F	'colony', the population of colonials in an establishment founded by a nation (LRPT, 1994:204)
<i>compagnie</i>	F	'company', presence nearby, or with, someone; permanent theatrical group (LRPT, 1994:210)
<i>coterie</i>	F	'faction', 'coterie', small exclusive group of friends, or people with a common interest (LRPT, 1994:244)
<i>diaspora</i>	F	'Diaspora', population throughout the world of Jewish people exiled from their country' (LRPT, 1994:322)
<i>dynastie</i>	F	'dynasty', succession of sovereigns of the same family, that can also apply to members of a wealthy family (LRPT, 1994:351)
<i>ethnie</i>	F	'those people related by language and culture' (LRPT, 1994:423)
<i>flop(p)ée</i>	F	'large number' (of commuters, people gathered up by a fog, etc.), (LRPT, 1994:478, <atilf.atilf.fr>, 2006)
<i>gent</i>	F	'species', 'race' (LRPT, 1994:517), identified particularly according to <i>caractères physiques communs</i> 'shared physical characteristic' (<atilf.atilf.fr>, 2006), regardless of where they are, plural <i>gens</i>
<i>humanité</i>	F	'humanity', 'humankind', humans in general across the five continents constituting a whole (<atilf.atilf.fr>, 2006)
<i>lignée</i>	F	line of descendants of one person, <i>collatérale, maternelle, matrilinéaire, paternelle, patrilinéaire</i> 'junior, maternal, matrilineal, paternal, patrilineal' (<atilf.atilf.fr>, 2006)
<i>parenté</i>	F	'relatives', connected by marriage, biology, limited to one parent; tie between one another for those sharing a common ancestor (LRPT, 1994:224, <atilf.atilf.fr>, 2006)
<i>population</i>	F	(English loan word) 'population', all the people inhabiting a country, city or other specified place or category (working population etc.) (LRPT, 1994:872)

<i>procession</i>	F	religious procession taking place while singing, praying (LRPT, 1994:900)
<i>postérité</i>	F	'future descendants', generations to come (LRPT, 1994:878)
<i>queue</i>	F	'file of people', in extension for <i>queue</i> (F) 'tail'
<i>réunion</i>	F	'reunion', 'gathering' by a certain number of people in the same place for a shared reason (having been previously separated) (LRPT, 1994:984)
<i>smala</i>	F	(Arabic) 'tribe', 'family' (LRPT, 1994:1041), <i>la famille et les équipages d'un Arab chef</i> 'family and retinue of Arab sheik' (from 'gathering of tents, etc. of Arab sheik') (<atilf.atilf.fr>, 2006)
<i>société</i>	F	'gathering of people between whom exist lasting and organised rapport'; habitual company, or gathered together in an instant (LRPT, 1994:1043)
<i>tribu</i>	F	'(anc.) tribe, people sharing ethnicity, territory; (mod.) social or political group founded on a real or supposed ethnic kinship, in pre-industrial societies' (LRPT, 1994:1137)

Some of these nouns have a vowel-final suffix that is supposedly feminine (LRPT, 1994:1227 ff), eg. *cohue*, *ethnie*, *humanité*, *lignée*, *parenté*, although to some extent it appears to relate to orthography. For two of these vowel-final nouns, *gent* and *tribu*, feminine gender is even less explicable given the weight of masculine gender for nouns with these terminal phones found by Tucker et al (1977). In their analysis of the 2000 nouns with the terminal phone [ã], *gent* is one of only five feminine nouns – the other 1995 are masculine. Of the 150 nouns with the terminal phone [y], *tribu* is one of five feminine nouns – the other 145 are all masculine.

Three slight oddities can be found amongst this group of nouns – loan words that are feminine and vowel-final, ie. *diaspora*, *population*, and *smala*, where one might have anticipated masculine gender as a kind of default, or perhaps a change to consonant-final pronunciation allied to feminine gender assignments. It could be argued that the vowel-final pronunciation of the nineteenth century *diaspora* is related to its loan word origins (Greek), and *smala* to its vowel-final Arabic origins, and that such origins may perhaps make them more resistant to change than words coming into French from other languages. However, there is considerable evidence that no matter the language source of the loan word, its word-final pronunciation is able to undergo significant phonological change, either from vowel-final to consonant-final, or consonant-final to vowel-final pronunciation in French. These changes need further exploration. However, previous analysis suggests that these changes occur where there is a mismatch between attributes associated with word-final pronunciation and attributes displayed by an entity.



Analysis of meanings of the nouns in this set shows that, as with those which are consonant-final, most nouns could be described as a unit or whole of 'similar' or 'like' individual parts. However, a number of nouns do not fit such a description, eg. *parenté*, which may pertain either to the wife or the husband, but not both sides of the family – except in the plural, and *lignée*, which pertains to a single bloodline in its application to one side of the family, matrilineal or patrilineal but not both – even in the plural. Another noun that does not fit is the loan word *smala*, defined as:

*ensemble des tentes d'un chef arabe, avec sa famille, ses serviteurs, ses soldats,  
ses richesses, son mobilier, ses troupeaux*

'gathering of tents of an Arab sheik, with his family, personnel, servants, soldiers,  
wealth, household furniture, equipment, carpets, animals, etc.

(<atilf.atilf.fr>, LRPT, 1994:1041)

While its meaning covers a single household as a 'whole', it is not a whole made up of 'like' individual parts, as shown in the extent of the different members in this feminine noun – humans, animals, inanimate objects. But this 'mixed' nature of the group is not sufficient to bring about masculine gender as occurs in agreement principles that resolve to masculine gender – which has some bearing on *gens* (M/F) 'people' and the collective sense of *homme* (M) 'humankind'. Its feminine gender requires us to focus on another crucial aspect of its meaning, 'under the leadership of the same (Arab) chieftain', a meaning similar to that of *bande* as a group of people fighting *ensemble sous le même chef* 'together under the same leader'. Both nouns are feminine, although the principles that underpin this classification require greater transparency.

It is noted that meanings of these feminine vowel-final nouns cover collectives of individuals based on similar grounds as the feminine consonant-final collectives above, eg.

- same bloodline, eg. *lignée, postérité*
- living generations connected by one degree, eg. *parenté*
- same leader, eg. *smala*
- same task, eg. *compagnie*
- same hereditary, religious, or social conditions, eg. *diaspora, ethnie, gent, tribu*
- assembled together, eg. *assemblée, cohue, réunion, société*

- same bloodline, eg. *lignée*, *parenté*

Meanings of collective nouns denoting individuals related by blood that are vowel-final differ in some way from the central semantic notion of the consonant-final *famille*, the household. In the case of *lignée* (F) 'offspring', the collective denotes descendants along a single line of descent, as is the case for *postérité* (F) 'future descendants'. However, the collective *parenté* (F) 'extended family' includes all the living individuals at various levels but limited to one degree to capture the blood and non-blood relationships between the various members of the 'extended family'.

The analysis of nouns in other categories suggests there is a relationship between vowel-final pronunciation and some semantic property, particularly one that contrasts with another associated with contrasting consonant-final pronunciation. The considerable number of feminine vowel-final nouns suggests the presence of at least one crucial property associated with vowel-final pronunciation. The semantic content of this set of collective nouns therefore warrants investigation in greater depth to draw out any property or properties that are salient. In this regard, material included with definitions is examined in order to bring out notions that are similar or different in their meanings, particularly since single-word translations are not always available, nor particularly helpful. For instance, one English 'mob' can be translated into three different French nouns, *populace*, *cohue* and *bande* 'mob' (COEFD, 1985:150), while one French term, *race*, is translated by seven different English nouns, 'race, stock, breed; line, ancestry, family; kind' (COFED, 1985:453).

One collective noun, *cohue*, concerns individuals coming together at a certain point. The similarity in meaning between consonant-final *foule* or *cohorte* and this vowel-final *cohue* might have suggested that all three would have the same word-final pronunciations. These different patterns suggest that different semantic properties within their meanings are associated with different classifications. In the case of *cohue*, its meaning stresses notions *confuse*, *désordonnée* 'confused, disorganised ('untidy') that come about when people are moving in different directions in the very same location.

The basic meaning for *compagnie* 'company' has no requirement for the immediate physical

presence of the other individual/s included in the collective, only to their 'presence nearby'. In its extended meaning *compagnie* 'permanent theatrical group' includes actors and all the other personnel behind the scenes, directing, giving technical personnel, etc., who are readily identifiable as part of the group, integral to it, but who work in different areas, at different times, etc. These notions are not found amongst feminine nouns in the consonant-final set.

Many of these collectives pertain to individuals living in widely differing locations – different regions, countries, continents – but this does not constrain their membership of a collective whole in any way, eg. *diaspora*, *ethnie*, *gent*, *humanité*, *parenté*, *population*, *tribu*. The dispersed nature of such groups, the lack of requirement for immediate physical connection or adjacency between each of the individuals making up the whole, provides a considerable contrast to the otherwise typical notion central to any 'collective', where objects can be considered as a collective because they are located together, as occurs among feminine consonant-final collectives such as *bande*, *caravane*, etc.

Three nouns in this vowel-final set, *assemblée*, *réunion* and *société* share a property not found amongst the consonant-final set. Although each occurs in a context in which referents come together to form a mass in the same way as *foule*, these collectives denote groups that have met in the past – as inferred in the term *réunion* and in its description *se retrouver ensemble* (LRPT, 1994:984), 'to come together again'. The three nouns *assemblée*, *réunion* and *société* each involve some kind of habitual gathering, one that is regular – even between the same individuals – at recurring intervals although the interval between repetitions may vary. The precise nature of these attributes and their association with the classification of these nouns is not yet clear.

This analysis suggests that feminine vowel-final collectives are related in the following ways:

- widely dispersed, eg. *diaspora*, *ethnie*, *humanité*, *population*, *tribu*,
- in different households, eg. *smala*
- working together although at different times/in different places, eg. *compagnie*
- bloodline from only one side, eg. *lignée*, *parenté*,
- meeting habitually, eg. *assemblée*, *réunion*, *société*,

- disorderly movement caused by people moving in different directions, eg. *cohue*
- related to a single species, eg. *gent, humanité, population*

In summary, feminine collective nouns, both consonant-final and vowel-final, deal with single groups of individuals according blood, leadership, task, hereditary, religious or social conditions, physical location, eg.

- blood, eg. *descendance, race, parenté, lignée, postérité*
- origins, eg. *race*
- leadership, eg. *bande, famille, smala*
- task, activity, eg. *caravane, équipe, compagnie*
- hereditary, religious, or social conditions, eg. *diaspora, ethnîe, gent, population, tribu*
- located together, eg. *bousculade, foule, multitude, assemblée, cohue, réunion, société.*

The different word-final pronunciation patterns suggest different attributes related to the basis on which a collective is formed, and there are some significant differences between consonant-final and vowel-final feminine nouns which will continue to be explored.

#### 8.4.3 Masculine collective nouns - vowel-final and consonant-final

Nearly 80% of collective nouns denoting human beings are feminine. However, the database includes a small set of 19 masculine nouns that can apply to collectives of humans, including those set out in Table 8.10 according to their word-final pronunciation patterns.

Table 8.10: Masculine collective nouns denoting human referents

Vowel-final nouns		
<i>attroupement</i>	M	'riot', <i>rassemblement tumultueux, fortuit</i> 'gathering formed by chance, in public thoroughfare' (<atilf.atilf.fr>, 2006, LRPT, 1994:75)
<i>clan</i>	M	'clan', collective of families having a common ancestor; also (mod.) small group of friends united by a common interest (LRPT, 1994:194)
<i>jupon</i>	M	(informal, fig.) 'women', 'young' women, as in <i>Courir le jupon</i> 'run after women' (LRPT, 1994:639)
<i>peloton</i>	M	'peleton', compact group of competitors bunched together (dimin. of ' <i>pelote</i> 'ball formed by tightly winding strings of rubber around and around' (LRPT, 1994:827); large group of competitors unable to keep up with front-runners

<i>populo</i>	M	(fam.) <i>grand nombre de gens</i> 'large number of people'; the various groups below upper class ( <i>élite</i> ) and middle class ( <i>bourgeoisie</i> ) (LRPT, 1994:872)
<i>tas</i>	M	(pej.) <i>grande nombre de gens</i> 'huge number of people' (LRPT, 1994:1093)
Consonant-final nouns		
<i>chœur</i>	M	'choir', gathering of singers who sing a piece of music together (chorus, body of dancers and singers (LRPT, 1994:186)
<i>gang</i>	M	'gang', English loan word, in the sense of a number of gangsters brought together to a commit criminal act (LRPT, 1994:509, CED, 1986:624)
<i>homme</i>	M	'humanity', suggested to be the collective sense of <i>homme</i> as <i>être humain</i> , ... <i>Les hommes ou (collectif) l'homme</i> (LRPT, 1994:562)
<i>lignage</i>	M	'lineage', all/any of the different branches of blood relatives, forebears in the family tree, in direct descent from a common ancestor (<atilf.atilf.fr>, 2006, LRPT, 1994:665)
<i>orchestre</i>	M	'orchestra', large group of musicians performing together on a variety of musical instruments, or small group who play different but related instruments (LRPT, 1994:792)
<i>peuple</i>	M	'people', all the individuals who form a nation; different groups who form a cultural community through a shared common origin (LRPT, 1994:840)
<i>public</i>	M	'public', 'people at large', the general mass of the population; also, a part or section of the community esp. at artistic events interested in a performer or body of work (LRPT, 1994:914)

Some of the masculine nouns are very old, *lignage* appearing in literary records circa 1050 (<atilf.atilf.fr>, 2006), while others are relatively recent entries. Some of these masculine nouns are vowel-final including the loan word *clan* [ klɑ̃ ] (COFED, 1985:104) and some are consonant-final including the loan word *gang* [ gɑ̃g ] (LRPT, 1994:509) and the adjectival substantive, *public*.

This small set of masculine nouns contrasts with the extensive sets of feminine collective nouns, and meanings suggest that an explanation for the different gender assignments lies beyond their composition as sets of human beings even in their composition as sets of 'males', or sets of 'males and females'. And while one of these nouns, *peloton* is a figurative extension of a diminutive noun and another, *public*, is derived from the masculine form of an adjective, the principles that can account for these masculine terms denoting groups of humans where most are feminine – and neither relate to biological sex – need to be made more transparent.

The meaning of *atroupement* (<atilf.atilf.fr>, 2006) places particular significance on time, place and manner of this group's composition – unpredictable in its encounters, movement and activities such that it can explode in a way that threatens public order. Something of the unpredictable nature of encounters appears to apply also to *jupon* but not as a gathering but as a number in a disconnected sequence.

The definition in LRPT (1994:194) shows the meaning of *clan* in its Gaelic sense as a collective composed of families (*parents*, ie. 'relatives') sharing a common chieftain, and another slightly different sense as an ethnic group having their origins in the same ancestor. The first is much like the feminine noun *smala* while the latter is much like feminine nouns *race*, even *lignée*, which relates to 'offspring' as a single line of descent from a common ancestor. There is an added sense for *clan* in that it relates to people 'anywhere', a notion that is suggested above to be associated with vowel-final pronunciation for *gens*. The precise nature of meanings of related terms *lignage* and *lignée* and their different gender assignments require further examination.

The collective loan word *gang* 'gang (of criminals)' is made up of individuals who do may or may regularly work together but who bring to the group the required range of different skills required (lock picker, safebreaker, explosives expert, getaway driver, etc.) to accomplish the specific job, in much the same way as for *orchestre* or *ensemble* in relation to a specific musical performance. Thus, although members have the same end goal, the crucial attribute appears to be the diversity of elements within the collective. The meaning of the masculine *gang* is very close to that of *bande*, a feminine noun which also denotes a group of criminals committing a crime together. It is interesting to note that the gender assignment of *gang* in Canadian French is feminine (<atilf.atilf.fr>, 2006). These different gender assignments require an explanation. It is possible that for *gang*, the most crucial attribute for mainland French speakers relates to the different tasks required of different members for the group to achieve a successful outcome, while for Canadian French the shared goal more crucial – the different classifications relating to more than one salient attribute in the meaning of *gang*, associated with different genders.

Nonetheless, for mainland French the meanings of *atroupement* and *gang* share a composition

based on difference, in the case of *attroupelement* relating to coming together of different groups from different directions, and in the case of *gang* the assembling of individual members for a specific purpose because it requires different skills. Both of these nouns are masculine, a predictable outcome for a system in which 'same' is associated with feminine gender and 'different' with masculine gender. One could argue that members of the feminine *équipe* 'team' have different tasks, eg. forward, winger, goal-keeper, defence, etc., a context which would suggest masculine in the same way as *gang*. Although individual roles may vary amongst members of an *équipe*, its application is restricted to those on the same side.

Other similarities in meaning between masculine and feminine nouns can also be found, eg.

- *attroupelement* (M) and *cohue* (F) where gatherings form and reform
- *peloton* (M) and *équipe* (F), groups pursuing the same activity
- *populo* (M), *public* (M), *foule* (F) and *multitude* (F), large groups of people *en masse*
- *peuple* (M), *homme* (M) and *humanité* (F), the human race
- *peuple* (M) and *nation* (F), relating to sovereignty
- *clan* (M) and *smala* (F), cultural terms for groups formed around a leader.

It is interesting to compare these last pair, *clan* and *smala*. In the case of *smala*, the collective includes the entirety of people and belongings associated with the leader, *réunion de tentes abritant la famille, le personnel, les bagages d'un chef arabe* 'gathering of tentes sheltering the family, personnel, equipment of an Arab sheik' (LRPT, 1994:1041). *Clan* includes the 'living and the dead' linked by 'blood and surname', and *smala* includes 'people and equipment', and combinations of 'different' kinds are suggested to be associated with masculine gender – but not where they are mutually exclusive, as for 'the living and the dead' since it these are mutually exclusive attributes and cannot both be salient at the same time. This has some implications for the masculine collective *homme* discussed below. However, among groups related to a 'household', there is a sense in which living in close proximity is crucial for *famille* in its application to people living together *sous le même toit* 'under the same roof' (LRPT, 1994:455) while for *smala* the various members live in quite separate accommodations, and for *clan* in different locations.

In summary, contexts in which masculine groups are formed reflect those of the feminine nouns:

- gathered together, eg. *attroupement* (M), *cohue* (F)
- common activity, eg. *chœur* (M), *peloton* (M), *équipe* (F)
- similar purpose, eg. *gang* (M), *bande* (F)
- related by blood, eg. *lignage* (M), *lignée* (F), or ancestry, eg. *clan* (M)
- dispersed in place, eg. *diaspora* (M), *peuple* (M), *colonie* (F), or time, eg. *jupon* (M)
- cultural or ideological community, eg. *peuple* (M), *populo* (M), *pègre* (F), *élite* (F)
- the same leader, eg. *clan* (M), *gang* (M), *bande* (F), *smala* (F)
- people in general, eg. *groupe* (M), *public* (M), *population* (F)
- the human race, eg. *peuple* (M), *genre humain* (M)

The similarities in meaning between nouns with different gender assignments evident in the above groups, and variation between vowel-final and consonant-final pronunciations for both masculine and feminine sets of nouns, reveal certain attributes that at this stage are of little assistance in identifying more specifically those that might be associated with gender and those associated with word-final pronunciation. In earlier analyses of other categories, particularly of fruits, a comparison of like entities allowed certain features involved in the classification process to become more transparent. Such a process may be helpful in the case of collectives, and is presented below.

#### 8.4.4 Collective nouns – word-final pronunciation

While word-final pronunciations are not analysed amongst these sets, several attributes that are also crucial to certain meanings stand out. For instance, the noun *caravane* identifies a group of people travelling together in the same direction, and this notion 'moving in the same direction' is also found for *bousculade*, *bande*, even *foule* and *monde*, while the meaning of *cohue* identifies people merging together from different directions, as does *attroupement*. These nouns suggest that a contrast between movement in the same direction and movement from opposite directions may be associated with contrasts in consonant- and vowel-final pronunciations for these nouns.

However, while the term *procession* also suggests moving in the same direction, more



importantly it also relates to habitual gatherings, as do other nouns such as *réunion* and *assemblée*. Other attributes are also suggested, for instance *lignée*, which relates to only a part of one's bloodline while *lignage* suggests both sides, matrilineal and patrilineal, an 'aggregate' or whole. These and other attributes will be explored more fully in the detailed analysis of variations in word-final pronunciation patterns below.

## 8.5 Collective nouns in related sets

It is clear that as individuals, people can be linked collectively in certain contexts identified above, eg. blood relationships, cultural or social conditions, common activity or purpose, *en masse* in countless numbers, etc. Collective nouns are analysed below in related sets as identified above.

### 8.5.1 Kinship groups - related by blood, marriage

Collective nouns in this set cover groups of people related to each other through family connections, and they are set out in Table 8.11.

Table 8.11: Collectives relating to kinship

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#### Masculine vowel-final noun

<i>clan</i>	M	'clan'	related by blood and surname	one side only (male)
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#### Masculine consonant-final noun

<i>lignage</i>	M	'lineage', family descent	related by blood and marriage	every line and branch
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#### Feminine vowel-final nouns

<i>dynastie</i>	F	'dynasty'	related by blood, succession of important or significant family line	one branch only
<i>lignée</i>	F	'issue'	single continuous bloodline	one branch only
<i>parenté</i>	F	1. 'kin', 'relationship' 2. relatives and <i>alliés</i> (close family friends)	blood relatives connected by one degree relations established by closeness	one branch only part from one set, part from another set

#### Feminine consonant-final nouns

<i>descendance</i>	F	'offspring'	related by the same antecedence	whole group
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<i>famille</i>	F	'family' (father, mother, child/ren, servants, etc.)	inhabiting the same household	everyone (incl. servants, etc.)
<i>progéniture</i>	F	'progeny', immediate descendants'	same bloodlines	whole group
<i>race</i>	F	distinguished family in its continuity	same point of origin	whole group

These relationships are established not only by blood but by other societal parameters such as surname and marriage as well as physical or emotional proximity. For instance, membership of a *clan* in its Gaelic sense relates to a single bloodline back to a common male ancestor. Over time any direct connection may be lost while the connection can be established, or maintained, through the same surname. This collective is thus forged from two quite different sources. This is not unlike *lignage*, which relates to all the lines of descent established through marriage and blood, two quite different sources associated with different classifications – although not mutually exclusive.

Where kinship or ethnic or family groups are derived from quite 'different' sources or connections, denoting nouns appear to be masculine, but where all members are connected in the same way – bloodline/s (*lignée, progéniture, descendance*), household (*famille*), or proximity established over time, as for *parenté* in its application to *alliées*, denoting nouns appear to be feminine.

The association between 'different' and masculine gender assignment for *clan* and *lignage* is consistent with earlier examples, such as *attelage* (M) 'work team' of one or more animals plus all the equipment, yoke, straps, parts, etc. that create a team (see §6.3.1), and *bocage* (M) 'weald', a mixture of open fields and areas planted with trees (see §7.3.1). Perhaps the same principle that motivates masculine gender assignment for 'unlike' elements in a semantic sense is operating also in a grammatical sense where 'unlike' agreements resolve to the masculine.

It is noted that the masculine noun *genre* once had the same collective meaning as *descendance* (F) 'offspring', suggested in LRPT (1994:517) to be derived from the Old French infinitive form *gendre* 'to be born'. However, this sense has now disappeared from its meaning, possibly

since its masculine gender assignment would have conflicted with other equally old but feminine nouns also meaning 'offspring', (<atilf.atilf.fr>, 2006), such as the fourteenth century *posterité* (F) 'descendants', *progéniture* (F) 'offspring', even the fourteenth century *famille* (F) '(immediate) family'. In its current meaning, *genre* is discussed further below with collective nouns that mean 'humans, in general'.

The noun *dynastie* can apply to both a succession of heads of the same family and to a succession of famous 'males' within the same family, eg. *la dynastie des Bach* 'the Bach dynasty' (LRPT, 1994:351), but this application to 'males' is not sufficient to bring about correlating masculine gender assignment. Nor can the combination of 'male' and 'female' bring about masculine gender assignment for any of these nouns, including *famille*, as appears to be the case for *gens* (M/F) 'people', examined below.

In regard to variations in word-final pronunciation among these nouns, other crucial attributes mentioned in definitions include 'one side of the family', that is, patrilineal line, or matrilineal line – but not both, eg. *parenté*, *lignée*, *clan* as single lines leading from or back to a single ancestor. Such terms that include only 'part' of one's bloodline appear to be vowel-final. For kinship collectives that include 'all' bloodlines, on 'both sides of the family', every possible proximal connection, eg. *famille*, *race*, *lignage*, etc., nouns appear to be consonant-final.

These contrasts in meaning suggest that some kind of opposition between 'part' and 'all/whole' may be related to contrasting vowel- and consonant-final pronunciation patterns among kinship terms. These oppositional notions were also observed earlier, particularly in collective terms with contrasting word-final pronunciation patterns, such as the consonant-final *flore* (F) 'flora', the totality of plant life in a given area, or *arbre* (M) 'tree' including its trunk, leaves, branches and roots, and the vowel-final collective term *fruit* (M) 'fruit', which refers to the parts of a plant that contain the seeds (see §7.9.1).

The contrast between 'part' and 'whole' will continue to be of interest particularly in the different ways that they may be considered since 'part of a whole' can be differentiated from both 'whole',

and 'whole of a part'. These very different ways of regarding a 'quantity' can be observed in nouns which relate to 'part' of a whole, eg. *fragment* (M) 'fragment', *morceau* (M) 'bit', *division* (F) 'division' and *section* (F) 'section' and like *parenté* they, too, have vowel-final pronunciation, while *corps* (M) 'trunk', *tranche* (F) 'slice' and *part* (F) 'part' identify the whole of a part and these nouns all have consonant-final pronunciation. However, the principle underpinning distributions that find 'part' is associated with vowel-final pronunciation and 'whole' with consonant-final pronunciation is not clear at this stage. Nor is there any explanation for an association between conjunctive or spatial relations of quantity with contrasting word-final pronunciations rather than gender. For a notion such as 'whole' that links all the adjacent parts, it is perhaps not unexpected to find it associated with consonant-final pronunciation, the pattern more commonly associated with feminine gender – if not 'female', through whom one generation is linked to the next.

A noun not previously cited, *maisonnée* (F) 'household', all the people living in the same house, does not have precisely the same sense of 'relatedness' as *famille*, yet fits best in this set. It shares something of the meaning of *famille* (F) as a set of people sharing the same residence and both nouns share the same feminine gender assignment. However, this noun is vowel-final where *famille* is consonant-final pronunciation, and it is yet to be accounted for.

### 8.5.2 Common activity, task, interest

Many collective nouns relate to a shared activity or task of some kind, as in Table 8.12 below.

Table 8.12: Collectives relating to shared activity, task, interest, belief, opinion

#### Masculine and vowel-final

<i>clan</i>	M	'clan', (mod.) small group of friends with shared interests, tastes	<ul style="list-style-type: none"> <li>• small in number</li> <li>• spread far and wide</li> </ul>
<i>peloton</i>	M	1. 'peloton', small group of competitors bunched together  2. all those competitors unable to maintain contact with leaders in race	<ul style="list-style-type: none"> <li>• small group</li> <li>• separated from others</li> <li>• diverse elements</li> <li>• part of a larger set</li> </ul>

#### Masculine and consonant-final

<i>chœur</i>	M	'choir', group of people who sing a piece of music together, or	<ul style="list-style-type: none"> <li>• whole set</li> <li>• perform together</li> </ul>
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<i>conseil</i>	M	'council', members elected for a specific period	<ul style="list-style-type: none"> <li>• diverse ministries</li> <li>• for duration of period</li> </ul>
<i>gang</i>	M	'gang', (Engl.) number of gangsters brought together to a commit a criminal act	<ul style="list-style-type: none"> <li>• diverse skills</li> <li>• connected to end point</li> </ul>
<i>orchestre</i>	M	'orchestra', group of musicians playing variety of instruments	<ul style="list-style-type: none"> <li>• diverse instruments</li> <li>• regular gathering</li> </ul>

#### Feminine and vowel-final

<i>assemblée</i>	F	'assembly', people regularly gathering together from different areas for a common purpose	<ul style="list-style-type: none"> <li>• common purpose</li> <li>• habitual gathering</li> </ul>
<i>coterie</i>	F	'faction', 'coterie', exclusive group of friends supporting a common interest	<ul style="list-style-type: none"> <li>• common interest</li> <li>• habitual gathering</li> </ul>
<i>procession</i>	F	'religious procession' accompanied by singing and praying	<ul style="list-style-type: none"> <li>• same activities</li> <li>• spread out; habitual</li> </ul>
<i>réunion</i>	F	'reunion', 'gathering' of a certain number of people in same place for shared reason	<ul style="list-style-type: none"> <li>• common purpose</li> <li>• repeat of gathering</li> </ul>
<i>société</i>	F	'gathering of people between whom exists an organised and lasting rapport'; habitual company for pleasure, support	<ul style="list-style-type: none"> <li>• shared emotional rapport</li> <li>• habitual gathering</li> </ul>

#### Feminine and consonant-final

<i>basoche</i>	F	'(pej.) legal fraternity'; body of clerks attached to courts of justice'	<ul style="list-style-type: none"> <li>• same activities/tasks</li> <li>• connection endures for length of appointment</li> </ul>
<i>cabale</i>	F	'cabal', secret group of several people plotting together	<ul style="list-style-type: none"> <li>• same goal</li> <li>• connection endures for length of time required to accomplish goal</li> </ul>
<i>caravane</i>	F	'caravan', company travelling together (through unsafe terrain)	<ul style="list-style-type: none"> <li>• same goal</li> <li>• endures uninterrupted to end point</li> </ul>
<i>équipe</i>	F	'crew', 'team', group of people facing <i>une finalité commune</i> 'common end'	<ul style="list-style-type: none"> <li>• same team</li> <li>• whole group</li> </ul>
<i>jurande</i>	F	(hist.) 'jury', those elected to serve as members of the jury	<ul style="list-style-type: none"> <li>• same task</li> <li>• enduring until end point</li> </ul>
<i>marmaille</i>	F	group of <i>jeunes enfants</i> crying, agitated (usu. pej., condescending)	<ul style="list-style-type: none"> <li>• same voice</li> <li>• duration of single event</li> </ul>
<i>peuplade</i>	F	(antiqu.) group of people sent to populate a new region	<ul style="list-style-type: none"> <li>• same activity</li> <li>• enduring connection</li> </ul>

<i>secte</i>	F	'group of people who follow the same religious doctrine'	<ul style="list-style-type: none"> <li>• same belief</li> <li>• enduring connection</li> </ul>
<i>troupe</i>	F	'troop', group of people journeying, or performing together	<ul style="list-style-type: none"> <li>• same purpose</li> <li>• enduring to end point</li> </ul>

It is noted that the noun *peloton* (M) 'peloton' is used in extension from its origins as a diminutive, *petite pelote* 'small pelota ball' (<atilf.atilf.fr>, 2006) and has more than one sense. It can apply to competitors in a race as a 'tight bunch forming a small group', but also to the larger group of competitors unable to keep up with the front-runners, as in the Tour de France. One can consider that these two meanings suggest very different attributes – 'quantifiable' in relation to its small size, and 'diverse', the 'mix' of individuals and/or teams competing against each other. These different meanings of *peloton* can be observed in *conseil* in its collective sense as 'board', 'council', a quantifiable number of people, from diverse sources, with diverse views.

While the notion 'acting in concert' mentioned above in relation to feminine gender assignment might be considered to apply to both *orchestre* (M) 'orchestra' and *équipe* (F) 'team', masculine gender may relate to the different instruments and different lines that create the performance. They suggest that different attributes, associated with contrasting classifications, may be salient. For some nouns, *conseil* (M) 'council', *chœur* (M) 'choir', *gang* (M) 'gang' and *orchestre* (M) 'orchestra', 'council, diversity appears fundamental to successfully accomplishing their purpose, while members of a *gang* carry out very different tasks.

Amongst feminine collectives *cabale*, *troupe*, *assemblée*, *basoche*, *coterie*, *procession*, individuals have the same purpose, perform the same activities, share the same interests, even *équipe* (F) 'team' which involves only players on the same side, or *caravane* (F) 'caravan', whose members seek safety by travelling on together.

In several cases there are direct contrasts in meaning, eg. as between *conseil* (M) 'council', and *cabale* (F) 'cabal', or between *orchestre* (M) 'orchestra' and *chœur* (M) 'choir' where members act in concert using different voices, pitch, entrances and exits to create the complexity of sound, unlike *marmaille* (F) in its application to the cries of tiny tots which have the same high pitch

and level of intensity; likewise, in its sense as 'noisy brats' membership of the group is restricted to those participating in the same way. Members of a *peloton* (M) 'peloton' are in competition against each other while members of an *équipe* (F) 'team' are all on the same side.

Thus, while the members of any *orchestre*, *gang* or *équipe* share the same goal, memberships for *orchestre*, *gang* and other masculine collectives in this set rely on difference or diversity in their make-up. For *équipe* and other feminine collectives membership is forged through 'sameness'. The association comparatively small numbers – a 'quantity' – suggested in certain applications of masculine nouns *clan* and *peloton* will continue to be explored.

Word-final pronunciations are not yet discussed. The consonant-final *équipe* applies not only to players on the field but those on the bench – the whole team, in much the same way as *orchestre*. These terms can be contrasted with both meanings of the vowel-final noun *peloton* that apply to part of a larger set. Some collectives continue for the duration of the shared goal, task or until a termination point is reached, eg. *cabale*, *conseil*, *jurande*, *peuplade*, *marmaille*, *secte*. While *caravane* identifies people moving forward together, other collectives occur when members return to some place, such as *assemblée*, *coterie*, *procession*, *réunion*, *société*, etc. However, *maisonnée* applies to the inhabitants of a household, those who come and go from the same house. Some meetings suggest a 'habitual' or 'regular' notion, for instance, *procession*, which may recur several times per day according to the religious calendar while for *assemblée* gatherings may be a daily event for a specific period such as the life of a school term. For others such as *société* and *coterie* meanings suggest a intermittent but frequent to the extent that it is seen as characteristic. However, for *réunion* the interval of time between one meeting and the next is possibly too long to be regarded as habitual, eg. an annual gathering of (almost) the same individuals for a village festival, or a milestone year for a school reunion. There is certainly a sense of 'going back' for *réunion*, although the precise nature of any association with vowel-final pronunciation for this noun, or with others, is unclear.

Regardless of the extent of the interval between any two meetings of the same group, collectives whose members meet regularly or habitually appear to have vowel-final pronunciation. One

might argue that *équipe* 'team' has something of this sense in that it meets regularly over the life of a season. However, for each new game a new team is selected and the 'whole' team lasts only for the duration of each game. This process distinguishes the consonant-final *équipe* from the vowel-final *réunion*, *procession*, etc. but precisely how it relates to consonant-final pronunciation is as yet unclear.

While the various notions, travelling on, coming and going out, intermittent gathering, whole and part and their potential association with different word-final pronunciation patterns do not provide a precise contrast with each other, the potential exists for them to operate elsewhere in the system. It is possible that 'habitual' or 'regular' repetitions elsewhere in the lexicon may also be associated with vowel-final pronunciation, as for *carillon* (M) 'peal/ringing of bells', while something that continues until an end point might be associated with consonant-final pronunciation, eg. *la grippe* (F) 'influenza'. These contrasts can be observed in concepts that are related, eg. *pluie* (F) 'rain', intermittent or regular precipitation from clouds which is vowel-final, whilst two other nouns that denote rain, eg. *déluge* (M) 'deluge', 'downpour' and *tempête* (F) 'tempest' cover the duration of its falling in a single instance. The various notions identified here will continue to be explored in the analysis of other collective terms.

### 8.5.3 Origins, homeland

A number of collective terms also identify humans in groups relating to their origins, as in Table 8.13 below.

Table 8.13: Collectives relating to origin, homeland

Masculine noun			
<i>peuple</i>	M	'people', all the individuals who form a nation or cultural community although not having the same origin	<ul style="list-style-type: none"> <li>• different origins</li> <li>• forming a whole</li> </ul>
Feminine nouns			
<i>colonie</i>	F	'colony', body of people separated from homeland but maintaining ties with it	<ul style="list-style-type: none"> <li>• same origin</li> <li>• separated from larger whole</li> </ul>
<i>diaspora</i>	F	'Diaspora', population throughout the world of Jewish people in exile from their country'	<ul style="list-style-type: none"> <li>• common origin</li> <li>• separated from each other</li> </ul>



<i>ethnie</i>	F	any people related by language and culture'	<ul style="list-style-type: none"> <li>• common language, culture</li> <li>• part of larger whole</li> </ul>
<i>gent</i>	F	'species', 'race', identified by shared physical characteristic	<ul style="list-style-type: none"> <li>• same species (origin)</li> <li>• in different locations, as part of larger set</li> </ul>
<i>tribu</i>	F	(anc.) 'tribe', an ethnic or ancestral division in ancient cultures'	<ul style="list-style-type: none"> <li>• common cultural/racial origins</li> <li>• part of a larger whole</li> </ul>
<i>peuplade</i>	F	(antiq.) group of people sent to populate a new region	<ul style="list-style-type: none"> <li>• common origin</li> <li>• whole of a part</li> </ul>
<i>race</i>	F	ethnic group which differentiates itself from others by hereditary physical characteristics	<ul style="list-style-type: none"> <li>• same species</li> <li>• whole of a part</li> </ul>

Analysis of the meanings of these nouns related to homeland or origin reveals that collectives of individuals who share a common origin, eg. *colonie*, *ethnie*, *race*, etc., are feminine. The single collective denoting individuals who form a nation but may not necessarily share the same origin, eg. *peuple*, is masculine.

A number of these collectives may also apply to other zoological species, eg. *gent canine* 'canine species', *race chevaline* 'horse species', but they apply to a single taxonomic group whose members are considered to share the same evolutionary origins and their application in this sense is consistent with that of the 'common origin' of the applications of these nouns to human beings.

Collectives originating from a larger group have vowel-final pronunciation, eg. *ethnie*, and *tribu*, which denotes a part of a larger set – any of the twelve tribes of Israel, or one of the three divisions of ancient Romans (Latins, Sabines and Etruscans), etc. This set also includes the vowel-final noun *gent* (F) 'species', which forms part of a more comprehensive whole, 'genus'. Collectives whose meaning concerns 'whole', every possible member in that domain, have consonant-final pronunciation, eg. *peuple*, *race*.

There is also the attribute 'apart', 'separated' for vowel-final nouns *colonie* (F) 'colony' as a body of people separated from their homeland, and *diaspora* (F) 'body' of people exiled from their homeland. Both of these meanings seem to have some similarity with *peuplade* (F) 'group of people sent to populate a new region', although they have different word-final pronunciation

patterns. However, for *colonie* and *diaspora* a crucial aspect of their meanings is that they were once part of a larger group, while for *peuplade* the salient notion of its meaning suggests it forms the 'whole' of a part. In their association with contrasting vowel- and consonant-final nouns, these attributes are consistent with the binary contrast between 'a/part' and 'whole' identified above in relation to kinship terms.

#### 8.5.4 Leader and retinue

Table 8.14 includes collectives of groups gathered around a leader, both literally and figuratively.

Table 8.14: Collectives relating to leader and retinue

Masculine noun			
<i>clan</i>	M	'clan', families connected by a common ancestor	<ul style="list-style-type: none"> <li>• distant connection</li> <li>• various households</li> </ul>
Feminine nouns			
<i>bande</i>	F	'group of people (especially rebels, miscreants) fighting together under the same leader'	<ul style="list-style-type: none"> <li>• directly linked</li> <li>• perform together</li> </ul>
<i>quadrille</i>	F	team of <i>toreros</i> working alongside <i>matador</i> (principle bullfighter)	<ul style="list-style-type: none"> <li>• directly linked</li> <li>• perform together</li> </ul>
<i>smala</i>	F	family and retinue of Arab sheik in their different tents, etc.	<ul style="list-style-type: none"> <li>• directly linked</li> <li>• various households</li> </ul>

Some of these groups are formed around a leader who is alive – the feminine nouns – and one who is long gone – the single masculine noun. However, a more likely explanation for the different gender assignments of these nouns is the direct link between members of each group for the feminine nouns in contrast to the absence of any direct connection between families linked to each other through an ancestor. Differences in word-final pronunciation patterns can be argued to relate to spatial contrasts between 'together' and 'separate' – 'together' associated with consonant-final pronunciation for *bande* and *quadrille*, 'separate' associated with vowel-final pronunciation for *clan* and *smala*.

#### 8.5.5 Gatherings related to quantity

Among collective nouns denoting humans are those that suggest a certain quantity. They are set out in Table 8.15 below according to their different gender assignments.

Table 8.15: Collectives relating to quantity

Masculine, vowel-final			
<i>ramassis</i>	M	'heap'	(pej.) gathering of people of little value (LRPT, 1994:934)
<i>tas</i>	M	'heap'	(pej.) <i>grande nombre de gens</i> 'large number of people piled together (as with other objects that can be piled up since they are inanimate)
Masculine, consonant-final			
<i>ensemble</i>	M	'group'	group of several people gathered together for some time; extend to inanimate objects (LRPT, 1994:393)
<i>groupe</i>	M	'group'	several people gathered together in the same location (LRPT, 1994:539)
<i>monde</i>	M	'world'	group of people gathered together, restricted to a certain location (LRPT, 1994:737)
Feminine, consonant-final			
<i>foule</i>	F	'crowd'	an unquantifiable mass gathered together at the same time and in the same location
<i>multitude</i>	F	'multitude'	huge numbers in an unquantifiable mass

As quantities, one might expect masculine gender for all while the meanings of both *tas* and *ramassis* suggest 'pile', an amount that is 'unquantifiable'. *Tas* suggests a mass formed by inanimate parts tiny enough to be piled up and its application to humans conveys that same sense of entities tiny in size and less than human – 'inanimate' objects for which masculine gender is not unexpected. The noun *ramassis* is derived from the same stem as *ramas* (M) 'pile/heap' and *ramasser* to 'draw together into a mass' and suggests the drawing together of previously scattered objects that are both inanimate and of little value. In its application to humans *ramassis* conveys this same sense of a 'pile' both 'less than human' and certainly 'of little value'. For both nouns masculine gender and vowel-final pronunciation remove any potential connection with attributes such as 'living/animate' or 'motile'. The use of the masculine term *jupon* (M) 'skirts', provides a similar dehumanising in relation to the sequence of sexual partners; this masculine noun identifies that sense in a way that the feminine noun *jupe* (F) 'skirt' would not. The association between 'impersonal' and masculine gender for *tas*, *ramassis* and *jupon* is consistent with the same association for *vif* (M) 'a living body', discussed for superordinate terms earlier in the chapter.

These masculine otherwise neutral terms that become pejorative when applied to a human being can be compared with feminine nouns with a slightly pejorative sense, e.g. *basoche* (F) 'gathering of *gens de justice*', and *populace* (F) 'low people', also *tourbe* (F) 'rabble'. The more pejorative nature of the masculine terms is generated not by that gender assignment *per se* but to their semantics since and the implication that the human referents in collectives denoted by *tas*, *ramassis* and *jupon* are 'inanimate', of such little account that they can be treated as 'inanimate'.

For *monde*, a group whose mass is limited or 'constrained' the size of the location in which it takes place, previous evidence of these same notions are also found to be associated with masculine gender in the analysis of birds (see Chapter 4). Definitions of *ensemble* and *groupe* both include *plusieurs* 'several' which meaning, in French and English, suggesting 'more than a few' but still a 'relatively small number' of individuals, in such quantity as is possible to count.

The masculine nouns contrast with the feminine nouns *foule* and *multitude* which also identify human beings gathered together in the same location – in such enormous numbers that they are rendered countless. These differences in meaning and gender for *ensemble* and *groupe* on the one hand, and *foule* and *multitude* on the other, suggest that some meanings relating to human beings assembled together may relate to differences in quantity, masculine gender for meanings that imply a 'number' one the one hand, and feminine gender for meanings that imply such quantity that number becomes 'countless' or 'unquantifiable' on the other hand.

In terms of word-final pronunciations for these masculine nouns, vowel-final pronunciation for *tas*, *ramassis* and *jupon* is suggested to relate to 'non-sensate' for groups of people identified as inanimate objects. Consonant-final pronunciation for nouns such as *foule*, *multitude*, even *monde*, a crowding that results from the physical togetherness of people in the same place – unlike *clan*, where members are spread out, even into other continents. These contrasting notions of 'together' and 'not together' may be associated with contrasting consonant- and vowel-final pronunciations. The notion 'together' can also apply to *caravane*, *ensemble*, *orchestre*, even *groupe* – regardless of whether it is a physical or mental 'drawing together'.

### 8.5.6 Groups based on social conditions

A number of nouns in the database have meanings that convey social divisions based on economic, political or class differences. They are set out in Table 8.16 below.

Table 8.16: Collectives relating to social conditions

#### Masculine consonant-final nouns

<i>cadre</i>	M	'cadre', group of officers and NCOs ( <i>sous-officiers</i> ) (LRPT, 1994:144)	<ul style="list-style-type: none"> <li>• diverse levels</li> <li>• whole group</li> </ul>
<i>monde</i>	M	'upper end of social spectrum', a specific social group, <i>milieu</i>	<ul style="list-style-type: none"> <li>• range of levels (upper)</li> <li>• whole group</li> </ul>
<i>peuple</i>	M	'lower and working class people' ( <i>opp. aux classes supérieures</i> )	<ul style="list-style-type: none"> <li>• range of levels (lower)</li> <li>• whole group</li> </ul>
<i>public</i>	M	'people', the mass of the population	<ul style="list-style-type: none"> <li>• range of levels</li> <li>• whole group</li> </ul>

#### Feminine vowel-final nouns

<i>communauté</i>	F	'community', social group whose members live together sharing their goods between them	<ul style="list-style-type: none"> <li>• single group</li> <li>• part of larger society</li> </ul>
<i>tribu</i>	F	'(mod.) social or political group founded on real or supposed ethnic kinship, in pre-industrial societies'	<ul style="list-style-type: none"> <li>• single group (social, political)</li> <li>• one of many groups (part)</li> </ul>

#### Feminine consonant-final nouns

<i>canaille</i>	F	'rabble', the least worthy	<ul style="list-style-type: none"> <li>• single class (lowest)</li> <li>• whole group</li> </ul>
<i>élite</i>	F	'the élite' ( <i>les plus remarquables</i> 'the most remarkable' in any group or community)	<ul style="list-style-type: none"> <li>• single class (highest)</li> <li>• group includes everyone who fits</li> </ul>
<i>fripouille</i>	F	'riff-raff', 'rabble'	<ul style="list-style-type: none"> <li>• single class (lowest)</li> <li>• everyone who fits</li> </ul>
<i>pègre</i>	F	'criminal class' (formed by thieves, swindlers, pimps, etc.)	<ul style="list-style-type: none"> <li>• single class (criminals)</li> <li>• whole group</li> </ul>
<i>peuplade</i>	F	'(mod.) weakest and least important humans in a primitive society'	<ul style="list-style-type: none"> <li>• single class (weakest)</li> <li>• group includes everyone who fits</li> </ul>
<i>plèbe</i>	F	'(Roman) second order of common people'	<ul style="list-style-type: none"> <li>• single order (second)</li> <li>• whole group</li> </ul>
<i>populace</i>	F	'(pej.) low people', 'rabble'	<ul style="list-style-type: none"> <li>• single class (lowest)</li> <li>• group includes everyone who fits</li> </ul>
<i>racaille</i>	F	'riff-raff', the most lacking in society, <i>gens de rien</i>	<ul style="list-style-type: none"> <li>• single class (poorest)</li> <li>• whole group</li> </ul>
<i>tourbe</i> (syn. <i>populace</i> )	F	(pej.) 'rabble', 'mob'	<ul style="list-style-type: none"> <li>• single class (lowest)</li> <li>• connected by physical proximity</li> </ul>

These nouns relate to subdivisions of society based on economic, political or social status, but they have different gender assignments and different word-final pronunciation patterns.

The noun *cadre* is used in figurative extension from its meaning 'frame' around mirrors, paintings, to a collective of human referents. Its composition in a military sense is made up of officers and non-commissioned officers, two separate, differently ranked groups that would not otherwise be considered together and in the commercial world it applies to the different members who make up managerial staff. In both of these applications, the collective includes two groups that would not otherwise be contiguous in any way, suggesting a membership that is 'disparate', made up of 'unlike' elements.

Meanings of these collectives are based on social divisions. Collectives based on social divisions that include a single kind, either class or race, have feminine gender, eg. *élite*, *pègre*, *tribu*. Collectives made up of more than one social division, 'diverse' elements, eg. *cadre*, *public*, have masculine gender assignment. The different distributions can be clearly observed in nouns with similar meanings, for instance, between *monde* (M) 'upper end of the social spectrum', which combines several levels, and *élite* (F) 'the most remarkable' of any society', a single level, or between *peuple* (M) 'lower and working class', which includes a combination of levels, and *peuplade* (F) 'weakest and least important', a single level. In regard to *peuple*, its meaning suggests that while this collective forms a cultural community, only some share a common origin. While *communauté* may include a range of social or economic levels, it pertains to a single group based on a notion of sharing equally, and valued equally, and is thus compatible with other feminine collective terms in this set. The features 'diverse' and 'same' that relate to these contrasts – groups made up of 'diverse' elements contrasting with groups made up of the 'same' elements – occur regularly in the analysis of related sets, from bloodlines, through to voice, and are consistent in their associations with specific gender assignments, 'diverse' with masculine gender, 'same' with feminine gender.

Word-final pronunciation patterns for nouns in this set are interesting in all but two of these nouns are consonant-final. The meanings of *communauté* and *tribu* suggest that they exist as a

'part' of a wider community, and both have vowel-final pronunciation. Meanings of masculine nouns such as *cadre*, *monde*, *peuple*, etc. relate to a 'whole' created by different parts, and meanings of feminine nouns such as *élite*, *plèbe*, *tourbe*, etc. suggest a 'whole' created by a single group, and thus 'part' and 'whole' can account for the different word-final pronunciations of nouns identifying social groups or divisions of society.

### 8.5.7 Groups on the move

The following nouns in Table 8.17 denote collectives whose meanings involve movement.

Table 8.17: Collectives on the move

Masculine			
<i>attroupement</i>	M	'mob', <i>rassemblement tumultueux</i> , <i>fortuit</i> 'coming together accidentally in the streets in a way that threatens public order'	<ul style="list-style-type: none"> <li>• different groups coming from different directions</li> <li>• coming together from different directions</li> </ul>
Feminine			
<i>cohue</i>	F	(pej.) 'crush', 'seething mob', 'tumultuous disorderly crowd'	<ul style="list-style-type: none"> <li>• uncountable mass</li> <li>• moving in different directions</li> </ul>
<i>flopée</i>	F	(u)ne grande quantité 'large number' appearing, disappearing	<ul style="list-style-type: none"> <li>• too many to quantify</li> <li>• irregular movement, appearing, disappearing</li> </ul>
<i>bousculade</i>	F	'surging crowd', 'crush'	<ul style="list-style-type: none"> <li>• uncountable mass</li> <li>• moving in the same direction</li> </ul>
<i>caravane</i>	F	'caravan'	<ul style="list-style-type: none"> <li>• travelling in the same direction</li> <li>• for the same reason, safety</li> </ul>

The masculine noun *attroupement* relates a group that grows as different groups meet up by chance in the open air, particularly on the streets, a gathering that is likely to give rise to violence. As a collective constructed from different or diverse sources, it shares some similarity with other groups founded in diversity, eg. *orchestre* (M) 'orchestra'.

Meanings of feminine nouns *cohue* and *bousculade* relate to collectives of individual members closely packed together while trying to move, as does *flopée*, which can also apply to groups that appear and disappear as they get swallowed up in a fog (<atilf.atilf.fr>, 12/06/06). *Flopée* might also apply to the 'crush' formed when everyone is trying to catch the same public transport at the rush hour. The term *caravane* suggests moving together, in the same direction, until the end

point of the journey. Thus, for collectives of people on the move, we find 'diverse' in relation to the masculine noun *attroupement*, 'same' in relation to feminine nouns *caravane* and *bousculade*, and to *cohue* as an 'unknown quantity'.

Differences in word-final pronunciation amongst these nouns are suggested to relate to attributes mentioned earlier (in §8.4.4). Both *cohue* and *bousculade* denote 'crush', but for *cohue*, the crush occurs when individuals in the same environment are moving in various different directions, while for *bousculade* the surge occurs when everyone heads for the same point. *Attroupement* concerns people coming together from different locations. However, *floppée* concerns not so much a crowd on the move as a crowd that comes and goes – as when a fog lifts and returns, or when 'rush hour' starts and is quickly over. The three nouns whose meanings relate to 'different directions', or 'coming and going', have vowel-final pronunciation, *attroupement*, *cohue*, *floppée*. The two nouns whose meanings convey a sense of moving towards a point have consonant-final pronunciation, *bousculade*, *caravane*. These results suggest some kind of contrast between the consonant-final 'towards', and vowel-final 'from' or 'coming-and-going'. These notions have not been identified previously and will continue to be explored. What is interesting is that the different nuances in their meanings are made evident in their different gender assignments and different word-final pronunciation patterns.

#### 8.5.8 Collectives of human beings

Certain collective terms apply to humans in a very general sense, and these nouns are further considered as a set in Table 8.18 below.

Table 8.18: Collective nouns denoting 'human beings' in general

Masculine noun			
<i>genre humain</i>	M	'human genus'	taxonomic group containing human species (LRPT, 1994:517)
<i>homme</i>	M	'humanity'	from either a plural or collective sense of <i>homme</i> in its application to <i>l'être humain</i> , <i>en général</i>
<i>peuple</i>	M	'people'	a cultural community living within a society in part sharing a common origin; also, a large number (LRPT, 1994:840)



# Feminine nouns

<i>gent</i>	F	'race', 'tribe',	species; humankind in various applications (lit., jest) (LRPT, 1994:517)
<i>humanité</i>	F	'humanity', 'humankind'	<i>le genre humain</i> (LRPT, 1994:569)

The compound term *genre humain* incorporates the various different species of the genus *Homo* (from the Greek, 'like' or 'same'). While the masculine term *peuple* designates a cultural community part of whom share a common origin, the salient attribute is less one of 'diversity' than one of 'difference', divided from others. The notion 'different' can be more clearly identified in the plural sense 'peoples' of the world, meaning 'all the 'different ones'. The application of *peuple*, a masculine noun, to a large 'number' is consistent with other nouns that identify a 'quantity' of people together, eg. *monde* (M) 'the world', a large number.

The count noun *homme* is suggested to have a collective sense in its application to 'humanity', and certainly some applications appear to convey that sense, eg. *hommes fossiles*, species that have become extinct, or *droits de l'homme* 'human rights' (LRPT, 1994:562). The use of a masculine noun for an 'extinct' species of human life is consistent with nouns in other domains that denote a species rendered extinct, eg. the feminine *tourtre* (F) 'voyager pigeon' which became the masculine *pigeon voyageur* (M) following its extinction, and the number of other nouns denoting extinct animals identified in Chapter 6, all of which are masculine. However, *droit de l'homme* is more problematic in that while its translation as 'human rights' suggests that it applies to all, this was not the case at the time, and its masculine gender contrasts with feminine terms having the same sense.

While the primary application is suggested to identify 'human', as was the case in for the Latin noun *homo* (M/F) 'human', where alternative gender assignments correlated with 'male' and 'female', the term *homme* replaced the Latin term *vir* (M) 'male human', and its masculine gender correlates with its restricted application to 'male' referents. In its extended application, however, obtaining a more collective sense requires that it identify both 'male and female' where terms such as *humanité* have no such obligation – but these attributes are mutually exclusive and both cannot be salient at the same time. This contravention of sense relations makes it difficult for

*homme* to convey a more general collective sense as 'humankind', 'everyone' – either as a collective or a plural count noun without additional explanatory material.

Even as a plural noun, various uses of *hommes* appear to convey 'males' rather than 'male-and-female', as in the following quotation:

*Hommes, soyez humains, c'est votre premier devoir.*

Men, be human, it is your first duty.

(Rousseau (in LRPT, 1994:569) trans. M. à Beckett)

If the semantics of *hommes* contained a broader application to 'humans' (male and female alike), not only would this exhortation be senseless but *soyez humains* would be redundant. Certainly the contrasting meanings of *surhomme* (M) 'superman' – a 'male' – and *surhumain/-aine* (M/F) 'superhuman' – any person – make this point clear. No explanation offered so far provides any consistency for this noun. It is further discussed below.

The singular collective term *gent* (F) 'people', derived from the same stem as *genre* (M) 'genus', applies to entities that are 'alike' or are members of the 'same' species, thus a 'race', 'tribe' or 'people'. With additional lexical detail *gent* can apply to any single species of animal, eg. *gent canine* (F) 'canine species', *gent humaine* (F) 'human species'. It can also be used to identify a group sharing the same feature, eg. *(l)a gent qui porte turban* 'people who wear turbans' (<atilf.atilf.fr>, 2006), and its feminine gender assignment is consistent with that of other collectives whose meanings also relate to 'same'. Today *gent* is used only in a limited way – perhaps to avoid confusion with the commonly-used plural collective noun *gens* (M/F) 'people', an application that is restricted to humans.

*Paire* (F) 'pair' and *couple* (M/F) 'couple' – further discussion of duals

These two duals were mentioned in §7.3.1 of the previous chapter dealing with collective terms, but they are equally relevant to this lexical field.

Applications of the feminine noun *paire* shows that it applies where two entities together in a group or set are considered 'alike' – no matter what kind – since it can apply to *deux choses*, or

*deux personnes semblables* 'two things' or 'two similar people' (LRPT, 1994:804), objects or people. While *couple* is most often found as a masculine noun, as a feminine noun it originally suggested a tie or binding between two (typically like) elements, and in the thirteenth century seems to have acquired a meaning as «*groupe de deux choses de même espèce*» (<atilf.atilf.fr>, 2005) 'group of two objects of the same kind'. In this sense, as a feminine noun it can apply today to 'a couple of hours', or 'a couple of eggs' – two of the same kind.

Early usage of *couple* as a masculine noun at around the same time suggests a «*réunion d'un homme et d'une femme*» – particularly united by ties of love, of marriage (<atilf.atilf.fr>, 2005). Other uses of the masculine form are broader, eg.

(e)nsemble de deux personnes liées par un sentiment, un intérêt quelconque

'two people meeting together through a shared opinion, an interest of some kind', such as *un couple de fripons* 'a couple of rogues/rascals'. This application responds to a less restricted usage than that identifying 'one male and one female', and seems to apply particularly where gatherings of the two are occasional, or short-lived – not otherwise found together. The application to 'one male and one female' can denote animals, particularly two animals yoked together for work, eg. *un couple de bœufs*. Thus, *couple* is feminine when it is intended to suggest either 'two leashed together', as for a couple of dogs on a leash, or 'two of the same kind or species'. Masculine gender applies where two otherwise separate or unrelated people are united by ties of love, marriage, a common interest or shared opinion – the latter two not appearing to require or denote 'male and female'. Masculine gender also occurs where the application is suggested to apply to 'one male and one female' – of any kind, animal and human.

The different gender assignments for *couple* are thus less about semantic oppositions than different features – 'same' and 'like' on the one hand, and 'separate', 'unrelated', and perhaps 'occasional' and 'short-lived' on the other – associated with specific and contrasting gender assignments. These attributes have been identified in earlier, including Chapter 4 in relation to birds, and Chapter 6 to other members of the animal kingdom, and they are consistent in their association with specific and contrasting masculine and feminine gender assignments.

### 8.5.9 Summary – collective nouns

The analysis of collective terms in the database identifying humans shows that collectives are built around certain characteristics:

- kinship relations
- leadership and followers
- culture, religion, belief
- activity, task or interest
- social conditions (economic, political, social)
- source, origins, eg. country of birth/homeland
- nouns used figuratively to denote human referents.
- quantity of individuals making up the collective.

Certain attributes appear to be associated with specific gender assignments. Those associated with masculine gender include:

- 'different' in nature, such as 'blood and surname' for *clan*, 'blood and marriage', eg. *lignage*, or 'diverse' as for the different teams of the *peloton*, the different origins of a *people*, 'diverse' instruments of an *orchestre* or skills of a *gang* or voices of a *chœur*, diverse in social status, eg. *public* (M) 'the public', *cadre* (M) 'cadre', different sources as for *attroupeement*, and different species, eg. *genre*
- any kind of number, eg. *peloton*, *monde*, *ensemble*, *groupe*, *monde*
- 'inhuman', eg. *tas*, or 'worthless', eg. *ramassis*, or both, eg. *jupon*

Those attributes which appear to be associated with feminine gender include:

- 'same' bloodline, eg. *lignée*, or origins, eg. *diaspora*, or culture, eg. *race*, or kind, eg. *humanité*, *gens*, or 'purpose', eg. *assemblée*, *coterie*, *caravane*, or voice eg. *marmaille*, 'same' social stratum, eg. *plèbe* (F) 'second order of common people', or household, eg. *smala*, *famille*, same side, eg. *équipe*
- closeness established over time, eg. *parenté* in its application to 'family friends'
- a number that is 'unquantifiable', 'countless', eg. *foule*, *multitude*, *cohue*, *flopée*, *gens*

There is no example among these collective nouns of gender assignments associated in any way with 'male' and 'female' as it occurs for 'duals' of humans, eg. *paire* (F) 'pair' and *couple* (M) 'couple'. Among the many groups that must entail 'male' and 'female', eg. *famille*, *humanité*, *smala*, or are likely to include both 'male' and 'female' in their mixture, eg. *cohue*, *flopée*, *foule*, *multitude*, such nouns are feminine. Further, 'male' appears to play no role in gender assignment even among groups of male-only referents since it cannot bring about either resolution to 'grammatical' masculine, or correlating masculine gender assignments among such collectives, eg. *dynastie* (F) 'dynasty', a succession of heads of the same family, particular famous 'males' in the same family, eg. *la dynastie des Bach* 'the Bach dynasty' (LRPT, 1994:351), and an old term *basoche* (M) 'legal fraternity' and others in Table 8.8.

The nature of 'unlike' or 'diverse' relates to some property shared or not shared by individuals forming the group. In some cases the collective comes about from the mixture of diverse elements, eg. *peloton* the pack is made up of the 'diverse' individuals in different teams competing against each other, while *clan* results from different rather than contrasting elements associated with different gender assignments – 'blood' associated with feminine and 'surname' (since blood is no longer apparent), an abstract construct associated with masculine.

Other attributes appear to be associated with specific word-final pronunciation patterns. Those associated with vowel-final pronunciation include:

- part - as of bloodline, relatives (*lignée*, *parenté*, *clan*), or competition event (*peloton*), social condition (*communauté*), or cultural/political/religious community (*colonie*, *ethnie*, *tribu*, *diaspora*)
- forming irregularly, eg. *peloton*
- recurring in habitual, intermittent, or regular way, eg. *clan*, *assemblée*, *coterie*, *réunion*
- not connected by physical proximity, eg. *smala*, *clan*, *gent/gens*, *humanité*
- directional aspects, 'from', eg. *attroupement*, *cohue*, or coming-and-going, eg. *flopée*, *maisonnée*.

Those attributes that appear to be associated with consonant-final pronunciation include:

- whole, totality, eg. *lignage, race, famille, peuple, élite, genre*
- sustained to end point, eg. *chœur, équipe, gang, cabale, caravane, quadrille, cadre*
- connected by physical proximity, eg. *foule, multitude, monde, ensemble, groupe, tourbe, bousculade*.
- directional aspects, 'towards, eg. *bousculade*, 'travelling on', eg. *caravane*.

To a large extent these attributes form binary oppositions, some in relation to gender assignment:

- 'different/diverse' and 'same', regarding the nature of the group
- 'quantity' and 'unquantifiable' as to number.

Other binary oppositions relate to word-final pronunciation:

- part/whole of a group
- recurring intermittently/sustained to end point
- not connected/connected by physical proximity.

Another potential opposition is suggested in directional notions 'from' and 'to' and they will continue to be of interest. Distinctions between 'part' and 'whole' do appear to apply elsewhere, such as the contrast between the vowel-final *tronc* (M) 'trunk' and consonant-final *corps* (M) 'body'. 'Part' and 'whole' can produce other semantic distinctions, such as 'part of a whole' and 'whole of a part'. Both are simple to operate, even for collectives at the most abstract level, eg.

- groups that are 'part of a whole' include *division* (F) 'division', *morceau* (M) 'bit', *partie* (F) 'part', *section* (F) 'section, each of which has vowel-final pronunciation consistent with 'part' for groups above, and perhaps *gent* (F) 'race'
- groups that are 'the whole of a part' include *tranche* (F) 'slice', *espèce* (F) 'species'.

In terms of the combination of the relationship between gender assignments and word-final pronunciation in relation to pejoration, it is not the case that masculine gender, or vowel-final pronunciation is sufficient to identify a pejorative sense since it does not occur for *clan*, nor does it occur for nouns in their original application to an objects such as a 'heap' of either small objects, casually accumulated and little valued. However, it is the semantic extension to humans of items that are inanimate, non-sensate, incapable of independent movement, and little valued

where humans are typically denoted by feminine nouns. In these cases the effect of masculine gender assignment and vowel-final pronunciation is to convey this absence of humanity or life.

The change in gender assignment from feminine to masculine for *gens* 'people' and change in a grammatical sense from a count noun to collective noun for *homme* (M) 'man' appear to have occurred during the same period as a historical movement that arose some time during the middle ages, the fifteenth to seventeenth centuries, based on a psychological desire to promote the position of men. As masculine nouns, *gens* and *homme* are now 'irregular' amongst 'collective' nouns in much the same way as *lierre* (M) 'ivy' and *mélèze* (M) 'larch', where their masculine genders place them in semantically unrelated sets.

#### 8.6 Count nouns denoting 'human' - predictability according to distributions

There are 275 nouns in the database designating a single human referent. Their distributions are set out in Table 8.19 below.

Table 8.19: Count nouns - distribution according to gender assignment and word-final pronunciation

	Vowel-final	Consonant-final	Total	
Masculine	23	102	125	45%
Feminine	17	62	79	29%
Alternative genders, same word-final pron.	4	67	71	26%
Total	44	231	275	

Comment must be made on differences in gender assignments that appear in previous accounts. For instance, the list of nouns provided by Gervais (1993:131-2) as accepted by the *Office de la langue française* shows alternative gender assignments for nouns such as *juge* 'judge' and *poète*. However, these alternatives are not offered in dictionaries used for this research (LRPT, 1995:639, 864 and COFED, 1985:303, 424), nor are they found in the more current on-line dictionary at <atilf.atilf.fr> (2006) – revealing a lag between social or public acceptance of changes and dictionary affirmations of changes.

We do not know how Tucker et al. (1977) handled alternative gender assignments but a review of data in Appendices I and II in that publication shows not one case. Neither does that

material take into account nouns that offer alternative word-final pronunciations. From examples provided it would seem that all were identified according to their masculine forms. However, certain examples in those Appendices allow us to observe changes in gender assignment that have taken place between the (1955) publication of the dictionary used by Tucker et al. (1977) and the (1985) COFD used for the current research, and more extensive changes in the later LRPT (1994) – each reflecting social norms that held in the period before the year of publication and changes over the intervening years.

As the above Table 8.19 shows, almost half of the nouns in this set are masculine; remaining nouns are almost equally divided between feminine nouns and those offering alternative gender assignments. Even so, these distributions relating to gender assignments are perhaps less interesting than distributions related to word-final pronunciation where all but 23 of the 125 masculine nouns have consonant-final pronunciations. Further, of the 71 nouns with alternative gender assignments, only four have vowel-final pronunciation, *péri* (M/F) 'peri', *enfant* (M/F) 'child', *soprano* (M/F) 'soprano' and *alto* (M/F) 'alto' (counter-tenor, contralto). More extraordinary are the four masculine nouns denoting a 'female' referent and the three feminine nouns denoting a 'male' referent. These nouns are explored further below.

For one set of nouns, the semantics suggest a human referent but there is no sex-specific entailment for 'male' or 'female' in their semantics, and no gender is assigned. Dictionaries identify this in different ways, the French dictionary LRPT (1994) recording such nouns simply as <n.>, while the English/French dictionary COFD (1985) records them as <s.m.f.> 'substantive' (masculine or feminine). For another set of nouns, the semantics identify a human in relation to their biological sex. For instance, the semantics of *oncle* (M) 'uncle' identify a human referent in a way that entails 'male', while the semantics of *tante* (F) 'aunt' identify a human referent in a way that entails 'female', and these meanings are not readily applicable to referents other than humans. For such nouns gender assignments are fixed in a way that correlates with their entailments. There are also nouns whose semantics suggest a human referent without any semantic entailment for 'male' or 'female' in the lexeme itself – but gender assignment is also fixed as, for instance, masculine in the case of *assassin* (M) 'assassin', and



feminine in the case of *dupe* (F) 'dupe'. Count nouns are different sets are:

- nouns whose meanings suggest a human referent and have no gender assignment.
- nouns whose meanings identify a human referent in a sex-specific way
- nouns whose meanings suggest a human referent and have fixed gender assignment.

Additionally, word-final pronunciations for some nouns is fixed or uninflected while others are inflected, and these differences are also taken into account in the analysis of sets below.

## 8.7 Nouns without any gender assignment

Nouns in the following sets designate a human being, and with no entailment for 'male' or 'female', no gender is assigned. These nouns denote a single lexical entity according to a range of personal characteristics, occupations, etc. that for the most part restrict their application to a human referent. Without any semantic entailment identifying 'male' or 'female', these nouns can be used to identify a specific real-world referent according to characteristic/s in the semantics of any noun. Some nouns are uninflected while others offer alternative word-final pronunciations, and nouns are examined in these two sets.

### 8.7.1 No fixed gender assignment, uninflected word-final pronunciation

The database contains 48 nouns whose semantics identify a human being without any sex-specific entailment and where gender is not assigned and word-final pronunciations are fixed and invariable. Their semantics typically identify occupations and personal characteristics.

Table 8.20: Nouns with no fixed gender assignment – uninflected word-final pronunciation

<i>acrobate</i>	<i>n.</i>	'acrobat', 'circus artist'; also (fig., pej.) someone gifted at juggling difficulties (LRPT, 1994:12)
<i>actionnaire</i>	<i>n.</i>	'shareholder'
<i>adulte</i>	<i>n.</i>	'adult person' (from Adj.)
<i>adversaire</i>	<i>n.</i>	'adversary', opposed to another in combat, conflict
<i>ancêtre</i>	<i>n.</i>	'ancestor'
<i>architecte</i>	<i>n.</i>	'architect', qualified person whose <i>métier</i> is to construct a building plan (LRPT, 1994:56)
<i>artiste</i>	<i>n.</i>	'artist'
<i>arsouille</i>	<i>n.</i>	'hooligan'
<i>athlète</i>	<i>n.</i>	'athlete', person who practises athletics (LRPT, 1994:70)
<i>barbouze</i>	<i>n.</i>	'secret agent' (male or female, from idea of 'false beard') (LRPT, 1994:96)
<i>bénéficiaire</i>	<i>n.</i>	'beneficiary', person who benefits from an advantage, law, right, privilege
<i>chimiste</i>	<i>n.</i>	'chemist', someone involved in chemistry

<i>dentiste</i>	<i>n.</i>	'dentist', a person who practises dentistry
<i>cinéaste</i>	<i>n.</i>	'film producer'
<i>cinéophile</i>	<i>n.</i>	'avid film-goer', 'buff'
<i>concierger</i>	<i>n.</i>	'porter', 'concierger'
<i>convive</i>	<i>n.</i>	'guest'
<i>cul</i>	<i>n.</i>	'hypocrite'; (also fam. inj.) 'imbecile' (der. <i>cul</i> (M) 'anat.) bottom', LRPT, 1994:266)
<i>collègue</i>	<i>n.</i>	'fellow worker/member of staff', 'partner'
<i>comptable</i>	<i>n.</i>	'book-keeper'; 'accountant'
<i>diplomate</i>	<i>n.</i>	'diplomat', person charged with diplomatic function (LRPT, 1994:327)
<i>disciple</i>	<i>n.</i>	'disciple'
<i>domestique</i>	<i>n.</i>	'domestic servant', person employed in household service
<i>enfant</i>	<i>n.</i>	'baby', 'child' (LRPT, 1994:387)
<i>esclave</i>	<i>n.</i>	'slave', someone held in bondage (LRPT, 1994:413)
<i>fan</i>	<i>n.</i>	(Eng.) 'fan', enthusiastic admirer, follower (of something, someone) (LRPT, 1994:455)
<i>fonctionnaire</i>	<i>n.</i>	'person occupied/employed in administration (LRPT, 1994:81)
<i>infirme</i>	<i>n.</i>	'cripple', 'disabled person'; 'invalid' (from Adj.)
<i>interne</i>	<i>n.</i>	'intern'
<i>interprète</i>	<i>n.</i>	'interpreter'
<i>intime</i>	<i>n.</i>	'close friend' (from Adj.)
<i>invalid</i>	<i>n.</i>	'invalid' (from Adj.)
<i>jeune</i>	<i>n.</i>	'young person' LRPT, 1994:634, from Adj.
<i>lâche</i>	<i>n.</i>	'person without moral backbone' (from Adj.)
<i>misérable</i>	<i>n.</i>	'wretch' (from Adj.)
<i>parent</i>	<i>n.</i>	'parent' (father, mother)
<i>philosophe</i>	<i>n.</i>	'person engaged in the area of philosophy'; 'sage'
<i>photographe</i>	<i>n.</i>	'photographer', person who takes photographs
<i>plouc</i>	<i>n.</i>	'peasant'; fam., pej. (inj.) 'someone with disgusting manners' (LRPT, 1994:861)
<i>péri</i>	<i>n.</i>	'male or female beautiful supernatural being (COFED, 1986:409)
<i>psychiatre</i>	<i>n.</i>	doctor specialising in mental illnesses
<i>psychologue</i>	<i>n.</i>	'psychologist'
<i>semblable</i>	<i>n.</i>	'someone alike' (Adj.)
<i>signataire</i>	<i>n.</i>	'signer', 'signatory', person who has authority to sign (certificate of marriage, death, etc.) (LRPT, 1994:1036)
<i>snob</i>	<i>n.</i>	(Eng.) 'snob'
<i>soprano</i>	<i>n.</i>	'soprano', person with a soprano voice
<i>stagiaire</i>	<i>n.</i>	'trainee'
<i>titulaire</i>	<i>n.</i>	'bearer' or 'occupant', 'titular incumbent' (COFED, 1985:551)
<i>transfuge</i>	<i>n.</i>	'political turncoat'; 'dissident', person who abandons their party to join the opposition
<i>virtuose</i>	<i>n.</i>	'virtuoso', gifted and brilliant musician

In that these count nouns identify a single referent with no semantic entailment regarding 'male' or 'female', they can thus identify either in their application to any real-world referent. This set of nouns includes loan words, eg. *fan*, *snob*, and a number of nouns derived from other grammatical classes, particularly adjectives, eg. *invalid*, *intime*, *lâche*, etc.

The roles and characteristics identified earlier in relation to collective nouns are also found among these nouns – roles and activities (eg. *actionnaire*), relationships with other humans or the world at large (eg. *arsouille*, *semblable*), personal characteristics ranging from positive (eg. *intime*, *virtuose*), to neutral (eg. *jeune*), to less than positive (eg. *lâche*, *snob*). Areas of employment include professions that have come into existence in the more recent past (eg. *photographe*, *psychiatre*, etc.), and some that are older (eg. *domestique*). Meanings of nouns in the above sets can be categorised according to subject matter, as in (5):

- (5)
- ties between people (blood, origin, etc.), eg. *enfant*, *ancêtre*
  - activity, task or interest, eg. *diplomate*, *domestique*, *philosophe*, *virtuose*
  - social conditions (economic, political, social), eg. *convive*, *misérable*, *jeune*
  - human condition/characteristics, eg. *adulte*, *cul*, *cinéophile*, *ivrogne*, *lâche*, *semblable*
  - figurative extensions of meaning in any of these areas, eg. *plouc*.

While these categories of meaning reflect those of collective nouns, in this set we find a greater focus on occupations and pastimes, particularly ways that people earn their living or gain an income from some kind of *métier*, as a trade or profession. This area of is of particular importance today. Nouns in this field that have alternative gender assignments can be sorted into the sub-categories set out in (6):

- (6)
- commerce/trade, eg. *actionnaire*, *comptable*
  - business, eg. *collègue*, *stagiaire*
  - profession, eg. *architecte*, *chimiste*, *photographe*, *psychiatre*, *psychologue*
  - medical world, eg. *dentiste*, *psychiatre*, *psychologue*
  - legal world, eg. *signataire*
  - religious world, eg. *disciple*.

However, one can compare various nouns that mean 'artist', such as *affichiste* (M/F) 'commercial artist', *coloriste* (M/F) 'colourist', *divisioniste* (M/F) 'painter (who works in the style of a particular art movement)', *pointilliste* (M/F) 'painter' (who works in a style similar to Seurat), *pastelliste* (M/F) 'pastelist' (who works in crayons/pastels), which nouns offer alternative gender assignments, while *peintre* 'painter', both 'artist' and 'worker or artisan who applies paint to a surface' is identified as masculine in LRPT (1994:826) but more recently

accepts alternative gender assignments. One can also contrast *satiriste* (M/F) 'satirist' and *auteur* (M) 'author', which similarly identify neither 'male' nor 'female' but for the latter alternative gender assignments are not yet acceptable. These findings for 'author' reflect similar findings among the various nouns meaning 'writer'. It is noted that *secrétaire* is masculine in its association with high prestige such as 'Secretary of State', but offers alternative genders in its association with lesser prestige of 'secretary' in a clerical role. While one may argue that a 'house-painter' is more likely to be 'male' than 'female' – and thus correlates with 'male', masculine gender in its application to 'artist' seems to reflect the same association with high prestige as occurs for the masculine *secrétaire* as 'Secretary of State'.

For these nouns, gender assignment depends on the speaker and the real-world referent intended by the speaker. Where the real-world referent is 'male', the speaker assigns masculine and where the real-world referent is 'female', the speaker assigns feminine, eg.

<i>le snob</i>	(M)	'snob'	'male'
<i>la snob</i>	(F)	'snob'	'female'
<i>le virtuose</i>	(M)	'virtuoso'	'male'
<i>la virtuose</i>	(F)	'virtuoso'	'female'

In such cases, the correlating gender assigned by the speaker allows any hearer/s to single out one referent from a set of potential referents according to a natural division between 'male' and 'female'. Successful outcomes occur when the gender assigned by the speaker and the sex of the real-world referent predicted by the hearer correlate.

#### 8.7.2 No fixed gender assignment, inflected word-final pronunciation

Nouns in Table 8.21 also identify a human being without any sex-specific entailment, and deal with similar categories of human relationships. As with nouns in Table 8.20 no specific gender is assigned, but unlike nouns in Table 8.20 these nouns offer alternative word-final suffixes, inflected in a way that may or may not involve phonetic changes.

Table 8.21: Nouns with no fixed gender assignment – inflected word-final pronunciation

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<i>abbé, -esse</i>	<i>n.</i>	head of religious order (LRPT, 1994: 2)
<i>acheteur, -euse</i>	<i>n.</i>	'buyer', 'purchaser'
<i>adhérent, -te</i>	<i>n.</i>	'supporter'
<i>adolescent/-te</i>	<i>n.</i>	'adolescent'

<i>ainé, -ée</i>	<i>n.</i>	first-born'
<i>allié, -ée</i>	<i>n.</i>	'relation by marriage'
<i>amant, -ante</i>	<i>n.</i>	'lover', someone who loves loving and being loved
<i>ami, -ie</i>	<i>n.</i>	'friend', someone with whom one is tied in friendship (LRPT, 1994:35)
<i>amoureux, -euse</i>	<i>n.</i>	'lover'
<i>apprenti, -ie</i>	<i>n.</i>	'apprentice', someone in an apprenticeship
<i>artisan, -ane</i>	<i>n.</i>	'artisan', someone who does manual work
<i>avocat, -ate</i>	<i>n.</i>	'lawyer', 'solicitor'
<i>banquier, ière</i>	<i>n.</i>	'banker', someone involved in banking industry
<i>boulangier, -ère</i>	<i>n.</i>	'baker'
<i>breton, -onne</i>	<i>n.</i>	'person from Breton 'Brittany'
<i>cafard, -arde</i>	<i>n.</i>	'hypocrite', 'humbug' (who tricks or deceives)
<i>champion, -onne</i>	<i>n.</i>	'champion', someone engaged in combat (for prize, cause)
<i>chercheur, -euse</i>	<i>n.</i>	'researcher', person engaged in research, partic. scientific
<i>chirurgien, -ienne</i>	<i>n.</i>	'doctor who practises surgery'
<i>client, -ente</i>	<i>n.</i>	'client', ( <i>Archaic</i> ) person who depends on protector; (mod.) person who buys or requires services for a consideration (LRPT, 1994:196)
<i>clinicien, -ienne</i>	<i>n.</i>	'medical practitioner' (LRPT, 1994:196)
<i>conseiller, -ère</i>	<i>n.</i>	'adviser', 'consultant', 'counsellor'
<i>copain, -ine</i>	<i>n.</i>	'friend' in same class, at work, etc.
<i>cousin/-ine</i>	<i>n.</i>	'cousin'
<i>créateur, -trice</i>	<i>n.</i>	'creator'
<i>curieux, -euse</i>	<i>n.</i>	(obs.) 'collector'; 'curious person' (from Adj.)
<i>défendeur, -eresse</i>	<i>n.</i>	'defendant', 'respondent' (in divorce proceedings)
<i>dieu, déesse</i>	<i>n.</i>	'god', a divine being (LRPT, 1994:286, 323)
<i>duc, duchesse</i>	<i>n.</i>	(arch.) 'ruler of a duchy', (M) 'duke', (F) 'duchess' (LRPT, 1994:349)
<i>éclaireur, -euse</i>	<i>n.</i>	'scout' or 'girl-guide', member of scout movement
<i>électeur, -trice</i>	<i>n.</i>	'voter', someone entitled to vote
<i>électricien, -ienne</i>	<i>n.</i>	'electrician', person ( <i>technicien, ouvrier</i> ) whose occupation relates to electricity (installation, etc.) (LRPT, 1994:369)
<i>empereur/impératrice</i>	<i>n.</i>	ruler of an empire, as 'emperor', or 'empress'
<i>ennemi, -ie</i>	<i>n.</i>	'enemy', person who is hostile to someone/something and seeks to harm
<i>entrepreneur, -euse</i>	<i>n.</i>	'entrepreneur'
<i>époux, -ouse</i>	<i>n.</i>	'spouse', person united with another in marriage', specifically (M) 'husband, (F) 'wife'
<i>étudiant, -te</i>	<i>n.</i>	'student'
<i>Européen, -enne</i>	<i>n.</i>	'European', someone born or living in Europe
<i>filleur, -eule</i>	<i>n.</i>	'godchild'
<i>fondeur, -euse</i>	<i>n.</i>	'cross-country skier'
<i>fou, folle</i>	<i>n.</i>	'lunatic', 'person who is mad' (from Adj.)
<i>gacheur, -euse</i>	<i>n.</i>	'(pop.) spoilsport'
<i>guerrier, -ière</i>	<i>n.</i>	'(anc.) warrior', person who makes a living going to war (LRPT, 1994:541)
<i>guérisseur, -euse</i>	<i>n.</i>	'healer', person who treats illnesses without having an official qualification as <i>médecin</i> (LRPT, 1994:540)
<i>héritier, -ière</i>	<i>n.</i>	'heir', person who will receive an inheritance (LRPT, 1994:556)
<i>hôte, -esse</i>	<i>n.</i>	'host', person who gives hospitality by receiving guests
<i>importun, -une</i>	<i>n.</i>	'boring person' (from Adj.) 'boring'

<i>infirmier, -ière</i>	<i>n.</i>	'nurse', someone whose profession is care of the sick (LRPT, 1994:604)
<i>jardinier/-ière</i>	<i>n.</i>	'gardener', whose <i>métier</i> is the cultivation of gardens (LRPT, 1994:631)
<i>loupot, -iotte</i>	<i>n.</i>	'child' (LRPT, 1994:675)
<i>marchand, -ande</i>	<i>n.</i>	'merchant'
<i>mendiant, -te</i>	<i>n.</i>	'beggar', someone who lives by begging
<i>mort, -te</i>	<i>n.</i>	'mortal remains of someone' (from Past participle)
<i>musicien, -ienne</i>	<i>n.</i>	'musician', person whose profession relates to composition or performance; someone who understands music (LRPT, 1994:753)
<i>neveu, nièce</i>	<i>n.</i>	'child of one's sister or brother' ('nephew' or 'niece')
<i>niais, -aise</i>	<i>n.</i>	'simpleton'
<i>orphelin, -ine</i>	<i>n.</i>	'orphan', child having lost one or both parents (LRPT, 1994:797)
<i>pataud, -aude</i>	<i>n.</i>	'awkward clumsy child or person', also (adj.) 'heavy- or lead-footed' from <i>patte</i> (F) 'paw' (LRPT, 1994:819)
<i>parent, -te</i>	<i>n.</i>	'parent of child' – 'father' or 'mother'
<i>pharmacien, -ienne</i>	<i>n.</i>	'pharmacist', person who practises pharmacy (LRPT, 1994:841)
<i>plaignant, -ante</i>	<i>n.</i>	'plaintiff'
<i>politicien, -ienne</i>	<i>n.</i>	'(Eng.) 'politician', one who exercises political action
<i>praticien, -ienne</i>	<i>n.</i>	'practitioner' (COFED, 1985:434)
<i>président, -ente</i>	<i>n.</i>	'president', head presiding over state, parliament, organised group, etc.
<i>prince, -esse</i>	<i>n.</i>	'child of king and queen'; also, (M) 'male married to queen'; (F) 'female married to prince'
<i>professionnel, -elle</i>	<i>n.</i>	<i>personne de métier</i> 'professional', a person earning income, living from a trade, craft, etc.
<i>prostitué, ée</i>	<i>n.</i>	'prostitute', person who lives by prostitution
<i>religieux, -euse</i>	<i>n.</i>	'monk', 'nun', person entering religious order
<i>républicain, -aine</i>	<i>n.</i>	'republican'
<i>richard, -arde</i>	<i>n.</i>	'wealthy person'
<i>rieur, -euse</i>	<i>n.</i>	'person who is laughing'; 'person who is merry'
<i>riverain, -aine</i>	<i>n.</i>	'owner' (of riverside property)
<i>roi, reine</i>	<i>n.</i>	'king'/'queen', one who reigns
<i>saint, sainte</i>	<i>n.</i>	'saint', person who is formally recognised after death through a holy perfection in their life (LRPT, 1994:1006)
<i>souverain, -aine</i>	<i>n.</i>	'sovereign', (Adj. male/female)
<i>supérieur, -eure</i>	<i>n.</i>	'person in charge of a religious community' (LRPT, 1994:1072); (in a military, administrative or social hierarchy) <i>person qui est placée au-dessus d'autres personnes</i> 'who commands others' (<atilf.atilf.fr>, 2006)
<i>surveillant, -ante</i>	<i>n.</i>	'overseer', 'supervisor', 'guardian', etc.
<i>vilain, -aine</i>	<i>n.</i>	(hist.) 'free person' (cf. <i>serf</i> ); (old) obscene or vile person; whose appearance is disquieting (LRPT, 1994:1176)

These 80 nouns were gathered at random during the data collection phase, but there is scarcely a page of any French dictionary that will not produce at least one such example. They are broadly similar with nouns in Tables 8.20 and 8.21 further above in that they denote a lexical referent according to occupations or characteristics attributable to a human, but here inflections

provided by word-final suffixes relate to alternative masculine and feminine genders. In some cases word-final alternatives are orthographic only since they produce no phonological change word-finally, eg. *prostitué/-ée, supérieur/-eure*. Other inflections produce both orthographic and phonological changes word-finally, eg. *politicien/-ienne, saint/sainte*, while some inflections involve even greater changes in pronunciation, eg. *neveu/niece, roi/reine*. Again, inflections relate to the specific gender assignment which itself is dependent on and regulated by the speaker in relation to the real-world referent.

In some cases nouns can apply to referents in other lexical fields, eg. *ennemi/-ie, mort/-te, orphelin/-ine, cousin/-ine*, as characteristics that could reasonably be expected to be shared by animals, *hôte/-esse* 'host' to animals and plants. However, most of these meanings constrain the referent to one who is human, eg. *époux/-se* 'spouse' since its sense involves the exchange of a promise, an undertaking that humans can make, but not other living things. Some of these nouns have meanings that allow them to denote referents with a human-like form in parallel worlds (spiritual, mythological, etc.). In these extended applications, nouns operate in the same way as for others in this set since they correlate with the 'sex' of the 'other-world' referent.

Where the speaker is unaware of the identity of the real-world referent or does not intend any specific identity, expressions such as *Être pâle comme un mort* 'To be as pale as the dead' (LRPT, 1994:742) reveal masculine gender in agreements. In such cases, for both speaker and hearer/s the referent is held to be 'someone', singular but indefinite – and it is this attribute that is suggested to underpin masculine as a kind of default gender.

However, even where speakers are aware of the real-world referent, for some nouns correlation between the gender assigned to the noun and sex of the real-world referent cannot occur, as for masculine nouns *assassin* (M) 'assassin', *témoin* (M) 'witness', *monarque* (M) 'monarch', *politique* (M) 'politician' and *peintre* (M) 'painter', and feminine nouns such as *dupe* (F) 'dupe', *ganache* (F) 'complete idiot', *majesté* (F) 'majesty' and *potiche* (F) 'figurehead'. These cases are examined further below.

Stems of these inflected nouns come from a variety of grammatical categories, as in (7) below.

- (7) • noun, eg. *amour-*, *conseil-*, *éclair-*, *music-*, *pat(te)-*, *politic-*, *profession-*  
 • adjective, eg. *infirm-*, *cop-*, *prin-*, *rélig(i)-*  
 • verb, eg. *alli-*, *march-*, *plain-*, *prostitu-*, *ri-*, *surveill-*.

Roles and characteristics for inflected nouns are set out in (8) below:

- (8) • engaging in an activity, occupation, pursuit, employment), eg. *boulangier/-ère*, *client/-te*, *guerrier/lière*, in specific fields – religion, eg. *dieu/déesse*, *supérieur/-re*, politics, eg. *politicien/-ienne*, royalty, eg. *souverain/-aine*, *roi/reine*, medicine, eg. *chirurgien/-ienne*, law, eg. *avocat/-ate*, *plaignant/-ante*  
 • family relationships, eg. *allié/-ée*, *époux/-ouse*, *filleul/-eule*, *neveu/niece*, *parent/-ente*, *prince/-esse*  
 • relating to other humans, eg. *amant/-ante*, *copain/-aine*, *ennemi/-ie*, or the world at large, eg. *électeur/-trice*, *hôtel/-esse*  
 • personal characteristics ranging from positive, eg. *adhérent/-te*, *important/-une*, to neutral, eg. *orphelin/-ine*, and to less than positive, eg. *cafard/-arde*, *foul/folle*.

Some nouns in this set relate to occupations or professions that are very old, eg. *apprenti/-ie*, *chirurgien/-ienne*, *guerrier/lière*, *prostituél/-ée*. Nonetheless, they concern areas of employment, the same sub-category as many uninflected nouns in Table 8.20. Why is it that these nouns are inflected, and not others? Why do some pairs of suffixes, eg. *-ain/aîne*, *ant/-ante*, *-at/-ate*, have alternative vowel- and consonant-final pronunciations where other alternatives, such as *-ard/-arde*, *-eur/-euse*, *-eur/-eronne*, are both consonant-final? A possible answer is that they, too, may relate to meanings in the gender assignments, particularly since suffixes are not interchangeable. However, it is noted that where inflections offer alternative vowel- and consonant-final pronunciations, eg. *ain/-aine*, the one that is vowel-final is associated with masculine gender, as for *souverain* (M) 'male sovereign', while the one that is consonant-final is associated with feminine gender, eg. *souveraine* (F) 'female sovereign'. Tucker et al (1977) suggests that word-final phonology provides some predictability with regard to gender assignments, and in these cases support this finding. However, some



inflections offer alternative consonant-final pronunciations, eg. *-eur*, *-euse*, as for *éclairéur* (M) 'scout' and *éclairéuse* (F) '(girl) guide' and there is no apparent relationship between these consonant-final suffixes that would predict gender assignments with any certainty. Indeed, the suffix *-eur* is more commonly associated with feminine nouns. If gender assignment and word-final pronunciations are related to attributes that independent of each other, as findings thus far suggest, what mechanism motivates these alternations in word-final pronunciation and their distributions between alternative gender assignments? These questions relating to suffixation require further examination.

LRPT (1994:606) notes that Canadian French makes further use alternative forms *-eurl/-eure* (eg. *ingénieur-eure* (M/F) 'engineer', *professeur/-eure* (M/F) 'professor') that occur in mainland French in nouns such as *prieur/prieure* (M/F) 'prior/prioress', and *supérieur/-eure* (M/F) 'person in charge of a religious institution'. The *Académie française* dismisses these alternatives as unacceptable syllogisms (<[www.academie-francaise.fr/langue/francois.html](http://www.academie-francaise.fr/langue/francois.html)>, 2005 and included as Appendix I), although why such forms should be acceptable in relation to 'comparative' contexts and not others is not clear – it is certainly the case that both of these nouns identify a position of authority over others. Regardless of any association between such attributes and either gender assignment or word-final pronunciation, it is difficult to find a logical explanation for the irregularity between what is acceptable and what is not for this suffix. It will continue to be of interest.

What is equally interesting is that for some substantives formed from adjectives, alternative forms exist for adjectives, eg. *piéton/piétonne* 'foot-', as in *sentier piéton* (M) 'footpath' cf. *allée piétonne* (F), and *porte piétonne* (F) 'entry for pedestrians'. In its application to *piéton* (M) 'pedestrian', neither the (1985) COFED nor (1994) LRPT offers a feminine alternative in the sense of 'female pedestrian', as though there are no 'female pedestrians'. It is noted that ATILF (<[atilf.atilf.fr](http://atilf.atilf.fr)>, 2009) now offers the feminine form *piétonne* (F) '(female) pedestrian'.

### 8.7.3 Inflected word-final pronunciation – further discussion

Dictionaries entries present these alternatives with the 'masculine' form first, followed by

orthographic changes for the 'feminine' suffix. The order of presentation and the way alternatives are presented suggests that feminine forms are derived from masculine nouns – in many instances created by the 'mute' <e> (Gervais, 1993:123–4). However, today it is more commonly argued that a more logical approach posits the feminine form as the base form, with masculine form resulting from elision of the word-final consonant of the feminine form – as appears to be the case in examples set out in Table 8.23 below.

Table 8.23: Further examples of masculine and feminine word-final variants

Feminine			Masculine	
<i>épouse</i>	[ epuz ]	'spouse'	<i>époux</i>	[ épu ]
<i>loupiotte</i>	[ lupjɔt ]	'child'	<i>loupjot</i>	[ lupjo ]
<i>parente</i>	[ parɑ̃t ]	'parent'	<i>parent</i>	[ parɑ̃ ]
<i>paysanne</i>	[ peizan ]	'peasant'	<i>paysan</i>	[ peizɑ̃ ]
<i>curieuse</i>	[ kyrjœz ]	'curious person'	<i>curieux</i>	[ kyrjœ ]

In these cases elision of the final consonantal phone of the feminine form produces the vowel-final phonological form associated with masculine classification.

However, for a small set of feminine variants with a [ \_VCC# ] double consonant-final structure, elision of the final consonant does not produce a vowel-final noun. Instead, it yields a [ VC# ] structure for the masculine form, in Table 8.24.

Table 8.24: Comparison of word-final variants according to syllable structure

Feminine	Final syllable structure	Meaning	Masculine	Final syllable structure
<i>morte</i>	[ CVCC# ]	'dead person'	<i>mort</i>	[ CVC# ]
<i>richarde</i>	[ CVCC# ]	'wealthy person'	<i>richard</i>	[ CVC# ]

The same process of elision can account for many of these masculine variants. In this case, the shorter of the two forms is linked with the masculine noun while the longer form is linked with the feminine noun. However, while there is a general association between vowel-final pronunciation and masculine gender and between consonant-final pronunciation and feminine gender, certain suffixes will always be phonologically consonant-final, eg. suffixes *-iste*, or *-eur*, while others will always be phonologically vowel-final, eg. *-il*, *-ie*, *él*, *-ée*, *-ul*, *-ue*.

While the suffix *-ée* is identified as forming feminine nouns (LRPT, 1994:1229), eg. *traversée* (F) 'passage, crossing', in some contexts it is associated with masculine nouns, eg. *musée* (M) 'museum', *trophée* (M) 'trophy', etc. Similarly, the suffix *-ie* in some contexts forms feminine nouns, eg. *jalousie* (F) 'jealousy' but it, too, may form masculine nouns, eg. *incendie* (F) 'huge fire/conflagration'. The word-final suffix *-eur* that forms feminine nouns, eg. *douleur* (F) 'pain', *chaleur* (F) 'heat'/'warmth', also forms masculine nouns, eg. *bonheur* (M) 'luck', *honneur* (M) 'honour', and *enchanteur* (M) 'wizard', whose form changes as a feminine noun to *enchanteresse* (F) 'witch'. These examples provide no regularity for suffixes in relation to gender assignments. If they are unrelated to gender assignment it is highly likely that suffixes of nouns relate to some other aspect of lexemes. Suffixes themselves require further exploration, particularly in terms of form, meaning, and relationship with stems.

#### 8.7.4 Gender assignments as indicators of social norms - in French and in other languages

It is mentioned above that Appendices I and II of Tucker et al. (1977) provide no examples or evidence of alternative gender assignments, particularly where alternatives would have existed, examples such as *collègue* 'colleague' (1977:78), *mioche* 'kid', 'urchin' (1977:96). Their examples are taken from the 1955 *Petit Larousse*. Dictionaries used for the current research (COFD, 1985 and LRPT, 1994 and the on-line dictionary (ATILF) reveal considerable differences in their treatment of certain nouns even over this relatively short period. Some nouns that have fixed genders in COFD (1985) in later sources display either alternative gender assignments or assign no gender, eg. previously masculine-only nouns *adversaire*, *artisan*, *artiste*, *banquier*, *chirurgien*, *cul*, *ennemi*, *fan*, and *garde* in its application to 'warden, guardian, keeper, warder', etc., and the formerly feminine noun *garde-malade* 'nurse'.

These changes from fixed gender assignments to alternative gender assignments do not appear to relate to any change in semantics for these nouns. Rather they appear to relate to changes in social mores in the different periods in which the various dictionaries were constructed, such as alternative forms *avocat/avocate* (M/F) where previously the only acceptable form was the masculine *avocat*. The reflection of societal changes in the classification of nouns is discussed by Aikhenvald (2000:347-8) in relation to Khmer where a different social order instituted by the

Khmer Rouge revolution affected honorific classifiers, and in Russian following the 1917 revolution, where professions formerly barred to women were opened, and once-masculine nouns began to allow alternations according to sex of referent for previously masculine nouns.

Similar changes for French nouns also occur in domains that were once restricted to males where there would have been no imperative for feminine correlation, particularly in education and the professions since many considered women incapable of being educated (Woolf, 1929:30), and certain sex-specific behaviours and characteristics that held sway for centuries have shifted only relatively recently in human history. These changes can be observed in recently-created feminine alternatives for nouns such as *avocate* (F) in relation to the masculine *avocat* (M) 'lawyer', and *piétonne* (F) in relation to *piéton* (M) 'pedestrian'. For the noun *semblable* (M/F) 'like kind', the French/English dictionary COFD allows only masculine gender and translates its meaning as 'fellow/fellow creature' (1985:508) – a construct that might suggest 'male'. In the (later) French dictionary, its definition as (*être, personne semblable*) (LRPT, 1994:1026) provides no such inference and it assigns no gender.

#### 8.7.5 Summary

Count nouns whose semantics identify a human referent according to family connections, social roles, human occupations, and visible or personal characteristics or qualities, but include no specifics regarding 'male' or 'female' sex, have no gender assignment. In their application, specific gender assignments will express either 'male' or 'female' in relation to a real-world referent, eg. *acrobate* (M/F) 'acrobat', *philosophe* (M/F) 'philosopher'. Speakers can make known more specific detail regarding the referent – who they are through what they do and what they look like – via contrasts in gender assignment correlate with semantic oppositions 'male' and 'female'. Since they relate to mutually exclusive attributes, a specific gender assignment enables hearers to halve the field to one or the other of the two sexes. The extent to which this is successful – that is, hearer/s successfully predict the sex of the intended referent – depends on individual speakers' views of the world and their willingness to convey such information. It is noted that where the real-world referent is unknown, speakers use constructions that require no gender, or masculine gender identifying 'someone', singular and

indefinite. Certain results still require an explanation, such as counter-examples with similar meanings that have fixed gender assignments, eg. *riche* (M) 'wealthy person' cf. *richardl-arde*, and *apothicaire* (M) 'apothecary' cf. *pharmacien/ienne* (M/F) 'pharmacist', although it is also noted that *apothicaire* tends to have a strongly archaic, ironic or pejorative sense.

Findings show that some of these nouns without any gender assignment have fixed word-final pronunciation while others offer alternative word-final variants. These variants may alternate between vowel- and consonant-final pronunciations, while some alternatives may both be consonant-final. Evidence from the analysis of nouns in other lexical fields suggests that word-final pronunciation patterns relate to attributes to a large extent independent of those involved in gender assignment. It is anticipated that word-final pronunciations may in fact be linked in some way to the semantics of each noun – the action, or act, or movement, etc. conveyed in its meaning. This area requires further exploration.

A phonological analysis of nouns which have alternative word-final variants suggests that many of the 'masculine' variants are formed through a process of elision of the final phone of the 'feminine' form to produce the masculine form. For instance, elision of the final phone of the feminine *cliente* produces the masculine *client*. Analysis of the alternative argument, that masculine is the phonological base form and that feminine forms are suffixed with the 'mute' or 'silent' <e> to reflect its pronunciation, allows neither certainty nor predictability as to what that phone will be. For instance, a process involving the 'silent' <e> for *client* (M) 'client' would produce \**clienne*, or \**clionne* as feminine forms, but not *cliente*, which is the feminine form of *client*. More particularly, the absence of a mute <e> following a consonant has no bearing on whether it is pronounced or not, eg. *transit* (M) 'transit' where the final consonants /t/ is pronounced but for *dos* (M) 'back' it is not; nor does the presence of a mute <e> have any bearing on gender assignment, eg. *termite* (M) 'termite', *ermite* (M) 'hermit'. Other alternations may be formed with the addition of an entire final syllable on the feminine form that is not present on the masculine stem, eg. the suffix *-esse* on the feminine noun *princesse* is absent from the masculine *prince*. Such examples suggest that suffixation itself shows no regularity.

Explanations await certain nouns that similarly denote a 'human' referent but have fixed gender assignment, some masculine and others feminine. They are discussed below.

## 8.8 Fixed gender assignment – masculine

Nouns in the sets below denote a single human referent and are all masculine. For one set of nouns masculine gender assignment is predictable in relation to 'male' in the semantics of the lexeme itself. For another set it is not. These two groups are examined below.

### 8.8.1 Masculine nouns entailing 'male' in the lexeme

Some nouns in the database have fixed masculine gender assignment that is fully predictable in relation to 'male' in their lexical semantics. These nouns are set out below in Table 8.25.

Table 8.25: Masculine nouns with male lexical referent

<i>amant</i>	M	'lover'	male who has sexual relations with a women without being her husband (LRPT, 1994:33)
<i>archange</i>	M	'archangel'	superior level of angels with male names such as Gabriel, Michael, etc. (LRPT, 1994:55)
<i>clerc</i>	M	'cleric'	man who has entered an ecclesiastic order (LRPT, 1994:196)
<i>Eros</i>	M	'Eros'	male god (of love)
<i>faune</i>	M	'Pan'	rural deity (Pan), with pointed ears, hairy body and hooves', envisaged as male (LRPT, 1994:459)
<i>fils</i>	M	'son'	male child in family
<i>fort</i>	M	'male porter'	<i>employés</i> (male porters of the market <i>les Halles</i> who carry heavy goods, COFED, 1985:233)
<i>frère</i>	M	'brother'	male child having the same parents as another person
<i>garçon</i>	M	'boy'	<i>enfant du sexe masculin</i> 'male child', young man (LRPT, 1994:510)
<i>gars</i>	M	'young fellow'	(fam.) kind of boy, from <i>garçon</i> (M) 'boy' (LRPT, 1994:512, COFED, 1985:246)
<i>gigolo</i>	M	'gigolo'	young man who loves a woman older than himself who supports him (LRPT, 1994:520)
<i>hère</i>	M	'wretched man'	possibly derived from German <i>Herr</i> term of address 'mister' (LRPT, 1994:547)
<i>homme</i>	M	'man'	adult male human (LRPT, 1994:562)
<i>loup</i>	M	'old salt'	(term of affection) from <i>loup</i> (M) 'male wolf'
<i>mâle</i>	M	'male'	male of the human species, with power to fertilise (LRPT, (1994:690)
<i>manche</i>	M	'clumsy idiot'	(arg.) incompetent, der. <i>manche</i> (M) 'handle', ie. <i>membre viril</i> (LRPT, 1994:602)

<i>mari</i>	M	'husband'	married man
<i>Mars</i>	M	'Mars'	male god (of war)
<i>mec</i>	M	'bloke, guy'	(fam.) term used to denote male individual (LRPT, 1994:709)
<i>moutard</i>	M	'small boy'	(argot) <i>petit garçon</i> ; (pl.) <i>enfants</i> (M) 'children' (possibly from a root meaning 'goat without horns') (LRPT, 1994:747)
<i>oncle</i>	M	'uncle'	male sibling of one's father or mother
<i>page</i>	M	'page'	boy from noble family placed in service to learn <i>le métier d'armes, faire le service d'honneur</i> (LRPT, 1994:804)
<i>père</i>	M	'father'	male parent
<i>barbeau</i>	M	'ponce'	man (ext. from <i>barbeau</i> (M) 'barbel' (freshwater fish with pointed snout and slender spines)
<i>pote</i>	M	'fellow', 'mate'	male friend, from <i>poteau</i> (M) 'post', 'stake', 'stock', solid support structure (LRPT, 1994:878)
<i>satyr</i>	M	'satyr'	from Greek god, with human body, horns and goat hooves' envisaged as male
<i>seigneur</i>	M	'squire', 'lord'	male, head of a feudal system of relations
<i>sylvain</i>	M	'Silvanus'	god of the forests, envisaged as male, Roman counterpart to Pan (LRPT, 1994:1081, CED, 1986:1421)
<i>tartuffe</i>	M	'hypocrite'	male character in a Molière play (LRPT, 1994:1093)

In each case the semantics of these nouns designate a 'male', eg. *oncle*, the 'male' sibling of one's father or mother, *père*, the 'male parent', *moutard*, a 'small boy', and *mec*, 'bloke', a casual term for 'male', even in other worlds, eg. *satyr*, *sylvain*, since images that represented them are male. One can presume from 'male' names that archangels are 'male'. *Garçon* is defined as *enfant du sexe masculin* 'child of masculine sex' rather than *du sexe mâle* as is the term *mâle* in the above set. Perhaps *masculin* for *garçon* reflects an approximation of *mâle*.

Although the translation of *manche* as 'clumsy idiot' suggests a broader application, vulgar connotations associated with its derivation (LRPT, 1994:692) would be understood by speakers in its association with 'male', and one would anticipate that it would only apply to a 'male' real-world referent even though, as an adjective, its translation as 'maladroit' could well apply to a female as to a male. Other examples that identify 'male' in their semantics include *pote* (M) 'old friend', 'mate', abridged from *poteau* (M) 'post' (a supporting structure), and *rustre* (M) 'boring lout', 'clod-hopper'.

Some nouns are drawn from or identify a character that is 'male', eg. *tartuffe*, a male character in a Molière play, and that real-world representation as 'male' now forms part of its semantics.

Other nouns relate to characteristics strongly associated with 'male', eg. *fort*, *rustre*, etc.

As mentioned above, also in this set is *mâle* (M) 'male human'. Its derivation in both French (LRPT, 1994:688) and English (CED, 1986:931) is given as the Latin *masculus*, which is identified as a diminutive of the adjective *mas* 'male sex' (ELD, 1966:494). The semantics of *mâle* indicate 'male', and can designate a 'male' of any kind. The term *hère*, 'poor miserable man' is suggested above to be derived from *Herr* (M) 'Mister', a German title of address for an adult 'male', and that sense seems to carry over into French since it does not extend to 'female'. and thus masculine gender is consistent with other nouns that entail 'male' in their semantics. This noun has a similar meaning to the substantive *misérable* (M/F) 'wretch', from the adjective *misérable* 'miserable', but as a noun it has no entailment of 'male'. In its application to a real-world referent, *misérable* is as likely to apply to a 'male' as to a 'female', and gender assignment depends upon the sex of real-world referent.

The different derivations of *hère* and *misérable* and the semantics of each as nouns produce different entailments regarding biological sex that are ultimately reflected in their different gender assignments. These different treatments can be observed in another synonymous pair, *tartuffe* (M) 'hypocrite', the name of a 'male' character extended to a human characteristic, and the substantive *hypocrite* (M/F) which has no such entailment for male. It is noted that the French/English dictionary has different gender assignments for *hypocrite* – in the French/English section it has alternative gender assignments (COFED, 1985: 275) but in the English/French section it is masculine only (COEFD (1985:116).

Various nouns identify a 'male' human through a characteristic or activity, as in (9):

- (9)
- family or social contexts restricted to the 'male' side, eg. *frère*, *garçon*, *hère*, *homme*, *mâle*, *mec*, *moutard*, *oncle*, *père*
  - physical strength requiring a 'male' physique, eg. *balèze*, *fort*, *rustre*
  - sexual connotations relating to a 'male', eg. *amant*, *gigolo*, *manche*
  - 'male' creatures in other parallel worlds, folklore, legends, religion, eg. *faune*, *satyr*, *sylvain*, *Eros*, *satyr*, *tartuffe*, *archange*, etc.



Thus, among these nouns there is something in the nature of their semantics, or in their realisation as a male character, that entails 'male' in their semantics. For such nouns masculine gender is assigned in a regular and predictable way as in other lexical fields where nouns also entail 'male' in their semantics, eg. *dindon* (M) 'male turkey', *jars* (M) 'male goose', etc. One would anticipate that in their application to real-world referent/s, they would be restricted to those that are male.

### An oddity

One noun in this list with fixed masculine gender, *amant*, also appears in the previous list in relation to its sense as 'lover', 'someone who loves loving and being loved'. In this set, however, its meaning is defined as a 'male who has sexual relations with a woman without being her husband', and with this entailment fixed masculine gender is predictable and regular. Thus, while there are two distinct meanings for this noun as a masculine noun, only in the previous set is there any reciprocity for 'female'. Without any reciprocal meaning in this set as a 'woman who has sexual relations with a man who is not her husband', there is no requirement for alternative feminine gender assignment.

### 8.8.2 Masculine nouns – no semantic entailment for 'male' or 'female'

The following nouns in the Table 8.26 denote 'person' but have fixed masculine gender assignment that is not predictable from any semantic content.

Table 8.26: Masculine nouns – no lexical designation of sex

<i>accordeur</i>	M	'piano tuner'	<i>professionel</i> who tunes pianos, organs, eg. <i>Elle est accordeur</i> (LRPT, 1994:8)
<i>acquéreur</i>	M	'buyer'	<i>personne</i> 'person' who purchases (property) (LRPT, 1994:10)
<i>amateur</i>	M	'amateur'	person who engages in research into certain areas, or takes part in sports, without recompense opp. <i>professionel</i> (LRPT, 1994:33)
<i>apache</i>	M	'criminal'	(since 1900) <i>malfaiteur</i> , <i>voyou de grande ville</i> 'hooligan, rough type found in large towns'
<i>apothicaire</i>	M	'pharmacist'	now <i>pharmacien/-ne</i>
<i>athlète</i>	M	'athlete'	(hist.) competitor in public sports;
	M/F	'athlete'	person who engages in sporting activity (LRPT, 1994:70)
<i>autocrate</i>	M	'autocrat'	<i>souverain</i> who possesses absolute, unrestricted power (LRPT, 1994:77)

<i>auteur</i>	M	'author'	originator, creator (of sthg) (LRPT, 1994:76)
<i>autrui</i>	M	'another'	from <i>autre</i> 'not the same' (LRPT, 1994:79)
<i>bébé</i>	M	'baby'	youngest, smallest in family, from Eng. 'baby' (LRPT, 1994:103) (cf. <i>unlune enfant</i> ) (fig.) 'surlly ill-bred person', from <i>butor</i> (M) 'bittern', someone who possesses neither <i> finesse ni délicatesse</i> (LRPT, 1994:140)
<i>butor</i>	M	'churl'	officer commanding a company; officer commanding a naval or commercial ship
<i>capitaine</i>	M	'captain'	employee of lowest rank in the military
<i>caporal</i>	M	'corporal'	Lord Chancellor, charged with guarding the Seal (LRPT, 1994:172)
<i>chancelier</i>	M	'chancellor'	(fig.) pitiless exploiter of others' misfortunes (LRPT, 1994:177)
<i>charognard</i>	M	'carrion-eater'	<i>personne</i> at the head, who directs, commands, etc. der. from <i>chef</i> (M) 'head' (part of body at the top) (LRPT, 1994:180)
<i>chef</i>	M	'chief'; 'chef'	opp. <i>laïc</i> (fig., pej.) from <i>corbeau</i> (M) 'raven', bird (greedy), person with miserly tendencies, as attributed in de la Fontaine fable (LRPT, 1994:239)
<i>clerc</i>	M	'clerk'; 'cleric'	(fam., pej.) from <i>cul</i> (M) 'bottom'
<i>corbeau</i>	M	'miser'	'sovereign who governs with absolute and arbitrary authority' (LRPT, 1994:312)
<i>cul</i>	M	'idiot'	person invested with honour (LRPT, 1994:325)
<i>despote</i>	M	'despot'	person who has graduated with the highest grade in a university faculty; person practising medicine, surgery (LRPT, 1994:336)
<i>dignitaire</i>	M	'dignitary'	person who composes literary works (LRPT, 1994:361)
<i>docteur</i>	M	'doctor'	<i>génie</i> supernatural character in Scandinavian legend (LRPT, 1994:371)
<i>écrivain</i>	M	'writer'	(fig.) from <i>étourneau</i> (M) 'starling', according to characteristics (tiny, chattering inconsequential)
<i>elfe</i>	M	'elf'	dignitary of the highest order in the Christian priesthood' (LRPT, 1994:431)
<i>étourneau</i>	M	'scatter-brain', 'birdbrain'	person considered as one of the family (LRPT, 1994:455)
<i>évêque</i>	M	'bishop'	(fig.) <i>fléau</i> (M) 'calamity from <i>fléau</i> (M) 'flail' (agric. device) (LRPT, 1994:477)
<i>familier</i>	M	'family friend'	person who guards something, place, etc. (LRPT, 1994:510)
<i>fléau</i>	M	'destructive person/thing'	military rank
<i>garde</i>	M	'guard', 'bodyguard'	
<i>général</i>	M	'commander-in-chief'	
<i>génie</i>	M	'genie'	<i>personnage surnatural</i> 'supernatural being' (LRPT, 1994:517)
<i>hermite</i>	M	'hermit'	someone cut of from the world, alone (LRPT, 1994:410)
<i>hoir</i>	M	'heir'	(anc.) 'person who inherits' (land, goods, etc.)
<i>ingénieur</i>	M	'engineer'	(Canada <i>ingénieur/-e</i> , discussed above)

<i>juge</i>	M	'judge'	magistrate charged with rendering justice (LRPT, 1994:638)
<i>larbin</i>	M	'flunkey'	(pej.) 'servant' obsequious individual (LRPT, 1994:653)
<i>macaque</i>	M	'ugly person'	(fam.) from <i>macaque</i> (M) '(Asian) monkey'
<i>magistrat</i>	M	'magistrate'	public servant in the judiciary (LRPT, 1994:684)
<i>maire</i>	M	'mayor'	chief officer of municipal council (LRPT, 1994:686)
<i>malfaiteur</i>	M	'criminal'	person committing criminal offence
<i>médecin</i>	M	'doctor'	person licensed to practise medicine (LRPT, 1994:710)
<i>militaire</i>	M	'member of the military'	<i>celui</i> (he) who is a member of the armed forces (LRPT, 1994:726)
<i>ministre</i>	M	'minister' (of state, religion)	<i>homme ou femme</i> (LRPT, 1994:728)
<i>moineau</i>	M	'nasty-looking individual'	(fig.) from <i>moine</i> (M) meaning 'monk, friar' (LRPT, 1994:735) (having associated traits)
<i>monarque</i>	M	'monarch'	'head of state in a monarchy' (LRPT, 1994:737)
<i>monstre</i>	M	'monster'	<i>être, animal fantastique et terrible</i> of myths and legends
<i>officier</i>	M	'officer'	soldier or sailor above sub-lieutenant or ensign second class; <i>titulaire</i> in honorific order (LRPT, 1994:785)
<i>peintre</i>	M	'painter'	artist/artisan who works with paint on a habitual basis (LRPT, 1994:827)
<i>plaisantin</i>	M	'joker'	(pej.) person who tells jokes of doubtful taste (LRPT, 1994:855)
<i>poète</i>	M	'poet'	writer of poetry
<i>politique</i>	M	'politician'	'(liter.) <i>homme ou femme de gouvernement, qui sait gouverner</i> 'male or female politician' ... who understands the governing of others' (LRPT, 1994:868)
<i>pompier</i>	M	'firefighter'	'man belonging to the <i>corps des sapeurs-pompiers</i> charged with fighting fires (LRPT, 1994:871)
<i>poupon</i>	M	'infant', 'small child'	from <i>poupée</i> (F) 'doll'
<i>prêtre</i>	M	'priest', 'minister'	member of the Catholic clergy, ordained minister in other religions (LRPT, 1994:895)
<i>prochain</i>	M	'fellow human being'	person, human being considered as <i>un semblable</i>
<i>professeur</i>	M	'professor', 'teacher'	person who teaches a discipline, art, etc. (Can.) <i>professeure</i> (F) (LRPT, 1994:902)
<i>riche</i>	M	'wealthy individual'	'millionaire', 'billionaire' (fam.) <i>richard</i> (M) (LRPT, 1994:989)
<i>rustre</i>	M	'brutal man'	<i>homme grossier et brutal</i> (LRPT, 1994:1002)
<i>savant</i>	M	'scientist'	person trained in science who engages in scientific research; (anc.) (M/F) v. cultured person (LRPT, 1994:1015)
<i>sculpteur</i>	M	'sculptor'	person who produces a work of art through the process of sculpting (LRPT, 1994:1021)
<i>secrétaire</i>	M	'secretary'	title of address to various <i>personnages</i> who depended on high political authority (LRPT, 1994:1023)

<i>singe</i>	M	'lazy person', 'copy-cat'	(fig.) from <i>singe</i> (M) 'monkey', associated with cunning properties attributed to monkeys; also, (fam.) 'corned beef' (as a copy) (LRPT, 1994:1039)
<i>témoïn</i>	M	'witness'	person who certifies, or is able to certify or witness something (LRPT, 1994:1097)
<i>titi</i>	M	'street-urchin'	child, from Adj. <i>petit-e</i> , 'small' (LRPT, 1994:1113)
<i>troglodyte</i>	M	'troglodyte'	prehistoric people who lived in caves; someone who inhabits a cavern, grotto (LRPT, 1994:1140)
<i>vif</i>	M	'living person'	(legal) 'any living being', from Adj. <i>vif</i> 'alive, living' (LRPT, 1994:1175)

Close examination shows that there is no entailment for 'male' among these nouns, even *ermite*, and *rustre* despite its translation as 'brutal man' and even *ermite*. For these nouns as well as *clerc*, *évêque* and *prêtre*, meanings themselves do not entail 'male', but masculine gender would have been regular and predictable as a result of constraints resulting from practices or stereotyping where the only real-world referents to which these terms could apply were 'male'. Today, however, religious terms in some churches such terms may apply equally to a female. While the original sense of *ermite* (M) was 'monk' – *un religieux* – again historically 'male', in its extended meaning it can apply to anyone who lives in solitude, cut off from others. The term *hoir* (M) 'heir' likewise has no semantic entailment for 'male', but its application would have largely restricted it to 'male' real-world referents, particularly in a country where females had no legal status over centuries. However, *clerc* has another meaning, 'notary public', and today such a role may well apply to a female. Nonetheless, it seems that masculine gender is retained regardless of the sex of the referent.

For the remaining nouns, particularly *monstre*, *monarque*, *savant*, *troglodyte*, etc., principles that underpin fixed masculine gender assignment in these cases remain to be identified. Two 'pejorative' terms in this set – *larbin* 'flunkey' in a servile, greasy kind of way, and *plaisantin* as someone a bit 'off', who jokes overmuch or in poor taste – have the same masculine gender assignment and vowel-final pronunciation observed earlier for pejorative terms. The term *plaisantin* no longer retains the inherent quality of *plaisant/-te* 'pleasing, pleasant'. While it is possible that masculine gender assignment for *plaisantin* conveys some privative sense, a loss of qualities suggested in its original sense, this is unlikely for *larbin* since its origins are no longer evident (LRPT, 1994:653). It is noted that pejorative collective terms for humans

discussed above, eg. *jupon*, *ramassis* and *tas*, also have masculine gender assignment and vowel-final pronunciation. However, a more likely explanation is that masculine gender assignment conveys some denial of qualities that make us human, particularly in its association with the attribute 'inanimate', in contrast to the strong association between feminine gender and 'animate' (living). The term *vif* is discussed above with superordinate terms where its masculine noun is argued to relate to a body that is 'unreal' or 'indefinite'.

Nouns denoting supernatural beings whose meanings are not sex specific, such as *ange*, *démon*, *esprit*, *elfe*, *génie*, *monstre*, all have masculine gender assignment. As 'non-human' characters in religion, myths, legends, etc., again there may be a sense in which masculine gender assignment denies any potential for 'human' qualities.

The noun *bébé* (M) denotes the 'youngest' person in the family, particularly 'new-born', and its classification can be related to comparative difference in age/size with the adult form. These classifications for *bébé* are consistent with nouns denoting the 'young' of creatures in other lexical fields, eg. *lionceau* (M) 'lion cub', *carpeau* (M) 'young carp', or *oisillon* (M) 'chick'/fledgling'. The same distinction in comparative (diminutive) size may also account for masculine gender assignment and vowel-final pronunciation of *poupon* and *titi*, particularly in their derivations from 'small'.

While the sense of some of nouns such as *autrui* and *prochain* suggest a comparison with some other, in its sense as 'not the same' masculine gender assignment for *autrui* reflects that of other 'privative' nouns, eg. *rien*, *personne ne* discussed above. Translations for *prochain* include 'neighbour', 'brother', 'fellow human being' (COFED, 1985:441), but these meanings miss out on the more salient nature of its meaning as 'someone close – but not blood', consistent with collective terms identifying kinships.

It is interesting to note that *apache*, *assassin*, *malfaiteur* and various other nouns denoting evil-doing, *bandit*, *brigand*, *gangster*, have fixed masculine gender. For such nouns, either some association exists between masculine gender and *mal*- 'bad', or fixed gender assignment for

these nouns reflects some kind of hangover from a time when it could never have been considered possible that they might apply to a 'female' referent – a tie that endures today. It is noted that *criminell-le* offers alternative gender assignments, but its meaning does not have the same sense as 'bad', or 'evil', suggesting that cultural discriminations exist in these areas. The definition of *assassin* includes murder that is not only premeditated but involves lying in wait, an attribute that is associated with masculine gender assignment in the analysis of fish in Chapter 5. For the 'solitary' *ermite* and 'underground' *troglydite*, these same attributes appear in the analysis of birds, in relation to masculine gender assignment for *aigle* (M/F) 'eagle', and of fish and other animals that bury themselves underground, eg. *ange* (M) 'angelfish', *rason* (M) 'cleaver wrasse' that dives headfirst into the sandy floor, *lapin* (M) 'rabbit', *wombat* (M) 'wombat', etc.

Thus, for some of these nouns fixed masculine gender assignment appears to be regular and consistent in its association with attributes identified earlier in their association with masculine gender, eg. 'endangering habits' such as burying oneself, leading a solitary life, lying in wait, and other attributes such as 'unreal'/'inanimate'/'indefinite' and 'not blood'. For others, however, fixed masculine gender assignment relates to domains that were once restricted to male real-world referents, particularly at the highest level or in the most esteemed positions in the creative arts, in public service, clergy, the law, and the military, and in amateur activities rather than professional or paid activities. In the late twentieth and early twenty-first centuries less restrictive social norms mean that most positions or occupations identified by such terms can be filled by a female.

#### 8.8.2.1 Masculine nouns used in figurative extension from pre-existing nouns

Nouns in Table 8.27 below are figurative extensions of pre-existing meanings.

Table 8.27: Masculine nouns derived from pre-existing nouns

<i>butor</i>	M	'surly ill-bred person'	from <i>butor</i> (M) 'bittern' a bird which whose heavy form suggests neither <i>finesse</i> ni <i>délicatesse</i>
<i>charognard</i>	M	'pitiless exploiter of others' misery'	from <i>charognard</i> (M) 'carrion-eater'

<i>corbeau</i>	M	'greedy person' with immoderate desire for food'	from <i>corbeau</i> (M) 'raven'
<i>étourneau</i>	M	'bird-brain', 'thoughtless person'	from <i>étourneau</i> (M) 'starling'
<i>fléau</i>	M	'destructive person'	from <i>fléau</i> (M) 'flail'
<i>macaque</i>	M	'ugly person'	from <i>macaque</i> (M), an Asian monkey
<i>moineau</i>	M	'nasty-looking type'	from <i>moine</i> (M) 'monk, friar'
<i>singe</i>	M	'lazy person', 'copy-cat',	from <i>singe</i> (M) 'monkey' as a cunning, clever animal

For only two of these nouns does there appear to be any association with 'male', for *butor* relating to 'bull-like noises', and *moineau* drawn from a term ('monk') denoting a 'male' referent. Nonetheless, for each of these nouns the masculine gender associated with the original meaning is maintained in their figurative extensions to human referents. This is not always the case, as we have observed for other living creatures, eg. *faune* (F) 'fauna' from *Faune* (M) 'male rural deity (cf. Pan)'. Whilst masculine terms may have some pejorative sense their figurative meanings, eg. *hobereau* (M) 'country squire' from its original sense as 'hobby', a small falcon, which comes to suggest *un gentilhomme campagnard de petite noblesse, qui vit sur ses terres*, 'a country gentleman of minor rank who exists in the same way as a hobby falcon, taking what the land offers' (LRPT, 1994:561).

Amongst nouns from other lexical fields whose meanings are used in extension to denote a human being, we have observed that changes in gender assignment from original meanings appear to be associated with amelioration or pejoration of that original sense in their application to humans, and that amelioration is associated with feminisation, eg. *grosse légume* (F) 'big shot', while pejoration is associated with the masculine *jupon* (M) 'petticoat' (an article of underwear that is unseen), rather than the feminine term *jupe* (F) 'skirt' (outerwear).

It is a field worthwhile examining more closely, particularly among terms used in a pejorative sense. Not quite in this field are other feminine nouns used in extension to denote a human being such as *pie* (F) 'magpie' for a person who talks nineteen to the dozen (rather than too much) (COFED, 1985:414). Even less tenuous are nouns such as the masculine *piaf* (M) 'sparrow', as a term of affection denoting *Piaf*, born Edith Gassion. These various inferences

even from these few nouns suggest that, in French, positive and negative effects emerge from the semantics of the lexeme and the way it reflects a certain quality of the referent – and not through gender assignments themselves.

#### 8.8.2.2 Masculine nouns derived from adjectives

A number of nouns are adjectival forms used as substantives, eg. *fort*, *balèze* and others discussed earlier, *familier*, *semblable*, *prochain* and *vif*. While most are accounted for, it is interesting to examine contrasting gender assignments among nouns with similar meanings.

As a substantive *fort* typically applies to male real-world referents, such as the *les forts des Halles* 'market porters' that have to lug heavy weights around, and masculine gender not so much fixed as correlating with the reality of its application to real-world referents that are 'male'. Similarly, the adjective *balèze* 'huge' as a substantive applies to those whose size suggests 'huge', typically 'male' referents, and masculine gender in this case also reflects a correlation with real-world referents.

It is interesting to compare the masculine terms *familier* (M) 'close family friend' and *prochain* (M) which is translated as 'neighbour'/'brother'/'fellow man' with *alliél-ées* (n.) 'related by marriage' and *intime* (n.) 'close friend' which offer alternative gender assignments. The noun *familier* is derived from the stem *famil-* which has the potential to suggest 'blood' in a way that *alliél-ée* and *intime* do not. Its fixed masculine gender ensures that no confusion can arise between 'blood' relation and 'close family connection' as a result of any feminine alternative. The term *prochain* is derived from the adjective *proche* 'close', identify a proximity that might reflect 'family' and again is not present in either *alliél-ée* or *intime* – which has a quite different nuance from the English notion 'intimate'. The degree of closeness for *prochain* that might suggest 'blood' is disambiguated with its masculine gender assignment.

#### 8.8.2.3 Remaining nouns

As identified above, masculine gender assignments for nouns identifying a role would once have been regular and predictable not in relation to the semantics of the lexemes themselves but



in correlating with 'male' real-world referents, particularly given the pre-twentieth century historical constraint on women occupying such roles. The 'fixed' nature of many of these terms appears to have come about as a carry-over from past times based on historical precedents, particularly where few or no women have been able to take up such roles. In some cases, the continuous application to real-world 'male-only' referents over centuries still occurs today, eg. nouns relating to members of the Catholic clergy, eg. *clerc, évêque, prêtre*. Masculine gender assignment for these nouns would once have correlated with the real-world referent in the same regular and predictable way as occurs for nouns that offer alternative gender assignments.

Legal and societal changes have meant that almost all of these roles once limited to 'males' are now open to both sexes, eg. *accordeur, apothicaire, chef, chancelier, docteur, garde, ingénieur, juge, magistrat, maire, médecin, militaire, ministre, officier, politique, pompier, prêtre, professeur, secrétaire, soldat*. Definitions clearly identify that these nouns may apply to a 'male' or 'female' in expressions such as (*P*)*ersonne qui* 'person who' for nouns such as *acquéreur, amateur, athlète, chef, dignitaire, docteur, écrivain, fort, garde, ingénieur, médecin, ministre, poète, sculpteur, savant*. For some nouns, the inclusion of both sexes is expressed even more overtly:

- ACCORDEUR, N.M. *Elle est accordeur*. (LRPT, 1994:8) 'she is a piano tuner'
- POLITIQUE, N.M. *Homme ou femme* (LRPT, 1994:868) 'politician, man or woman'
- SOLDAT, N.M. *Homme qui sert dans une armée ... Une femme soldat*. (Fam. *soldate* n.f.) (LRPT, 1994:1044) 'Man who serves in an army ... A female soldier.'

Precisely why there is such resistance to feminine alternatives for these few nouns which today are likely to be called upon to express a 'male' or 'female' real-world referent is the interesting question. Masculine gender assignment is unrelated to their semantics, unlike *oncle* (M) 'uncle', *garçon* (M) 'boy' or *père* (M) 'father' whose semantics entail 'male'. The 'fixed' nature of masculine gender assignment would appear to relate to some source external to the semantics of the lexemes.

One might argue that some forms cannot offer a feminine alternative for an equivalent meaning since feminine forms already exist but have a different meaning, eg. *chancelière* (F) is not 'female chancellor' but 'foot-muff', *générale* (F) is not 'female' general but 'general's wife',

*procureuse* is not 'female prosecutor' but 'procuress' (person who procures others as prostitutes) and *sécrétaire* (M) 'Secretary of State has a feminine alternative 'secretary', support staff. However, this should not be sufficient to prevent their application in the case of equivalent meanings denoting a 'female' referent. In this respect, it is interesting to note the distaste of female authors for any feminisation of *auteur* – but whether this relates to the demeaning nature that English speakers seem to feel for -ess in manager/manageress, or whether it relates to some other aspect of its semantics needs to be explored further. It is also noted that COFED (1985:326) provides a feminine form *maireesse* (F) 'lady mayor', which it suggests is now obsolete (it is not found in the later (1994) LRPT). Perhaps this noun, too, is less agreeable than *maire* – particularly since the semantics of *maire* do not include 'male' in a way that would preclude any application to 'female'.

Analysis of the domains of these roles which have no feminine equivalent shows that they are limited to the following areas:

- creative arts, eg. *auteur, écrivain, peintre, poète, sculpteur*
- practices (unremunerated), eg. *amateur*, or learned professions (remunerated), eg. *apothicaire, docteur, ingénieur, médecin, professeur, savant*
- power, either political or physical, eg. *athlète, autocrate, despote, garde, pompier*
- property, wealth, eg. *acquéreur, riche*
- high office, eg. *chancelier, chef, dignitaire, juge, maire, ministre, monarque, personnage, politique, secrétaire*
- legal, military, and religious domains, eg. *capitaine, caporal, général, militaire, soldat, témoin, clerc, évêque, prêtre*.

However, not covered in these sets are *accordeur* (M) 'piano-tuner', *acquéreur* (M) 'purchaser', *banqueteur* (M) 'diner at banquet' for which there is also strong resistance to alternative gender assignment. That resistance is unlikely to relate to -eur as a masculine suffix since -eur elsewhere forms feminine nouns. Equally significant is that there is no evidence of any effort to provide an alternative suffix form that might be acceptable for these nouns. This would suggest that there is some appropriation of these roles by males that is felt to be unfitting or inappropriate for a female. It can be argued that for each of these offices, old customs and

methods are valued and perpetuated, and the celebration of tradition can encourage a conservative approach as well as resistance to change.

The association between masculine gender and offices of wealth and leisure, high status, and education, particularly in their application to occupations such as *écrivain*, *peintre*, *poète* can be argued to relate in part to historical associations between 'male' and masculine gender over the centuries during which women could not have been present in such fields. In part they may also reflect a world that admired an amateur status over the professional who worked for profit, and in certain areas (sports such as tennis, horse racing, etc.) these distinctions were made much of even until the second half of the twentieth century, lingering in certain sports. Certainly the amateur world would have been restricted to those who could afford not to work and for many centuries this set would also have excluded females. Resistance to change would have allowed the image of status to be perpetuated past its natural life.

Changes in society between dates of publication of dictionaries used for this research (COFED, 1985, LRPT, 1994) have meant that an enormous number of nouns identified as masculine in the earlier dictionaries today have alternative masculine and feminine genders enabling them to correlate with the real-world 'male' or 'female' referent – nouns such as *président/-ente* (M/F) 'president', *curieux/-euse* (M/F) 'collector', *collègue* (M/F) 'colleague', *adversaire* (M/F) 'opponent, adversary'. It will be interesting to observe this are in the coming decades. Some of these nouns represent archaic practices, eg. *apothicaire*, *hoir*. In some cases new coinings that offer alternative genders have sprung up, eg. *pharmacien/-ienne* (M/F) 'pharmacist', *héritier/lière* (M/F) 'heir' and non-correlating terms have now lost currency. One would expect that any use of these archaic nouns today would be intended to reflect that past world, and that fixed masculine gender assignment would provide an additional signal of *temps passé*.

It can be argued that for nouns concerned with high office, wealth, learnedness and creativity, masculine gender assignment is not predictable from the semantics of the nouns themselves but from past legally and socially accepted customs. In relation to strength associations with 'male' thus far appear to result from a combination of custom, stereotype, social practices relating to

what is/is not acceptable for females vis-à-vis males. It will be interesting to observe nouns in these areas over the coming decades. In this regard it is interesting to note that *chef* has a single usage of a feminine form (in LRPT, 1994:180), *C'est la chef* but elsewhere in its definition we find *Elle, c'est un chef*. For one we find feminine agreement on the (definite) article *la* and for the other agreement on the (indefinite) article, *un*, is masculine – perhaps because *une* is even less comfortable.

8.8.2.4        Related pair - *personnage* (M) 'personage' and *personne* (F) 'person'

Comparison of related pairs of nouns has previously been helpful in identifying not only differences in their meanings but crucial distinctions that can account for their different treatments. One such pair occurs in the contrast between the masculine *personnage* (M) 'important person' and the noun from which it is derived, the feminine *personne* (F) 'person'. One dictionary suggests that *-age* itself is associated with masculine gender (LRPT, 1994:1227). There is an extensive set of masculine nouns with this terminal sequence, eg. *brûlage* (M) 'burning', *caquetage* (M) 'cackling (of hens)', *langage* (M) 'language', *mirage* (M) 'mirage' and *mariage* (M) 'marriage' and such examples do appear to involve a suffix *-age*. There are also some (rare) feminine nouns that end in a similar *-age* word-finally, eg. *hypallage* (F) 'hypallage' (a figure of speech), and plants such as *passerage* (F) 'pepperwort' and *saxifrage* (F) 'saxifrage'. While it is not clear whether or not these words involve a suffix, in the case of the (plural) *ambages* (F) 'ambiguity' (having more than one interpretation, from the Latin stem *amb(i)-* 'around'), it seems highly likely. However, none of these words is in the semantic fields discussed in the present work.

It is argued above in the case of *personne* that each of us is can be recognised from amongst others through a voice that is uniquely ours, and this attribute 'unique' is consistent in its association with feminine gender across each of the lexical fields in this study. As a masculine noun, *personnage* would never be confused in any way with 'unique'. However, this pair might form a contrast between a uniqueness that is 'created' for *personne*, whereas the distinction that singles out any *personnage* is 'man-made'. Nonetheless, the meaning of *personnage* depends on a differentiation or singling out of one from others, and given the extensive evidence of the

association between masculine gender and 'distinctive', 'distinguished', 'different', as a masculine noun *personnage* is consistent with other examples where these same notions are salient.

#### 8.8.2.5 Canadian French treatment of nouns

Several Canadian nouns are presented in the dictionary, eg. *ingénieure* (LRPT, 1994:606), *professeure* (LRPT, 1994:902) as alternative feminine forms to *ingénieur/professeur* so that orthographically they can correlate with a 'female' real-world referent. As reported above, *-eur/-eure* are only considered acceptable by the *Académie française* when associated with meanings related to Latin comparative terms (see bulletin of *Académie française* at <[www.academie-francaise.fr/langue/francois.html](http://www.academie-francaise.fr/langue/francois.html)>, 2005, and Appendix II, part 2 'Neologisms'), such as *supérieur/-eure* (M/F) 'head of a community or religious order', particularly 'Mother Superior'.

The readier acceptance of such alternatives in Canadian French over modern mainland French may possibly relate to historical forms present in the language of early French migrants to Canada. It perhaps reflects a similar acceptance of feminine gender for trees that we find today.

#### 8.8.3 Masculine nouns, semantic referents 'female'

The database contains some rare examples of nouns whose semantics designate 'female' but which have fixed masculine gender. They are set out below in Table 8.28.

Table 8.28: Masculine nouns with female lexical referent

<i>bas-bleu</i>	M	'bluestocking'	female with literary pretensions; <i>intellectuelle pédante</i> 'priggish intellectual' (LRPT, 1994:96)
<i>chaperon</i>	M	'chaperon'	person who accompanies <i>une jeune fille</i> , <i>jeune femme</i> to maintain propriety (LRPT, 1994:174) from <i>chaperon</i> , dimin. of <i>chape</i> (F) 'cape'
<i>jupon</i>	M	'(fam.) woman, girl'; 'bit of skirt'	from <i>jupon</i> (M) 'petticoat', 'underskirt' (COFED, 1985:303)
<i>laideron</i>	M	'unattractive young girl, older woman'	from (Adj.) <i>laid</i> , <i>laide</i> 'ugly'
<i>tendron</i>	M	'(arch.) 'young girl'	<i>Très jeune fille.</i> (LRPT, 1994:1100)

The earlier discussion regarding *jupon* is related to its collective meaning, but it also appears to be used as a count noun. For each of these nouns the notion 'female' is entailed in the semantics

of the lexeme itself, just as it is entailed in the lexemes of nouns such as *mère* 'mother' and *tante* 'aunt'. Yet the correlation that occurs between 'female' in the semantics of the lexeme for *mère* and *tante* and their feminine gender assignments does not occur for these four nouns. These masculine gender assignments require explanation.

Meanings of each of these nouns are in some way disparaging, and while *bas-bleu* appears to be an old-fashioned word and has lost some of its pejorative sense, this is not the case for *laideron* derived from the adjective *laide* 'ugly'. While the salient attribute in the case of *bas-bleu* may be 'inanimate' in relation to an article of clothing, there is no doubt that masculine gender for all four suggests 'not female'. Two masculine nouns, *jupon* (M) 'petticoat', an article of clothing quickly put on and taken off but never seen, and *tendron* (M) 'young shoot' are used figuratively to denote a 'female' lexical referent – either as someone of little account or someone too young to be considered 'female'. The masculine noun *chaperon* is derived from *chaperon* (M) 'small cloak', and is used figuratively to denote a person performing the role as 'chaperone'. This case is different from *laideron* in that masculine gender assigned to the original meaning is maintained in extension, even though the real-world referent would typically be female.

The example of *jupon* is interesting, particularly since it is derived from the feminine noun *jupe* (F) 'skirt' that might just as easily have been used instead – as occurs in English. However, as with *laide*, the salient qualities of a 'petticoat' – light and unseen – are in themselves pejorative. It may be that the use of a masculine term for a 'female' emphasises the lack of regard, but whether or not this is reflected in the use of feminine terms such as *tête* (F) 'head' and *patate* (F) 'sweet potato' in a derogatory sense as 'blockhead' as against masculine terms such as *cul* (M) 'idiot' is an interesting question for future exploration. It is noted that another pejorative term used informally is *bringue* (F) 'tall gangly girl', derived from *brin* (M) 'blade of grass'. In this case, *brin* might suggest 'not female' where its meaning is only captured by the direct reference to 'female' and in this one example we find changes in both gender assignment and in word-final pronunciation patterns. An example such as this suggests that gender assignments are acutely significant and contribute to meanings beyond any morpho-syntactic role.

## 8.9 Fixed gender assignment – feminine

This section relates to feminine nouns in the database whose meanings denote a human referent. Some of these feminine nouns entail 'female' while others have no such entailment.

### 8.9.1 Feminine nouns whose semantics entail 'female'

Table 8.29 contains 36 nouns in the database with fixed feminine gender assignment and in each case 'female' is entailed in the semantics of lexeme itself.

Table 8.29: Feminine nouns with female lexical referent

<i>aspara</i>	F	'Aspara', female nymph of Hindu mythology
<i>bacchante</i>	F	'priestess of Bacchus'; (mod.) 'debauched woman'
<i>ballerine</i>	F	'ballerina', female ballet dancer
<i>bayadère</i>	F	'dancing girl', esp. one serving in a Hindu temple
<i>bégueule</i>	F	'prude', female who displays affected modesty (LRPT, 1994:104)
<i>belle</i>	F	'beautiful woman/young woman' (LRPT, 1994:105)
<i>bonne</i>	F	'servant', 'maid'
<i>bringue</i>	F	'(informal, pej.) 'tall gangly girl' (LRPT, 1994:133) (from <i>brin</i> (M) 'blade of grass, shoot, sprig; stick'
<i>call-girl</i>	F	'call-girl' (LRPT, 1994:146)
<i>compagne</i>	F	'female friend (LRPT, 1994:210)
<i>dame</i>	F	'lady'
<i>dinde</i>	F	'stupid woman' (fig. extension of <i>dinde</i> (F) 'turkey'-hen)
<i>fée</i>	F	'fairy', imaginary being with female appearance given supernatural powers (LRPT, 1994:461)
<i>femme</i>	F	'woman', adult female of human race capable of conceiving (LRPT, 1994:462)
<i>filie</i>	F	'daughter', female person considered in relation to her father and mother; 'descendant'; female after the age of puberty (LRPT, 1994:471)
<i>fillette</i>	F	'girl', young female child of human race'
<i>garce</i>	F	'(mod.) <i>femme de mauvaise vie</i> , <i>femme/fille méchante</i> , <i>désagréable</i> , female human (archaic) <i>femme</i> 'woman', <i>filie</i> 'daughter' (LRPT, 1994:510)
<i>gigogne</i>	F	'old lady who lived in a shoe' (pantomime character)
<i>gorgone</i>	F	'gorgon', any of the three winged monstrous sister (COFED, 1985:254)
<i>gouine</i>	F	'lesbian' (female homosexual, LRPT, 1994:526)
<i>gourgandine</i>	F	'loose woman'
<i>houri</i>	F	one of the female nymphs of Paradise
<i>madame</i>	F	'madam', term of address for woman of a certain age
<i>mademoiselle</i>	F	'miss', term of address for younger or unmarried woman (LRPT, 1994:683)
<i>maman</i>	F	'mummy' term of address for mother
<i>mère</i>	F	'mother'
<i>muse</i>	F	'muse'
<i>nymphé</i>	F	'nymph', female goddess envisaged as a beautiful maiden
<i>papesse</i>	F	'female pope' (COFED, 1985:396)
<i>pépée</i>	F	'(informal) <i>femme</i> , <i>jeune fille</i> 'young woman, girl' (from <i>poupée</i> (F) 'doll'
<i>putain</i>	F	'(pej.) prostitute' (also <i>pute</i> ); (informal) someone who wants to please everyone (LRPT, 1994:918)

<i> salope </i>	F	'(pej.) a slut' (cf. <i>salaud</i> (M) 'a shit', contemptible male); also, 'despicable woman' (LRPT, 1994:1008)
<i> sirène </i>	F	'siren', 'mermaid'; (fig.) 'siren', 'charmer', 'seductive woman'
<i> sœur </i>	F	'sister'
<i> tante </i>	F	'aunt'
<i> vierge </i>	F	'virgin'

These nouns that entail 'female' in their semantics occur in certain contexts:

- family relations, eg. *maman, sœur, tante*
- religion, myth, legend, eg. *aspara, bacchante, fée, gigogne, muse, nymphe*
- 'female' physical appearance, both complimentary, eg. *belle, péri*, and less so, eg. *dinde, garce*
- sexual proclivity, eg. *guine,ourgondine, putel/putain, salope, sirène, vierge*
- occupation or role, eg. *bonne, call-girl, houri, papesse*
- age distinctions, eg. *dame, fillette*
- titles of address that also include distinctions for age, eg. *madame, mademoiselle*.

Thus, in fields where distinctions between 'male' and 'female' are crucial, a noun whose lexical semantic referent is identifiably 'female' motivates feminine gender assignment in a regular and predictable way. This pattern is replicated for nouns denoting 'female' figures in parallel worlds of myths and legends.

#### 8.9.2 Feminine nouns – no semantic entailment for 'male' or 'female'

Some meanings have no entailment for 'male' or 'female' and can apply to any human referent but they are nonetheless feminine, as is the case for the 24 nouns set out in Table 8.30 below.

Table 8.30: Feminine nouns – no lexical designation of sex

<i>asperge</i>	F	'tall thin person'	from <i>asperge</i> (F) 'asparagus' (LRPT, 1994:64)
<i>buse</i>	F	'block-head'	(personne sott e ignorant e)' from <i>buse</i> (F) 'buzzard' (LRPT, 1994:139)
<i>chiffe</i>	F	'weak character'	from English 'chips' (LRPT, 1994:185)
<i>courge</i>	F	'(fam.) idiot'	from <i>courge</i> (F) 'variety of marrow' (LRPT, 1994:250)
<i>connaissance</i>	F	'acquaintance'	person with whom one has limited previous contact' (LRPT, 1994:223)
<i>cruche</i>	F	'silly fool'	<i>personne niaise, bête et imbécile</i> , from <i>cruche</i> (F) 'rounded earthen-ware or pottery jug' (LRPT, 1994:264)



<i>dupe</i>	F	'dupe'	person one can deceive without the least suspicion, from <i>houpe</i> (F) 'topknot' (LRPT, 1994:350)
<i>épée</i>	F	'good swordsmith'	from <i>épée</i> (F) 'sword' (LRPT, 1994:403)
<i>estafette</i>	F	'courier'	(archaic) charged with speedy delivery (LRPT, 1994:417)
<i>frappe</i>	F	'scoundrel', 'villain'	from (arg.) <i>frapouille</i> , cross between <i>fripouille</i> (F) 'rascal' and <i>frapper</i> 'to knock' several times (LRPT, 1994:494)
<i>ganache</i>	F	'complete idiot', 'blockhead'	from <i>ganache</i> (F) 'jaw' (LRPT, 1994:509)
<i>gourde</i>	F	'clumsy person'	from <i>gourde</i> (F) 'gourd', round fruit used as container (LRPT, 1994:526)
<i>huile</i>	F	'important person', 'person in authority'	(often in plural) (LRPT, 1994:568)
<i>grosse légume</i>	F	'big shot'	from <i>légume</i> (M) 'legume' (LRPT, 1994:658)
<i>linotte</i>	F	'scatter-brain'	from <i>linotte</i> (F) 'linnet' (feeds on flax seeds) (LRPT, 1994:667)
<i>majesté</i>	F	'majesty'	title given to hereditary sovereign (LRPT, 1994:688)
<i>moule</i>	F	'fool', 'imbecile', 'spineless person'	from <i>moule</i> (F) 'mussel' (LRPT, 1994:746)
<i>nouille</i>	F	'silly spineless person'	<i>personne molle et niaise</i> ) from <i>nouille</i> (F) 'noodle' (LRPT, 1994:773, COFED, 1985:376)
<i>patate</i>	F	'stupid person'	from <i>patate</i> (F) 'sweet potato', (inf.) 'potato' (LRPT, 1994:819)
<i>pie</i>	F	'chatterbox'	( <i>personne bavarde</i> ) from <i>pie</i> (F) 'magpie' (LRPT, 1994: 845)
<i>pomme</i>	F	'idiot', 'simpleton'	from <i>pomme</i> (F) 'apple' (LRPT, 1994:870)
<i>potiche</i>	F	'figurehead'	person relegated to honorary position, without any active role, from <i>potiche</i> (F) large oriental porcelain vase' (LRPT, 1994:879)
<i>poupée</i>	F	'doll'	figurine in a human form (generally child, infant) (LRPT, 1994:881, <atilf.atilf.fr>, 2006)
<i>relation</i>	F	'acquaintance'	person with whom one has habitual and frequent contact (LRPT, 1994:959)
<i>recrue</i>	F	'(mod.) recruit'	newly enlisted soldier (since military conscription); person who has just joined (a group) (LRPT, 1994:948)
<i>ruine</i>	F	'person degraded by old age, illness'	from <i>ruine</i> (F) 'destroyed building' (LRPT, 1994:1001)
<i>star</i>	F	'celebrity', 'film star'	English loan word (LRPT, 1994:1060)
<i>sentinelle</i>	F	'sentry', 'sentinel'	person who keeps watch, guard (LRPT, 1994:1029)

<i>vedette</i>	F	'scout', 'sentry'; 'star'	original sense related to an elevated position giving sight over the surrounds; (mod.) having one's name up in lights (LRPT, 1994:1161)
<i>victime</i>	F	'victim', 'someone injured/suffering'	person who submits to injustices, or suffers through injustice, injury, etc. from 'living creature offered as sacrifice' (LRPT, 1994:1173)

These feminine nouns can apply to any human referent where the quality in the semantics of the noun is shared by the 'real-world' referent. Many of these nouns are figurative extensions of pre-existing nouns since some aspect of their original meaning can apply specifically to humans, eg. 'lack of a brain' for *courage*, *cruche*, *ganache*, the 'thinness' of an asparagus spear, 'chattering' of the *pie*, etc. Others identify excellence in some way, eg. *épée huile*, *grosse légume*. Others rely on play between meanings of the object and human, eg. *potiche*, *ruine*.

For all but one of these nouns used in extension the same feminine gender assignment for the original term is maintained in extended meanings. The exception is *légume*, which is masculine in its application to a 'vegetable' and feminine in relation to *grosse légume*. A comparison of original meaning and the figurative extension as 'human' for these nouns shows that where a characteristic of the new meaning is also a characteristic of the original meaning, the original gender assignment is maintained, eg. *moule* (F) 'mussel', which has no spine, and *ruine* (F) 'ruin', a structure that has been destroyed, and *pie* (F) 'magpie' which calls continuously, a characteristic reflected in the human 'chatterbox'.

However, in the case of *grosse légume* (F) 'important person' the extended meaning has an attribute that contrasts with the original meaning, as for *légume* (M) 'legume' in its application to a common, plentiful vegetable crop that is not highly esteemed. It would appear that this change in meaning is highlighted and reflected through different gender assignments. This play on meaning occurs through contrasting classifications and is not connected in any way with the sex of any real-world referent. However, this example raises the question as to whether the amelioration is directly associated with the change to feminine gender assignment itself. This area also awaits future research.

Beyond this example are other feminine nouns, such as *victime*, *connaissance*, *majesté*, *relation*, *poupée*, *star*, and military terms such as *sentinelle*, *recrue*, etc., where feminine gender assignments are not fully accounted for. For *victime*, the notion 'living' is fundamental to its original sense as a 'live human offering to the gods' (LRPT, 1994:1172) – an act that would have been meaningless were the *victime* dead. 'Live' is equally crucial for *recrue* (F) 'recruit' in that it relates to a 'live' body that makes up the numbers lost through death and injury resulting from battle (its vowel-final pronunciation suggests that 'injured' is not problematic). This attribute 'live' (living, alive) emerged initially in Chapter 5 in the analysis of certain 'flatfish' that lie on the sides, a position that for fish – and, presumably, other living entities – might well suggest otherwise. As feminine nouns *victime* and *recrue* are consistent with such examples.

However, 'living' or 'live' are rather less pertinent for *connaissance* and *relation*, which suggests the presence of a more salient attribute. The extension from the verb *connaître* 'to know' and the association with the noun *personne* in the definition of *connaissance* (LRPT, 1994:223) as *personne que l'on connaît* 'person whom one knows', identifies someone who stands out from others because we can recognise them as different from all others. This 'standing out from all others' is surely what contributes to the meaning of 'unique'. Thus, feminine gender for *connaissance* is consistent with other nouns that suggest 'unique'. The feminine loan word *star* typically applies to a distinguished or glamorous celebrity particularly the one given top billing, the one whose name gets to be put up in lights. This example suggests that 'unique' extends to someone stands out from all those around them, in whatever field. The meaning of *star* also suggests 'top', 'up high', possibly a similar context to *aigle* 'eagle' in its eyrie, although a similar notion 'above others' is suggested to be associated with consonant-final pronunciation as for *supérieur/-eure* (M/F) 'a (male or female) person in charge of a religious community'.

The noun *relation*, however, identifies a contact that is continuous and habitual, and there is evidence of an association between 'continuous' and feminine gender, and also between 'habitual' and vowel-final pronunciation. Feminine gender for *poupée* (F) 'doll' could not relate to 'living', that typically presents a complete human form, *figurine humaine* (LRPT, 1994:861). Other nouns that denote representations of the human form include *statue* (F) 'statue', a sculpture that

presents the complete human form (LRPT, 1994:1061), while *buste* (M) 'bust', presents only an incomplete the human form. These notions 'complete' and 'incomplete' that appear to be linked with gender assignments in relation to form can be compared with notions 'part' and 'whole' and findings for collective nouns that suggest they are associated with contrasting word-final pronunciations. While semantically these meanings are related, they appear to apply differently in the classification of French nouns. The notion 'complete' also appears to be salient for terms such as *addition* (F) 'bill' and *totalité* (F) 'totality', while *compte* (M) 'account' does not necessarily imply a final amount. It is interesting to examine word-final pronunciations among these nouns, in that *poupée* and *statue* both have vowel-final pronunciation that could well be associated with 'immotile', having no capacity for independent movement, while *buste* – which cannot be animate since its form is incomplete – has consonant-final pronunciation that can be may well relate to a shape that is 'solid'.

Nouns denoting titles of address are discussed further below.

While feminine gender assignment for *recrue* is argued to be accounted for in relation to its meaning as a 'living' body, this attribute does not appear to be relevant for other military terms that are also feminine, eg. *estafette*, *sentinelle* and *vedette*; for these nouns 'living' or 'alive' can be taken as a given. Each identifies a person in relation to a specific act or task:

- *estafette* (F) 'person who delivers messages speedily' by finding the fastest route
- *sentinelle* (F) 'person who keeps watch', a task that relies on both sight and hearing
- *vedette* (F) 'person sent out to reconnoitre' where sight, typically from an elevated position, gives access to areas that would otherwise be invisible.

It can be argued that these duties may be linked with attributes associated with feminine gender assignment in a more fundamental way. Where 'messenger' is denoted by masculine nouns *messager* and *coursier*, we find *estafette*, someone who finds the fastest route. There is some evidence of an association between 'speed' and feminine gender assignment in *vitesse* (F) 'speed'. Nouns that identify the most direct/fastest route between two points such as *route* (F) 'route', *autoroute* (F) 'autoroute' are also feminine, while *chemin* (M) 'way, path, road', and *sentier* (M)

'path', routes that follows *les accidents du terrain* 'the natural terrain' (LRPT, 1994:180) are masculine. It is possible that some association exists between 'direct' and feminine gender, as for collectives of blood relations, and 'indirect' and masculine, as for collectives linked by marriage. However, it is also possible that this ability to find the fastest route conveys on *estafette* some notion of an ability that stands out from others, and one that is 'superlative'.

As a military term the noun *vedette* originally applied to one sent out ahead to find visible confirmation of enemy placement. However, both *sentinelle* and *vedette* are roles that rely on *vue* (F) 'sight', while *sentinelle* also involves *ouïe* (F) 'hearing', and there may be some association between such acts and the feminine senses with which they are associated. These associations, however, require further substantiation but they fall outside the domain of this thesis and must await future research. There is some association between an 'elevated position' and feminine gender, as observed earlier for *aigle* in relation to *en altier* 'on high', and also in its *eyrie*, a nest that is always located in high places – an association that is maintained for *vedette* in its modern application to those having their name 'up in lights', in a raised or elevated position.

Different word-final pronunciations of feminine nouns in the above set remain to be explored.

### 8.9.3 Feminine nouns whose semantics entail 'male'

Table 8.31 contains several nouns whose semantics suggest 'male' in a similar way to *garçon* (M) 'boy' and are used to designate a 'male' real-world referent, yet these nouns are feminine.

Table 8.31: Feminine nouns with 'male' lexical referent

<i>basse</i>	F	'base'	<i>voix d'homme la plus grave</i> (LRPT, (1994:99) the lowest man's voice
<i>baderne</i>	F	'old foggy/fossil'	<i>homme âgé et borné (souv. ex-militaire)</i> 'old, narrow-minded' (ex-military) (LRPT, 1994:88)
<i>biffe</i>	F	'(pop.) infantryman'	possibly related to <i>biffer</i> 'to cross out', 'delete'
<i>copaille</i>	F	'homosexual male'	from <i>copain</i> plus suffix <i>-aille</i> used in other pejorative terms (LRPT, 1994:1228)

<i>lope</i>	F	'homosexual male'	(argot) derived from <i>lopaille</i> , a misrepresentation of <i>copaille</i> , derived in part from <i>copain</i> (M) 'friend') in the expression <i>Sa Sainteté</i> (the Pope) (LRPT, 1994:
<i>Sainteté</i>	F	'Your Holiness'	

These nouns are less pejorative than slang but where gender assignment for *homosexuell-elle* (M/F) 'homosexual' alternates in its application to a specific real-world referent, for these nouns gender assignment is fixed. For two of these meanings, *copaille* and *lope*, 'maleness' is much reduced, and feminine gender assignment may signal this absence. We find similarities in English – a non-gendered language – for instance, in the use of 'queen', a term applying to a 'female', to denote a homosexual 'male'. For *baderne* (F) 'fogy, old fossil', its semantic suggest someone living in the past, and feminine gender in this case can be argued to relate not to 'male' but to 'living' – albeit in a narrow-minded way, as expressed in its definition (see above).

Two other nouns, *biffe* (F) (pop.) 'infantryman' (COFED, 1986:59) and *gonze* (F) (slang) 'chap' (male) (which exists alongside a feminine/female noun *gonzesse* (F) (vulg.) 'tart') also emerged in the database, but no further information is available. While feminine gender assignment for *biffe* may be associated with 'living/alive' in the same way as *recrue* and *baderne*, feminine gender for *gonze* cannot be accounted for at this stage. However, as a slang term it would not be unexpected to find a counter-culture where masculine features were classified as feminine, having little to do with the fundamental nature of the classification system and much to do with upsetting natural order.

In the case of *basse*, this term applies to base line of a harmony, the lowest of all, and it then extends to a referent having such a voice. Regardless of whether this line is sung by a male or female, this noun is feminine, whereas nouns such as *soprano* (M/F) 'soprano' and *alto* (M/F) 'alto' both allow alternations – possibly because there is no certainty as to which will be the 'highest' voice. Presumably for these two nouns the referent cannot be identified by the line or voice and alternative gender assignments that correlate with 'male' or 'female' offer a means of identifying a referent. In regard to 'lowest possible voice', there is some parallel with an example identified in Chapter 5, the term *miette* (F) 'the smallest possible crumb'. These 'superlatives' are

all associated with feminine gender – but, it would seem, in relation to 'standing out from all others' in whatever way.

#### Two oddities – *majesté*, *sainteté* as titles of address

Among nouns mentioned above but not yet addressed are *Sa Sainteté* (F) 'His Holiness', the term by which the Pope is referred to, a feminine term that clearly denotes a male referent, and *majesté*, a title of address as *Sa Majesté* that more commonly denotes a male but can apply to either a male or female as 'His/Her Majesty' (identified by J. & J. Thiraud, quoted by Grévisse, in Corbett, 1991:226) while .

Both of these terms recognise a 'supreme' being, someone of the 'highest' status in religion and royalty, in which context feminine gender assignment is consistent with others denoting one that stands out above all the rest. In this case, however, it is their vowel-final pronunciations that are of interest, and one attribute that offers some potential is that these are abstract terms to address a humans with a physical form. It is possible that this notion 'abstract' may be associated with vowel-final pronunciations for these nouns.

#### 8.10 Summary – count nouns

The summary below covers gender assignment and word-final pronunciation for nouns denoting human beings, and includes comment on nouns that similarly signal 'male' and 'female' but in the non-human world. Count nouns in the corpus denoting a single human referent can be divided in several ways. Some have specific gender assignments – but others do not. Among those assigned a specific gender, some are regular and predictable according to a specific semantic attribute in its meaning, associated a specific gender assignment. Attributes suggested to be salient in relation to masculine gender assignments include:

- male
- domesticated
- unreal, inanimate, indefinite
- distinctive or different from others, but not unique
- endangering habits (burying oneself, leading a solitary life, lying in wait)

- negative/private
- closely related, but not by blood
- incomplete physical realisation of a human body.

Attributes suggested to be salient in association with feminine gender include:

- female
- living, alive
- unique - standing out from others
- complete physical realisation of a human body
- senses associated with feminine gender
- height/raised elevation of action.

The contrast in gender assignments for the feminine *personne* and masculine *personnage* is striking. While in English we might consider 'personnage' as unique, or outstanding, masculine gender for this noun in French suggests that, in that culture, its sense relates to someone with a certain distinctive presence or power that makes them different from others, but not unique – in which case masculine gender assignment is regular and consistent.

For the last three notions in the set above, evidence is not extensive. However, additional material can only come from other lexical fields outside the domain of this research, and they await future study.

As identified above, for another set of nouns certain qualities, activities and roles suggest that they relate to a human referent, but meanings include no sex-specific entailment and they have no gender. For certain of these nouns speakers assign a specific gender according to the real-world referent in a regular and predictable way – masculine correlating with 'male' and feminine correlating with 'female', eg. *chanteur-euse* (M/F) 'singer', *intime* (M/F) 'close friend'.

For a third set of nouns, lexemes also pertain to human qualities, roles and activities, particularly occupations and areas of employment, including rank and their meanings likewise include no entailment for 'male' or 'female'. However, most of these nouns with fixed gender assignment



cannot correlate in a regular and predictable way with the real-world referent, e.g. *maire* (M) 'mayor', and where the referent is female, *Madame le Maire*. In these cases, fixed gender assignments do not appear to be related to attributes in any consistent way, as occurs for nouns in the first set. Instead, examples suggest that fixed gender assignments are carry-overs from a time when the only referents were 'male', or 'female', and their conservation depends on psychological, sociological, traditional or stereotypical expectations of society at large, or of an individual speaker.

Classifications of meanings that are subject to social and cultural norms are also subject to change as social changes occur, as noted by Aikhenvald (2000:311). This set was once much larger, and evidence suggests that they are now limited to a few domains. Those associated with masculine gender include high office, wealth and property, learned activities that are not remunerated, power (political and physical), and the most select of the creative arts. Those associated with feminine gender include roles traditionally associated with 'female' – nurturing or caring for children and the sick, and support staff.

Some of these changes relate to domains that were once restricted to one sex or one class are now open to both sexes and all classes, with achievement based on merit. The old 'amateur/professional' split that existed until the second half of the twentieth century no longer exists, while connotations from the legal obligations for male/female partnerships rooted in fifteenth century law no longer hold. Changes in social acceptance are visible in the changes in gender assignment in dictionaries.

Investigation of gender assignment in relation to rank shows that alternative gender assignments exist for 'male' and 'female' real-world referents in royalty, nobility, academia and religion, but not the military, even though historical terms such as *guerrier/-ière* (M/F) 'warrior' suggest that this was not always the case. These findings suggest that the custom of masculine gender assignment is unrelated to the semantics of rank terms themselves. It may result from the period of time during which these roles were considered appropriate only for males in combination, and the celebration that is so crucial in military culture and makes change difficult.

For some of these nouns, fixed gender assignment for a noun has become 'fossilised' in these domains and new terms have been created that allow alternative gender assignments. For instance, *apothicaire* (M) 'pharmacist', *acheteur* (M) 'purchaser', *hoir* (M) 'heir', *riche* (M) 'wealthy', have been replaced by modern coinings that offer alternatives, *pharmacien/-ienne*, *acheteur/-euse* (although as employee rather than self), *héritier/-ière*, *richard/-arde*. Any modern use of these obsolete terms serves to identify a different social era.

For a fourth category of nouns, gender assignments can reduce or enhance a connotation conveyed in the semantics, particularly among nouns used in figurative extension from pre-existing meanings to designate a human referent. Evidence suggests that where the original meaning is maintained in its extended meaning, the original gender assignment is maintained. Correspondingly, any change in gender assignment from the original noun to its extended meaning suggests some amelioration or pejoration of an aspect of the original meaning.

Gender assignments for 'male' and 'female' in the non-human world

Another related set are representations of male and female in the non-human world. Evidence shows that those figures represented or identified as male are typically masculine, eg. *Eros* (M) 'Eros', *faune*, *dieu* (M) 'male god', while those represented or identified as female are typically feminine, eg. *fée* (F) 'fairy', *déesse* (F) 'female god', *poupée* (F) 'doll'. Where non-human figures are undefined, eg. *monstre* (M) 'monster', masculine gender prevails as it does elsewhere, eg. *mollusque* (M) 'mollusc'. The noun *poupée* is interesting in that while it most often represents a 'female' figure, it can also apply to a 'male' figure; that is, it would apply equally to a 'Ken' doll as a 'Barbie' doll. However, an explanation for feminine gender assignment for this noun in its application to an inanimate entity of either sex may be gleaned from a comparison with other nouns denoting inanimate representations of the human form, eg. the feminine noun *statue* (F) 'statue', where we find a representation of the whole figure of a person, and the masculine *buste* (M) 'bust', a part-figure that includes only head and shoulders. We have observed contrasting gender assignments for 'whole' and 'part' elsewhere, particularly among collectives that involve family memberships. It would not be unexpected, then, for 'whole' to become salient in relation to *poupée*.

## Word-final pronunciation among count nouns

As with count nouns in other lexical fields, word-final pronunciation varies extensively. Some nouns are vowel-final, others are consonant-final, some offer contrasts that are orthographic and involve no phonological difference, while some offer alternative vowel- and consonant-final pronunciations, or alternative consonant-final pronunciations.

Those attributes associated with vowel-final pronunciation include:

- 'comparative' form (diminutive, or affective), eg. *bébé* (M) 'infant', *maman* (F) 'mummy', *onton* (M) 'uncle', *enfant* (M) 'child' and other 'affective' terms, particularly *argot*
- 'varying' shape and size, eg. *soprano*, *alto*, *contralto*
- 'inutile' for *poupée* (F) 'doll'
- 'unreal', 'abstract' presence, eg. *fée* (F) 'fairy', *génie* (M) 'genie', *péri* (M/F) ' and *houri* (F) 'houri'.

Consonant-final pronunciation for some appears to relate to a concrete presence, eg. *virtuose* (F) 'virtuoso' which would counteract any sense of *virtu-* that otherwise relates to a 'virtue', a 'quality' – entities without any physical properties. Consonant-final pronunciation for *personnage* may similarly relate to a real or concrete form, particularly since its stem identifies something other than a body.

Some vowel-final pronunciations remain to be accounted for, eg. examples such as *accusé-ée* (M/F) 'accused person', *habitué/ée* (M/F) 'regular customer', etc. The noun *plouc* (M/F) '(pej., inj.) (male or female) is defined as *personne qui a des manières grossières* 'person who has rude/disgusting manners' in LRPT (1994:861). The absence of any phonological transcription in LRPT indicates that the final letter <c> is not pronounced, but in ATILF the transcription is given as the consonant-final [pluk]. Both pronunciations can be accounted for by different saliences of attributes identified previously – vowel-final pronunciation in relation to the attribute 'rough' as for fruits that present a 'rough' outer surface (see Ch.7), and consonant-final pronunciation in relation to 'motile', an attribute that appears to be salient among footed/legged/winged creatures, and may be pertinent here in relation to the sound made when

walking in clogs/through mud, etc. However, these attributes do not appear to account for vowel-final pronunciation for *soprano* (M/F) 'soprano', particularly since it is unchanged from its Italian origins, as is *alto* (M/F) 'alto', and *contralto* (M/F) 'contralto', while for *virtuose* (M/F) 'virtuoso' the final vowel is elided to yield consonant-final pronunciation. It may be that vowel-final pronunciation for *soprano*, *alto* and *contralto* each relates to its 'part' of the whole.

Analysis of count nouns in other lexical fields relating to living things suggests that word-final pronunciation relates to shape or physical outline in space (including 'texture'), and movement (which includes 'motility' and 'behaviour'). While we might consider 'abstract' and 'concrete' to relate to form (and thus gender assignment), in French these relationships are strongly associated with 'invisible/visible' in space – and thus associated with word-final pronunciation. Other issues raised include a potential relationship between 'over' and consonant-final pronunciation, as for examples such as *prieur/prieure* (M/F) 'prior'/prioress', and *supérieur/-eure* (M/F) 'person in charge of a religious community', *chef* (M) 'chief', *maire* (M) 'mayor'.

However, many alternative word-final pronunciations of nouns in the above sets remain unaccounted for. For these cases there appears to be a more complex paradigm, particularly suffixed nouns. Some alternatives are consonant-final for both masculine and feminine alternatives, eg. *-eur/resse*. Other suffixes have one alternative that is vowel-final, eg. *-eux*, and another that is consonant-final, *-euse*. Further, the suffix, *-eur* is associated in with masculine gender in some cases, eg. *docteur* (M) 'doctor', with feminine gender in others, eg. *grandeur* (F) 'magnitude, grandeur', but may have alternative gender assignments in the case of *prieur/prieure* (M/F) 'prior/prioress' (where the 'mute' <e> provides an orthographic but not phonetic distinction). There remain nouns that do not offer word-final alternatives. In some cases these nouns are vowel-final, eg. *habitué/-ée* (M/F) '(male/female) regular customer', *bossu/-ue* (M/F) 'hunchback', but most are consonant-final, eg. *interprète* (M/F) 'interpreter', *intime* (M/F) 'close friend', *chimiste* (M/F) 'chemist', *fonctionnaire* (M/F) 'civil/public servant', etc. Since suffixes are limited to certain stems, it is possible that they, too, are associated with a semantic notion that combines with the stem to create the whole meaning of a noun. This area requires further analysis in the future.

In that gender assignments of nouns *père* (M) 'father', *mère* (F) 'mother', *oncle* (M) 'uncle', *tante* (F) 'aunt', *frère* (M) 'brother' and *sœur* (F) 'sister' designate individuals according to family relations, it is possible that a 'physical' or 'concrete' shape may account for consonant-final pronunciations of otherwise abstract notions – particularly since contrasting 'abstract' or 'non-physical' representations are associated with contrasting vowel-final pronunciation. However, vowel-final pronunciation for the term of affection *maman* (F) 'mummy' contrasts with consonant-final pronunciation for *mère*. These two nouns clearly show that the contrast in affective meaning between the informal and formal is effected via these phonological contrasts word-finally between open and closed syllable structures. The noun *maman* is of particular interest since it is one of only three feminine nouns amongst the other 3000 nouns with this word-final nasal vowel [ ǣ ] identified by Tucker et al (1977:108, 109, 114). It is possible that the more consistent association between vowel-final pronunciation and masculine gender may alert young language learners to the presence of something other than a phonological system. It is not surprising to find cases in child language acquisition of errors in gender assignment, such as *\*le maman* (reported in Müller, 2000:379), indicating that learners who appear to have acquired principles of the phonological system related to gender assignment are still in the process of acquiring semantic aspects while building their awareness of relationships other than gender assignment. An example such as *\*le maman* may possibly suggest that certain associations between phonological patterns and gender assignments may be acquired before the semantic association with gender assignment. In its way *maman* is as striking an example of a mismatch in classifications as the three consonant-final masculine nouns that denote core 'male' family members – *père*, *frère*, and *oncle*. However, informal children's terms for closely-related adults are, like *maman*, vowel-final, and they are discussed below.

#### Affective terms for humans – word

Vowel-final pronunciation of *maman* (F) 'mummy' can be contrasted with consonant-final pronunciation for *mère* (F) 'mother', contrasts also found in *tata* (F) 'aunt' and *tante* (F) 'aunt', *papa* (M) 'daddy' and *père* (M) 'father', *tonton* (M) 'uncle' and *oncle* (M) 'uncle'. In each case the affective, or informal, meaning is vowel-final where the neutral, or formal, term is consonant-final. These changes are consistent with the change observed in children's language relating to

animals discussed in Chapter 6, where *dada* (M) 'horsey' has vowel-final pronunciation where the generic term *cheval* (M) 'horse' has consonant-final pronunciation while other terms of affection, eg. *mimi* (M) 'pussy-cat' and *toutou* (M) 'doggy', also have vowel-final pronunciation (as do their generic terms *chat* (M) 'cat', and *chien* (M) 'dog'). This 'affective' use by children includes inanimate entities, eg. *lolo* (M) 'milk' (rather than *lait*).

Other informal terms can be formed with the vowel-final suffix *-o* on stems of more formal terms, eg. *proprio* (M/F) 'proprietor' for *propriétaire*, *prolo* (M/F) 'proletarian' for *prolétaire*, *facho* (M/F) 'fascist' for *fasciste*, etc. (LRPT, 1994:1234). It is found in collective terms, eg. *populo* (M), an informal term denoting *peuple* (M) 'people'. The same suffix *-o* occurs in Australian English, eg. 'wino', someone who habitually drinks wine to get drunk (CED, 1986:1740), 'biffo', a bit of a punch-up, etc., while vowel-final 'diminutives' are also associated with personal names eg. 'Bazza' for Barry, 'Shazza' for Sharon, 'Jimmy' for James. Thus, 'slang', 'informal' and 'affective' terms are all associated with vowel-final pronunciation patterns, suggesting the possibility of a more general phenomenon. Nonetheless, the semantics associated with affect emotions can be related to 'diminutive' in a comparative sense, and vowel-final pronunciations among this set of French nouns can be regarded as consistent with other nouns whose meanings also emerge from a process of comparison between like entities.

## 8.11 Issues still outstanding

The above explanations leave a number of issues to be dealt with. Two nouns discussed above, *homme* and *gens*, are grammatically odd in that *homme* as a singular count noun is suggested to apply to *en général*, 'in general', while dictionary entries show that alternative gender assignments of *gens* relate to word order involving related elements (adjectives). The basis for their different treatments require further analysis. Also requiring clarification are terms related to rank, differences in historical and current acceptance of alternative gender assignments, and variations in word-final pronunciation not yet accounted for, which are covered below.

### 8.11.1 Alternative gender assignment for *gens* (M/F) 'people'

As discussed above, *gens* is irregular among nouns in the database in that alternative gender

assignments are suggested in definitions to be tied to grammatical principles of agreement. While not every noun in the entire corpus of this work is analysed to the same degree, findings in the previous four chapters reveal similarities within a semantic system that, thus far, can account for gender assignments of all but two nouns – one tree and one vine, whose gender assignments were artificially reclassified (see Chapter 7).

Alternative masculine and feminine gender assignments for *gens* are different from other alternatives in that they require explanations that are not required elsewhere. These 'word-order' agreements are demonstrated by such examples as:

- feminine form where adjectives precede the noun, eg. *vieilles gens* 'old people' (where the masculine form of the adjective is *vieux*)
- masculine form where adjectives follow the noun, eg. *gens forts* 'powerful people' (where the feminine plural form of the adjective is *fortes*)

If there is no intervening adjective between the article and noun we also find the masculine plural form for gender-sensitive determiners, as in the expression *tous les gens* 'all the people' (LRPT, 1994:517), rather than the feminine plural form *toutes* 'all'.

These different word orders – adjective-noun in the case of *vieilles gens*, and noun-adjective in the case of *gens forts* – appear to reflect historical changes from a time when pronominal adjectives were more frequent in earlier stages of French. While there is no cross-linguistic/typological correlation between order of object and verb on the one hand and order of attribute adjective and head noun on the other (Dryer, 1988), Posner's examination of linguistic change in French shows that, in Old French texts, adjectives 'frequently, indeed probably normally' (1997:363) preceded the noun, as in examples provided in the text:

<i>blanches mains</i>	=	<i>des mains blanches</i>	'white hands'
<i>l'anglais roi</i>	=	<i>le roi anglais</i>	'the English king'.

However, while the change in gender assignment for *gens* could be achieved in the case of less common nouns – all of which follow any noun, it was not successful in the case of more common expressions, particularly everyday sayings involving pronominal constructions which are notoriously difficult to overcome and linger in the vernacular to form a contrast in usage.

If the original gender assignment of *gens* was feminine, an explanation is required not only regarding the original feminine gender assignment but the change to masculine. Rickard (1974:150) provides some clue as to the second part in his discussion of different agreements of *gens* in expressions such as ... *les vieilles* (FEM.adj) *gens sont soupçonneux* (MASC.adj). 'the elderly people are suspicious' and the different agreements of adjective relative to their positions in relation to the noun. He suggests that these changes illustrate the 'tug-of-war' between feminine gender assignment of *la gent*, the feminine singular form of *gens*, and 'the common-sense tendency to make it (*gens*) both plural and masculine as the equivalent of '*les hommes*' (1974:150). This intention to make *gens* the equivalent of *les hommes* suggests that *les hommes* could not successfully identify a collective meaning 'humankind' and an equivalent masculine term was required. It also shows that the gender assignment of *gens* was able to be changed – possibly its selection was encouraged because of its vowel-final pronunciation that has historically been closely associated with masculine gender.

However, in altering the gender assignment from feminine to masculine, grammarians 'regularising' the language could not remove the strong association over centuries between feminine adjectival agreements associated with the older word-order pattern in common expressions such as *vieilles gens* (F) 'old people', *petites gens* (F) 'people not well off' (LRPT, 1994:517). It could only be enforced amongst less common adjectives, those that today follow the noun. The historical word order barely survives, continuing only among the handful of the most common adjectives which, in every case, precede the noun, adjectives such as *grand/-* 'grand', *beau/belle* 'beautiful', *brave* 'courageous', *bon/-ne* 'good'.

The rigid enforcement of the 'grammatical' change to masculine gender for this noun can be related to other changes from feminine gender to masculine gender that occurred at around the same time, such as the imposed reclassification of feminine nouns denoting tall trees and one vine to masculine, said to be designed to regularise the language (see Chapter 7, §7.13, Conclusion, Woody plants). The ease with which masculine gender is imported onto feminine nouns, and the extreme displeasure that accompanies the importation of feminine gender onto masculine nouns – as per responses from the *Académie française* in Appendices I (1984) and II



(2002) – particularly in relation to gender inclusion for professional terms even without any change word-finally, eg. *ingénieur/-e* (M/F) 'engineer' (in Canadian French), make an interesting contrast.

However, while grammarians may have regarded gender assignment as a 'grammatical' feature of language, in seeking a semantic explanation across the system in this thesis, alternative gender assignments for *gens* should find some consistency with others. It is difficult to account for masculine gender in relation to *gens* in relation to findings of this analysis. While it could be argued to relate to the same resolution to masculine as occurs in grammatical principles of agreement on related elements, it would be the sole such example. Nor is there any sense in which 'male' and 'female' could be combined together as 'different', since a mixture of mutually exclusive attributes contravenes sense relations. Furthermore, only attributes associated with contrasting gender assignments that are not mutually exclusive can compete or combine as 'unlike' elements for gender assignment. Masculine gender for *gens* would only make sense if the entities it applied to were entirely 'unlike' in kind, which is not the sense that *gens* implies. On the other hand, the semantic principles that can account for other nouns throughout this thesis can account also for *gens* as a feminine collective noun, while historical social conditions can account for its masculine gender assignment in much the same way as masculine gender for count nouns associated with creative arts, high office, etc.

Masculine gender for *gens* can, however, serve to counter-balance the considerable extent of feminine gender assignment among common nouns denoting 'person' and 'people'. It is not impossible to consider that the extent of the considerable number of feminine collective nouns might have generated a line of action that oversaw a change in meaning for *homme* and gender assignment for *gens*. We may understand today a certain anxiety on the part of those involved in regulating the language in their desire to find a way of including 'masculine', given the present-day involvement by females to redress 'he/man' as though it is inclusive of 'male and female'. It can be related to Gervais' observation (1993:126) in relation to the widespread popular use of *jeunes gens* in its application to 'young men' as the plural of *jeune homme* 'young man' – which usage is expressed in the dictionary definition of *gens* in the contrast between *les*

*jeunes filles et les jeunes gens* 'young women and young men' (LRPT, 1994:517). This usage may be contributing to the fading use of *gens* as the generic feminine term 'people', just as the Latin *homo* (M/F) 'human (male/female)' no longer has any application to in modern French.

Word-final pronunciation for *gens* remains unaccounted for at this time, although certain features are suggested earlier – notions 'close' and 'afar', as well as 'everywhere', although quite how they relate to vowel-final pronunciation is yet to be determined. It will continue to be explored.

#### 8.11.2 Singular, plural and collective meanings of *homme*

The semantic irregularities of *homme* identified above require further exploration of this noun and its meanings.

##### 8.11.2.1 Historical changes in the lexicon

Until the early centuries AD, the widespread Latin noun *vir* (M) denoted an 'adult male (human)', the same stem occurring for *viril*, -*ile* 'virile', derived, it is suggested (CED, 1986:, from *vis* 'strong', the same root as for *vigne* (F) 'grapevine'). In extension *vir* could also apply to animals, in limited circumstances tied to the sense of 'the male' or 'mate' (AELD, 1966:923) of the female of the same kind, the one who gives birth to new life. However, over time *vir* was replaced by *homo* (M) 'male human being', the masculine alternative of *homo* (M/F) 'human being (male/female)' (Rickard, 1977:13) and eventually *hom/homme*. The definition of *homme* given in the earliest of French dictionaries, Nicot's (1606) *Thresor de la langue française/francoyse* (<[www.lib.uchigao.edu/efts/ARTFL/projects/dicos](http://www.lib.uchigao.edu/efts/ARTFL/projects/dicos)>, 2004) suggests that *hommage* and *homme* are inter-related:

*Homme, m. penac. Il se prend en special pour vassal terme correlatif de cet autre seigneur Feodal: ainsi dit-on que le seigneur Feodal par faute d'homme peut mettre en sa main le fief mouvant de luy, c'est à dire par faute de vassal. Il est prins ainsi, parce que le vassal faisant sa foy et hommage, devient homme, c'est à dire, tenu et subject à son seigneur Feodal.*

As the above material suggests in *Il se prend en special pour vassal* 'It is held as a special term for vassal', particularly in the practice of paying homage where by the vassal taking the pledge *devient homme* becomes someone's man – in the sense of belonging to his feudal *seigneur*. This practice is generally regarded as having begun in the eighth century with

Charles Martel (grandfather of Charlemagne) who granted nobles rights over tracts of land and any income – which the nobles would, in turn, use to provide fighting men for his army. While 'sub-infeudation' eventually led to a social hierarchy of adult males from highest to lowest in a 'pyramid of loyalty' (<en.wikipedia.org>, <www.worldhistory.net>, 2006), the replacement of *vir* by *homme* may have been encouraged by the status afforded *homme*, but it would seem to have commenced earlier than the eighth century. The feudal system of paying *hommage* and becoming *homme* would have given *homme* a status that carried more prestige than *vir* or *homo*, in particular, in its role as a 'mate' and not the primary partner. Where *homo* could apply to both 'male' and 'female', *homme* could apply only to 'male' real-world referents and thus would have correlated with 'male' in much the same way as the 'fossilised' historical masculine gender assignments discussed above.

By the eleventh century we find several different usages of *homme*, with several different orthographies, *hom*, *home*, *homs*, *homes*, *omme*, *homs*, in the famous poem that appears to have been inspired by the first crusade, *Chanson de Roland* 'Song of Roland':

- *homme de guerre* 'warrior'
- *vingt mil homs, avec leurs capitaines* 'twenty thousand men, and their leaders ...'
- *mon homme* in the sense of 'husband'
- *tous hommes d'honneur* 'all men of honour'
- *homme à homme* 'man to man'.

In all but one of these various usages *homme* suggests 'adult male human'. Only for *tous hommes d'honneur* might there be any broader application to include women – but in the context of this text as a poem about the Crusades and the world of men, any such inference is almost impossible. Documentary evidence suggests that at least by the early seventeenth century *homme* could apply not only to 'adult male', but to:

*HOMME. m. Signifiant en général tout homme, Homo.*  
 'Signifying in general every human, *Homo*.

Nicot (1607, in <www.lib.uchigao.edu/efts/ARTFL/projects/dicos>, 2004)

(trans. M. à Beckett)

This definition suggests that *homme* is the equivalent of *tout homme*, a collective application reinforced by *Homo*, suggesting the genus. The co-occurrence of *Homo* alongside the collective

sense expressed in *tout homme* removes a restriction that would otherwise mean 'every male' since *Homo*, the (scientific Latin) collective term for the genus *Homo*, would encompass 'everyone'. In the scientific meaning of the term *Homo* as a genus of entities 'different' from other living forms for a superordinate term that must incorporate all species, both extinct and extant, masculine gender would have been regular and consistent with others. This dictionary entry suggests that it is more difficult for the term *homme* to acquire that very broad sense.

Nearly a hundred years later the definition of *homme* (*Dictionnaire de l'Académie française*, 1694, @ <[www.lib.uchigao.edu/efts/ARTFL/projects/dicos](http://www.lib.uchigao.edu/efts/ARTFL/projects/dicos)>, 2004) takes a fateful leap:

*HOMME. s. m. Animal raisonnable. En ce sens il comprend toute l'espèce humaine, & se dit de tous les deux sexes.*

'MAN. s.m. Creature capable of reasoning. In this sense it includes every human species and can be said to express both sexes'.

(trans. M. à Beckett)

The use of the phrase (*A*)*nimal raisonnable* in that definition identifies not a collective but a single referent. While there is some connection between *raisonnable* and the enormous increase in mental cognition for the only species that has come to 'walk upright', the application of *animal* to a single referent removes any sense of a collective application. However, as a singular term, *homme* retains a one-to-one relationship between the noun and its referent, and the sense implied by *tous les deux sexes* 'both sexes' is that 'male' is retained – and 'female' is excluded. In order to regain a collective application, considerable explanatory information is required – not only *toute l'espèce humaine*, but *tous les deux sexes*.

Overcoming this semantic challenge means that any use of *homme* in its application to either 'male or female' or 'male and female' is required to redress the exclusion. In the above definition, the fundamental part of its meaning as ... *toute l'espèce humaine* requires it to be sandwiched between further explanatory phrases, one that introduces a more specific meaning – as in the phrase *En ce sens* 'In this sense' – and one at the end that provides material not otherwise present – *tous les deux sexes* 'both sexes'. This latter notion *tous les deux sexes* 'both sexes' is not required for other nouns with a general application meaning 'human' – either collective nouns,

such as *humanité, société, église, compagnie, ethnie, race, population*, etc., or count nouns such as *être humain, individu* and *personne* – all of which meanings apply 'regardless of sex'. However, the notion 'regardless of sex' is not possible for *homme* since 'male' is intrinsic to its meaning. It must therefore include *tous les deux sexes*, allowing *homme* to encompass *femme* 'woman' despite sense relations that suggest that they are mutually exclusive terms in which the presence of one excludes the other. For a language whose systems appear to be organised around the sense relations of ungradable antonyms in binary opposition way that sense relations ignoring sense relations in a language whose systems depend on oppositions – a semantic which it would not otherwise do since these two terms are mutually exclusive – the presence of one precludes the presence of the other. The use of *homme* to encompass *femme*, either collectively or in a one-to-one relationship, appears to have taken some time to obtain currency in that documentary evidence supplied for such usage (<atilf.atilf.fr>, 2006) dates from the mid-eighteenth and nineteenth centuries onwards. It can be compared with a similar process taking place in England during a similar period for 'man' to encompass 'woman'.

#### 8.11.2.2 'Man' – from 'male' to 'human'

It is interesting to note that a similar process was taking place at the same time in the English language. Old English had a cognate of the Latin sex-specific *vir*, namely *were*; Old English *mann* could be both sex-specific and sex-neutral (cf. *woman*, originally 'wife-man', that is, a female person). Although the Latin noun *homo* applied generally to 'person, human, the human race' (ELD, 1966:368), it is widely translated as 'man', eg. *Quot homines, tot sententiae* 'Many men, many minds', or *nihil hominis esse* 'nothing of a man'. Such examples call into question many of the translations of this noun, such as 'lord of creation', 'a man's sense', 'a man/fellow/he'.

Spender (1985:147) reports that the rationalisation that 'man embraces woman' commenced in England some time towards the middle of the sixteenth century:

The first record we appear to have is that of a Mr. Wilson in 1533 who insisted that it was more *natural* (sic.) to place the man *before* (sic.) the woman, as for example in male and female, husband and wife, brother before sister ...', etc.

Since the superiority of males over females was a natural principle, he suggested that it should

be reflected in the way we structure our language. By the mid-1600s the concept of natural precedence of males had made some small progress with grammarians. However, as Spender reports (1985:149), the English-speaking world was by and large unmoved by his argument and showed little attempt to modify language use to accommodate it. In practice the use of *they/their* for sex-indeterminate references continued, eg. 'Everyone has *their* rights' (Spender, 1985:149).

However, by the nineteenth century prescriptive grammarians regarded this 'agreement' as incorrect to the extent that in 1850 they helped secure, by an Act of Parliament, the legal insistence that *he* stood for *she* (Bodine, in Spender, 1985:150) – a policy which promoted the primacy of the male. This primacy of the male allowed 'man' to encompass 'woman' in a collective sense. This rationale was contemporaneous with efforts to 'regularise' the French language. If Renaissance grammarians, trained in Latin, were 'somewhat uneasy' to discover that French only had two genders rather than the three in Latin, as Rickard (1974:91) suggests, one can only consider that they would also have been disturbed by the extent of feminine gender assignments among nouns denoting 'human being' – not only in most general nouns *personne*, *gent* and *gens* but amongst collective terms, even those applied to groups composed exclusively of males.

In this wider context, efforts to change gender assignment for *gens* from feminine *gens* to masculine, and for *homme* to incorporate *femme*, as well as changes from feminine to masculine for nouns denoting 'woody plants' identified in the previous chapter – the tree *mélèze* (M) 'larch', and vine *lierre* (M) 'ivy' – seem less altruistic in the consolidation of French into a single 'language'. This material suggests that these elements appear to have been prompted by a less benign phenomenon.

#### 8.11.2.3 Modern applications of *homme* as a singular, plural and collective noun

The three semantic distinctions of *homme* are:

- 'man' as a single adult 'male' human
- 'man' as a single human
- 'man' as 'humankind', a collective sense.

Masculine gender for these meanings would be expected to be consistent with other similar meanings. In its application to 'male adult human', masculine gender for *homme* is consistent with all other examples that also entail 'male' in their meanings, eg. *coq* (M) 'rooster', *jars* (M) 'gander', *bouc* (M) 'male goat'. Masculine gender for other nouns denoting a single human referent relates consistently to 'different' – *être human* as one who is different from other beings', and *individu* as one who is different from any other human, male or female. In this context, *homme* fits perfectly as a 'male human', one who is different from a 'female human'. In seeking to acquire the same sense of *personne* in its application to 'any human', we might have anticipated a change to feminine gender, as occurs for *grosse légume* (F) 'big shot'. More importantly, in this sense the semantics of *personne* would make *homme* redundant and it is difficult to explain the encouragement of a similar application for *homme*.

Among collective nouns that denoting groups of humans in general, the only masculine noun beyond *gens* is *peuple* (M) 'people', a nation formed by people regardless of their origins, a sense that has little to do with the meaning sought for *homme* as *toute espèce humaine*. Otherwise all such nouns are feminine, eg. *humanité*. It is interesting to observe the definition of this noun in LRPT (1995:562)

These grammatical distinctions between collective nouns and count nouns are also problematic for *homme* in a way that does not occur for other collective nouns that can also identify a single referent, eg. *fruit* (M) 'fruit'. It is difficult for *homme* to obtain a collective meaning without plural inflection, but the application of *homme* in an individual sense presents its own set of difficulties. It seems that dictionary makers are aware of problems in both semantic and grammatical relations since LRPT (1994) adjusts for a collective sense by including the additional phrases in its definition – not only '*en général*' but also '*(L)es hommes ou (collectif) l'homme*' (1994:562). In the definition of *humanité* (F) 'humankind' we find ... *les hommes en général* (LRPT, 1994:569) as if they were not. In the definition of *humain* 'human', we find ... *De l'homme, propre à l'homme en tant qu'espèce* 'Of man, belonging to man considered as the species' (1994:569). The use of *homme* in definitions of both nouns causes problems.

However, regardless of its singular or plural status, the use of *homme* in definitions throughout LRPT apply unmistakably to 'male', as in the following examples:

- *PÈRE ... Homme qui a engendré, donner naissance à un ou plusieurs enfants* 'Man who has fathered one or more children (LRPT, 1994:832)
- *SOLDAT Homme qui sert dans une armée.* 'Man who serves in an army (LRPT, 1994:1044)
- *MARIN ... Personne (surtout homme) dont la profession est de naviguer sur la mer* Person (typically male) whose profession is to navigate on the seas (LRPT, 1994:700).
- *POLITIQUE. Homme ou femme* (LRPT, 1994:868) 'Politician. Man or woman.

In these cases *homme* disambiguates any possible application to 'female'. We can also observe *homme* in definitions of certain adjectives, exemplified in (12).

- (12) • *honnête* (adj.)      *Je suis honnête homme ...* 'I am an honest man' (LRPT, 1994:563)
- *fort/forte* (adj.)      *Un homme grand et fort* 'A big, strong man' (LRPT, 1994:487)

While the first phrase might be argued to mean 'I am an honest person', it is difficult to consider that a female would use the same phrase. I would argue that the more likely utterance would be *Je suis honnête femme* 'I am an honest woman'. In the case of the second phrase, it is very difficult to consider that its meaning is anything other than 'male human' – and, possibly, adult. There is certainly no collective sense for either.

The entailment of 'male' means that any use of *homme* in a more general application to a single 'human' that attempts to signal 'male' or 'female' will fail. The collective sense of *homme* built on the belief that 'man' can incorporate 'woman', a sixteenth century rationale, will always provide a challenge since the very elaboration it requires in its application to *mâle et femelle*, or *tous les deux sexes*, introduces and makes salient two attributes in binary opposition at the same time violating sense relations that underpin ungradable antonyms – both cannot be salient at the same time. These problems do not occur for feminine collective terms *humanité* (F) 'humanity', *société* (F) 'society', *tribu* (F) 'tribe', *race* (F) 'race', etc. since they apply regardless of sex.



### 8.11.3 Rank and gender assignment

One area that remains less well accounted for is the strong association between masculine gender assignment and nouns denoting military rank, as for nouns in Table 8.33 below.

Table 8.33: Military ranks and their gender assignment

<i>caporal</i>	M	'corporal'
<i>sergent</i>	M	'sergeant'
<i>lieutenant</i>	M	'lieutenant'
<i>capitaine</i>	M	'head'; (fig.) 'captain (mil.), flight-lieutenant (air.), lieutenant-commander (navy)'
<i>commandant</i>	M	'major (commanding battalion)'
<i>colonel</i>	M	'colonel (commanding regiment)'
<i>général</i>	M	'general, commander-in-chief of army; person placed at the head of an administration'

One might consider that these terms would offer alternative gender assignments to correlate with female referents, particularly given historical precedence in previous eras where women led armies, etc., and today where such terms are now likely to apply to a 'female' referent

There are two possible explanations. One explanation is that masculine gender is associated with a sequence of gradable rankings in much the same way as numbers, eg. *un* (M) 'one', *deux* (M) 'two', *dix* (M) 'ten', *cent* (M) 'one hundred', and colour terms, eg. *bleu* (M) 'blue', *blanc* (M) 'white', *rouge* (M) 'red', except for 'brightest possible', rather as points along a continuum or a step-wise sequence of levels measured against each other according to different sets of tasks or skills, establishing a series of hierarchical grades. Another explanation is that the military, which spends a considerable amount of time and energy in celebrating past traditions, is slower to change than other areas of society.

Other areas where rank is crucial are royalty and nobility, and certain terms relating to these domains found in the database are set out in Table 8.34.

Table 8.34: Other terms identifying rank – royalty and nobility

Male			Female		
<i>roi</i>	M	'king'	<i>reine</i>	F	'queen'
<i>prince</i>	M	'royal son'	<i>princesse</i>	F	'royal daughter'

<i>duc</i>	M	'duke, rank lower than prince, male	<i>duchesse</i>	F	'woman who holds the rank lower than 'princess'; married to/widow of a duke
<i>marquis</i>	M	'marquess, rank	<i>marquise</i>	F	'marchioness, 'woman holding the rank of marquess, lower than 'duke'
<i>comte</i>	M	'earl, rank lower than marquess'	<i>comtesse</i>	F	'woman who holds this rank, or wife or widow of count or earl
<i>vicomte</i>	M	'viscount, rank lower than earl	<i>vicomtesse</i>	F	'woman rank lower than <i>comte</i> ; married to a viscount
<i>baron</i>	M	'baron, rank lower than viscount'	<i>baronne</i>	F	'woman who holds the rank of baroness, or is married to a baron

At each rank one variant identifies 'male' and another variant identifies the 'female' equivalent. These examples tend to suggest that 'rank' has little to do with gender assignment since what is crucial in each case is the sense of 'male' or 'female' in the semantics of each, which constrains them from denoting a real-world referent other than of the same sex. While the latter part of the second millennium in the history of the military might not have demanded any correlation with 'female', as once occurred for *guerrier/guerrière* (M/F) 'warrior', the discomfort caused by non-correlation between masculine gender assignment and any 'female' real-world referent appears to be more acceptable than offering feminine gender as an alternative.

It is noted that in the Roman Catholic church, alternative gender assignments are offered where terms can apply to a 'male' or 'female' real-world referent, eg. *abbé/-esse* (M/F), *religieux/-euse* (M/F) and *supérieur/-ieure* (M/F), *prieur/-eure* (M/F). In academia and education, distinctions for 'male' and 'female' occur at lower levels but not at the top, as shown in Table 8.35 below.

Table 8.35: Rank and gender assignment in academia

<i>chancelier</i>	M	'chancellor'	head of university executive arm
<i>doyen, -enne</i>	M/F	'dean'	head of faculty, accords with 'male' or 'female' real-world referent
<i>maître, -esse</i>	M/F	'lecturer'	accords with 'male' or 'female' real-world referent

While alternative gender assignments are offered for both *doyen/-enne* and *maître/-esse* to correlate with 'male' or 'female' real-world referents, the concept of a 'female' *chancelier* seems

to have been unthinkable – with or without a phonological change in the word-final suffix. While there is a feminine form, *chancelière* (F) meaning 'foot-muff', a furry foot warmer, this is not to say that this prior meaning would prevent 'female chancellor' from gaining a currency now enjoyed by *présidente* (F) 'female president' since the 2007 presidential race in France – particularly in light of the extensive set of homonyms in that the French language enjoys.

The masculine term *professeur* as 'teacher' is not restricted to an academic context but designates a 'teacher' in any *collège*, *lycée*, or *faculté*. However, while nouns such as *chirurgien/-ienne* (M/F) 'surgeon' and *chimiste* (M/F) 'chemist' – meaning 'person engaged in a certain vocation or employment' – allow alternative gender assignments, other nouns that were once restricted to masculine and now allow alternative gender assignments, while certain nouns that also mean 'person engaged in X', do not. It is not that the semantics of these few nouns indicate 'male' in the way that *homme* 'man' and *oncle* 'uncle' do.

It is easy to understand resistance to change, but less so the introduction of alternative gender assignments that elsewhere correlate so readily with 'male' and 'female' real-world referents – particularly since this process involves the introduction of an alternative rather than a change from masculine. It is possible that masculine gender maintains a status (and income) that would otherwise be lowered by 'opening the professional gates' to a realm previously owned by males.

Equally problematic are suffixes and the derogatory sense of 'less than male' for some of them; this occurs even in English in a comparison between 'manager' and 'manageress'. The lack of acceptance of alternative suffix forms such as *ingénieur/-e* described by the *Académie française* as *barbarismes* ('errors of speech' is grounded in their argument, made clear in its *Déclaration faite par l'Académie française en séance du 14 juin 1984* (in Appendix II), that gender assignment serves only to distinguish between 'unmarked' (masculine) and 'marked' (feminine) categories. However, in the natural world, the least 'marked' noun in terms of encompassing all entities is *nature* (F) 'nature', a feminine noun, as are the most general meanings denoting living entities collectively, eg. *flore* (F) 'flora' and *faune* (F) 'fauna', and individually, *créature* (F) 'creature'. This same *Déclaration* also asserts that masculine gender, as the unmarked gender,

has the capacity to represent relevant elements of both genders. Findings in this analysis suggest otherwise where they are associated with mutually exclusive attributes.

#### 8.11.4 Historical v modern acceptance of alternative gender assignments

Fixed gender assignment for some of these nouns appears to be attached to roles and characteristics originating in and accurately reflected historical social divisions that continued for centuries, often at the expense of earlier terms where gender was not assigned, eg. *guerrier/-ière* (M/F) 'warrior' where *soldat* is masculine.

A similar example is an older meaning of *savant/-ante*, *n.* as 'cultivated (knowledgeable) male or female person' (LRPT, 1994:1015), a noun whose alternative classifications could correlate with the 'male' or 'female' real-world referent in both gender assignments and word-final alternations. Its meaning today as 'scientific researcher' – a person who through their knowledge and research contributes to the advancement or progress of a science – does not constrain it to a 'male' referent, yet today *savant* has fixed masculine gender and is no longer able to reflect a 'female' real-world referent as it once did. The influence of high honour and prestige associated with this term in fixing its gender assignment as masculine is difficult to ignore.

It is possible that differences in the treatment of these terms relates to different paradigms, one that saw a contrast between those who earned their living through some kind of *métier - emploi, fonction, profession*, etc. (LRPT, 1994:721), where alternative gender assignments were regulated according to 'male' or 'female' real-world referents, while occupations or pastimes of 'amateurs' or well-to-do (that were not open to females) offered a status or added cachet not only from not having to earn a living nor because such areas were traditionally 'owned' by the educated few, nor because females were not admitted – but all of these in combination.

A contrast can be made between the higher status and commensurately higher financial rewards associated with occupations dominated by 'males' compared with the lower status and less substantial financial rewards for occupations dominated by 'females', even today. These

contrasts in status (and income) can be observed in the different gender assignments for the same noun *secrétaire*, noted earlier, which is masculine in its application to the Secretary of State, an office of high prestige, while its application to the lower status of the office worker whose job is to prepare files, papers, etc., was once restricted to feminine but now offers alternative gender assignments relate to the 'real-world' referent – still (as noted in its definition) ... *surtout femmes* 'largely female' (LRPT, 1994:1023). Differences in prestige are even more apparent in translations of the masculine term *couturier* (M) 'couturier', who designs for/directs a fashion house, and feminine 'counterpart' *couturière* (F) 'needlewoman', 'dressmaker' (COFED, 1985:129).

Another noun which can be drawn into discussion here is *garde* (M) 'guard', 'bodyguard'. 'someone who guards prisoners', is defined as *personne qui garde, qui a la garde de* 'person involved in conserving or protecting (something – an object, place, person' as laid out in the definition) (LRPT, 1994:510). The use of *personne* and *qui* imply that the referent can be male or female, but *garde* in this sense has fixed masculine gender assignment. This noun also has a feminine alternative *garde* (F) but its application to *(c)elle qui garde un malade, un enfant* 'one who looks after someone ill, a child' (LRPT, 1994:510) suggests 'nurse'. The association between feminine gender assignment and 'caring for young' for this noun is consistent with feminine gender assignment for *aigle* when associated with 'nurturing' connected with the nest (see Chapter 4). However, while these gender assignments may be associated with attributes stereotypically associated with 'male' or 'female', there is no intrinsic sense of either 'male' and 'female' in the semantics of *garde* – only habitual or past practices that prevent it from offering alternative gender assignments to correlate with the real-world referent in either context.

There is a certain parallel in English and probably many other languages. The entry of women into a profession may be regarded by those within it as lowering its status, particularly since there is it may possibly be associated with lower financial reward. New barriers are introduced, higher qualifications in particular, to keep out women since they have traditionally been less able to afford them and families have been less willing to support them. This pattern can be seen in changes from «book-keeper», to «accountant», thence «chartered accountant» and

«certified practising accountant» that maintain prestige. A term such as 'sister' once denoted a qualified nurse, but in its association with a specific sex it has been found wanting with the number of males desiring to enter this profession. In today's era of social equality the term 'sister' has falling into disuse, and the once lower-status 'nurse' is now used instead.

In summary, the regularisation of French that began in the sixteenth century and brought about the reclassification to masculine of the formerly feminine nouns *mélèze* (M) 'larch' and *lierre* (M) 'ivy' (discussed in Chapter 7) appears to have occurred at around the same time as efforts to broaden the application of *homme* (M) from its meaning 'adult human male' to 'man' as a single human being, and the partially successful reclassification of the feminine noun *gens* 'people' to a masculine plural noun. Given the prevailing philosophy that 'every relationship had to have a ruler and a subject' (Koontz, 2005:153), and the sudden recognition by those 'regularising' the language of the extent of feminine gender assignment among the terms denoting human beings, a desire for more generally applicable masculine terms would have seemed not unreasonable.

## 8.12 Summary and conclusions – human beings

### Collective nouns denoting human referents

Findings suggest that among collective nouns denoting human beings certain attributes in their semantics are associated with masculine gender while others are associated with feminine gender. While many are regular and predictable across the lexical fields covered in this thesis, others pertain particularly to relations and activities that are significant in the world of humans. These attributes are laid out in Section 8.5.10 above.

### Count nouns

For count nouns the above analysis identifies four different sets of nouns whose gender assignments involve quite different processes:

- nouns whose gender assignments are sex-specific in their semantics, particularly in relation to certain characteristics or roles, eg. *père* (M), father, *mère* (F) 'mother'
- nouns whose gender assignments relate to certain attributes in their semantics in a way

that is regular and consistent with others, eg. 'unique', standing out from all others, as for *majesté* (F) 'majesty', *personne* (F) 'person', *dupe* (F) 'dupe'

- nouns whose semantics are not sex-specific but gender assignments are fixed, fossilised to a sex-specific precedent determined by historical practices, social custom, prestige, tradition, etc. eg. *écrivain* (M) 'author', *docteur* (M) 'doctor', *professeur* (M) 'teacher', *apothicaire* (M) 'apothecary', *soldat* (M) 'soldier', *riche* (M) 'person of wealth'
- nouns whose semantics are not sex-specific and have no gender assignment except in relation to the real-world referent/s intended by a speaker, particularly in the domains of human relations, characteristics, roles, etc., eg. *artiste* (M/F) 'artist' (male or female), *cousin/-ine* (M/F) 'cousin', *client/-e* (M/F) 'client', *richard/-arde* (M/F) 'person of wealth'.

These four groups can account for all nouns except two – *gens* (M/F) 'people', and *homme* (M) in its extended meaning as a single count noun 'human', and as a collective term 'humankind'.

These sets are explained further below, alongside certain examples. It is noted that a full explanation relating to count nouns is detailed in §8.10.4 above.

### Sex-specific characteristics, roles

With certain exceptions, for nouns whose meanings have a sex-specific lexical referent, gender assignment is regular and predictable in relation to the 'male', or 'female', as identified in the lexeme. For example, the lexical semantic referent of *tante* (F) 'aunt' is a 'female' and the denoting noun is feminine. The lexical semantic referent of *fil*s (M) 'son' is a 'male' and the denoting noun is masculine. Nouns *neveu* (M) 'nephew' and *nièce* (F) 'niece' are likewise sex-specific and cannot be seen as alternatives in the same way as *mort/-e* (F) 'dead person' (male/female). In some cases lines may become blurred, eg. *hère* (M) translate into English as 'wretch' or 'down-and-out', both of which are sex-neutral – which should allow it to apply to male or female, but its French definition identifies *un homme méprisable* 'a despicable man' rather than *une personne méprisable*. Thus, fixed masculine gender assignment can be seen as correlating with any real-world referent since it would not be used in any application to a 'female' – possibly resulting from an earlier constraint relating to its suggested derivation from *Herr*, a male German title of address (LRPT, 1994:555).

Exceptions to this regularity are nouns that have a sex-specific 'male' or 'female' lexical referent but gender assignments do not correlate either with the sex identified in the lexical semantics, or with the 'real-world' referent. In such cases contrasts suggests that some essential 'maleness' or 'femaleness' of the referent is no longer present or no longer exists, eg. *chaperon* (M) 'chaperon', *lope* (F) 'homosexual male'. There is also some suggestion that feminine gender may be a variant of masculine gender used in counter-cultures within French society. But it is through our awareness of the lack of fit between gender and sex of the referent that the precise connotation can be obtained.

#### Other attributes associated with specific gender assignments

Beyond attributes 'male' and 'female' are other salient attributes associated with specific gender assignments in the same way as in other lexical fields. Attributes associated with masculine gender include:

- 'less than human', eg. *monstre* (M) 'monster', *larbin* (M) 'flunkey',
- 'unreal', eg. *vif* (M) 'living body'
- endangering habit, such as burying oneself, eg. *troglodyte* (M) 'troglodyte', living in solitude, eg. *ermite* (M) 'hermit', cutting oneself off *larbin* (M)
- privative, eg. *plaisantin* (M) 'someone a bit off with the jokes', *personne ne* (M) 'no-one'
- 'different', eg. *autrui* (M) 'another', 'someone else'
- associated with death, eg. *assassin* (M) 'assassin', *apache* (M) 'criminal', *malfaiteur* (M) 'criminal' (an evil-doer).

Notions undetermined, unknown, or indefinite associated with masculine gender is assigned appear to form some kind of the default mechanism.

Attributes associated with feminine gender include:

- 'unique', standing out from all others, eg. *majesté* (F) 'majesty', *personne* (F) 'person', *basse* (F) 'bass'
- 'living/alive', eg. *dupe* (F) 'dupe', *épée* (F) 'good sword smith', *victime* (F) 'victim', etc.



Some of these attributes are oppositional, such as 'living'/'absence of life', 'unique'/'different'. The analysis suggests certain other attributes, such as speed, sight, hearing, and elevated position, which appear to be associated with feminine classification although the principles on which these latter associations are based require to be identified. Certain other attributes are associated with masculine, such as a close family friend but not blood relative, comparative meanings, and privative constructions or meanings that involve the absence of a body since 'absence of life' appears to be associated with masculine gender.

For nouns derived from pre-existing nouns used in figurative extension to designate a human referent, in cases where something of the original meaning is maintained in its application to a human referent the gender of the original meaning is maintained in its extended meaning, eg. *moule* (F) 'spineless person' from *moule* (F) 'mussel', *potiche* (F) 'figurehead', empty container that is largely ornamental from *potiche* (F) 'large ornamental vase', and in these cases nouns that were feminine in their original meaning remain feminine in their extended meanings. For nouns such as *butor* (M) 'surly ill-bred person' from *butor* (M) 'bittern', a bird without either  *finesse ni délicatesse*, and *macaque* (M) 'ugly person', masculine gender of their original meanings is retained in extension.

However, where a crucial attribute is lost, or its extended meaning identifies a contrasting attribute (either pejorative or ameliorated), evidence suggests that the gender of the original noun changes in its extended meaning, eg. *grosse légume* (F) 'important person' from *légume* (M) 'legume', a plentiful vegetable food crop not held in high esteem. These changes in meaning and contrasts in gender assignments can also be observed for *personne*, a 'unique' individual that, in the privative construction *personne ne* (M) 'no-one', is now absent.

#### Nouns having 'fossilised' gender assignments

For the third set of nouns, gender assignment is fixed but is unrelated to either 'male' or 'female', or to any other attributes identified above associated with specific gender assignments. These nouns identify a person according to social roles, professional employment or pastimes etc. that have traditionally been associated with one sex or another, eg. *apothicaire* (M) 'apothecary', or

military ranks – although older nouns in older times offered alternative genders, eg. *guerrier/ière* (M/F) 'warrior' where today we find *soldat* (M) 'soldier'. In these cases gender assignments relate to the sex of real-world referents in a previous era and any correlation with the real-world referent today is accidental rather than by design. In some areas these older restrictions are breaking down, eg. *garde-malade* 'nurse' was once feminine as an employment considered appropriate only for females but now offers alternative gender assignments, and this same change has occurred with terms such as *avocat/-e* 'lawyer' and *président/ente* that once were masculine, denoting only male referents. These 'fossilised' gender assignments remain in areas of high prestige and domains that celebrate tradition or past practices, eg. the military, law, and certain areas of medicine, masculine continues regardless of who the real-world referent is, eg. *auteur* (M) 'writer', *juge* (M) 'judge', *peintre* (M) 'painter', *savant* (M) 'person whose knowledge and research has added to scientific progress' – a noun that once offered alternative gender assignments as *savant/-ante* 'learned person'. The same result has occurred in relation to *guerrier/guerrière* 'warrior' which is no longer in use having been superseded by the masculine-only *soldat* (M) 'soldier' – although *soldate* (F) 'female soldier' is starting to appear in informal contexts (LRPT, 1994:1044).

#### Nouns having no gender assignment

For the last set of lexemes there is no sex-specific detail in their semantics, nor is there any salient attribute associated with a specific gender assignment. In such cases nouns have no gender assignment. It is assigned only upon its application by a speaker, at which point it correlates with the 'male' or 'female' sex of the real-world referent – masculine in the case of a 'male' referent, feminine in the case of a 'female', eg. Such nouns typically identify a human referent through some activity (professional, recreational) or some physical/behavioural characteristic. In these cases, gender assignment is determined by the speaker – as for *angora* (M/F) 'angora' – to correlate with the gender associated with the male or female real-world referent – masculine for a 'male' real-world referent and feminine for a 'female' referent.

This explanation can account for all such nouns – except the set of nouns with 'fossilised' gender assignments identified above.

What specific gender assignments tell us

These findings suggest that gender assignment for nouns denoting a human being is largely predicated on contrasting attributes 'male' or 'female' either in the lexical semantics of a noun, or in correlation with the referent intended by the speaker. In cases where specific gender assignments are not related to a male or female referent – either in the semantics of a noun or in relation to a real world referent – they are suggested to relate to one of the following areas:

- attributes associated with a specific classification, for which the specific gender assignment is consistent not only for human beings but more broadly in other lexical fields
- pejorative, fossilised, or counter-culture associations according to societal attitudes
- ranks or roles in employment domains that celebrate tradition and hold strongly to past practices
- positions or activities that are held in the highest esteem in the arts, education, justice and civil service until recently the prerogative of males.

This last point may also account for irregularities for two nouns. The first is the formerly feminine *gens* (M/F) 'people' which gender is now restricted to related elements in the rare adjective-noun word order and where masculine gender is inconsistent with other nouns meaning 'humans in general' since it is unrelated to any quantity. The second irregularity is *homme* (M) 'adult male human' in its extended uses either as a count noun to denote the broader notion 'human being' (male or female) since 'male' is intrinsic to its meaning as a replacement for *vir* (M) 'adult male human', and in its collective sense applying to 'humankind' (*tous les deux sexes* 'both sexes') since these attributes together violate sense relations of relating to ungradable pairs that are mutually exclusive. Both irregularities appear to have come about in an era during which there was a strong historical imperative for male to encompass female, and where the only general terms – collective and count nouns – were feminine. These two examples can be linked to other historical examples where feminine gender assignments were 'regularised' to fit a masculine paradigm identified in the previous chapter.

It is interesting to note the different treatments by grammarians of *personne* (F) 'person' as a

noun in positive constructions and as a pronoun in privative constructions provided above in (1). Similar arguments are made for other examples. Many expressions use the masculine form of the adjectival pair *grand/grande* with otherwise feminine nouns, eg. *grand-chose*. This is identified in LRPT (1994:530) as an indefinite pronoun in the expression *pas grand-chose*. COFED (1985:256) identifies it as a singular invariable noun ... ('used only in negative context'), and provides the same example, *pas grand-chose* 'nothing much', not much, very little'. This example looks very like *peu de chose* 'something of little importance'. These different grammatical treatments of the same 'noun' in such expressions would appear to arise from efforts to understand alternative gender assignments.

These examples can be observed alongside different treatments for *chose* (F) 'thing'. As discussed above, *chose* is identified as a feminine noun in its application to 'something concrete or abstract perceived as unique' (LRPT (1994:187) but is masculine in expressions such as:

- *autre chose* (M) 'something different', or
- *donnez-moi ce chose* 'give me that thingummy-jig' (rather than *cette chose*), or
- *se sentir tout chose* 'to feel out of sorts' (rather than *toute chose*).

Here it is treated as a 'locative indefinite masculine' (noun) (in LRPT) and as *s.m.* (singular masculine noun) in COFED (1985:100).

Together, these different gender assignments of meanings in these various expressions are consistent with features observed elsewhere – *personne* and *chose*, where regarded as 'unique' are associated with feminine gender assignment, but in negative constructions that introduce 'absent' (*ne, pas*), or 'indefinite' (*autre*), or different in their comparative amount (*peu, grand*) they are masculine. Such examples provide interesting diagnostics for this study.

#### Word-final pronunciations

Evidence suggests that word-final pronunciation patterns in this field also relate to aspects of motility and shape, but 'texture' is less relevant in a field related to a single kind – except perhaps in any contrast between young and old. Findings suggests that other semantic features may possibly be significant in this domain, such as directional differences, 'continuous' and

'discontinuous, 'unchanging' or 'subject to change', which relate to matter in time and space. In their association with contrasting word-final pronunciations, attributes 'part' and 'whole' can be observed as quite different from attributes 'complete' and 'incomplete' associated with gender.

Some nouns have alternative pronunciations, eg. *candidat/-ate* (M/F) 'candidate' where inflectional suffixations may result in vowel- and consonant-final pronunciations, but for *chanteur/-euse* (M/F) 'singer', both alternatives are consonant-final. In the case of alternative suffix forms, it is difficult to argue that they relate to agreement – either with the gender assigned to the noun, or with the real-world referent – since agreement, in Hocking's definition (referred to in Chapter 1) occurs outside the noun. Moreover, if gender assignment relates to 'male/female' distinctions, it seems unlikely that word-final pronunciations would correspond or agree with gender in some cases, eg. *avocat/avocate* (M/F) 'lawyer', *candidat/-ate* (M/F) 'candidate', but not others, eg. *acrobate* (M/F) 'acrobat'. These issues are yet to be answered, and are examined further in Chapter 9.

The lack of wider acceptance of alternative suffix forms *-eur/-euse* that have always existed in French and, moreover, are orthographic rather than phonetic, does not appear to have any semantic or grammatical basis. The more extensive use of these alternative forms in Canadian French may reflect an older system that is today forgotten or ignored in mainland France.

#### Implications beyond this lexical field

The analysis of collective nouns suggests an association between masculine gender assignment and the presence of 'unlike' elements. The attribute 'unlike' results from a context in which more than attribute is salient, attributes that are associated with contrasting gender assignments – but not where they are mutually exclusive (except *homme* (M) in its collective construct that involves *tous les deux sexes* 'both sexes').

The area of agreement is not covered in this research. However, findings reveal an association between masculine gender and collectives whose meanings relate to 'unlike' attributes – that is, more than one salient attribute associated with different gender assignments, eg. 'blood',

associated with feminine gender, and 'surname' (an 'abstract' notion) for *clan* (M) 'clan'. This combination of 'unlike' elements associated with different gender assignments for collective nouns can allow us to understand the resolution to masculine gender where masculine and feminine genders must combine in grammatical agreement for count nouns and pronouns.

#### Implications for other languages

Findings in the above analysis have certain implications for other languages with gender or noun class categories particularly where similar treatments occur, as observed earlier (in Chapter 3) for Russian, where nouns relating to professions that were once masculine now permit alternative gender assignments with the admission of women into such positions. An extensive discussion of these changes is to be found in Comrie et al. (1996, Ch. 6).

Alternative gender assignments for French nouns denoting human referents can also be compared with examples from other languages identified in Chapter 2, eg. *ḥakin* 'doctor', a Lak noun that can take agreements associated with gender I, gender II and gender III according to age and sex of the referent (man, older woman, or younger woman), and Archi, where nouns such as *lo* 'child' and *misgin* 'poor person' can take Gender I agreement for a male referent, Gender II agreement for a female referent. There is some similarity in the alternative gender assignments for *aigle* (M/F) 'eagle', and for *angora* 'angora' since these alternative gender assignments relate not to 'male' or 'female' but to features other than 'sex'.

Nominal classification of collectives in the six Australian Aboriginal languages analysed by Harvey (1997) shows some similarities with French, particularly for collectives, in that groups consisting only of males may, in some cases take the feminine enclitic *-mba*, while others take the masculine enclitic *-da* (1997:41-42). The masculine enclitic, suggests Harvey, '... must depend on other factors, beyond simply biological male reference. It is possible that, as for French, not only 'anomalous' distributions of nouns denoting human referents but other entities more generally, including inanimate entities in other gendered languages, may be semantically motivated.

## **Chapter 9 Discussion, Conclusions & Theoretical Implications**

The final chapter includes discussion of the various findings in Chapters 4 to 8 in relation to gender assignment and word-final pronunciation, and conclusions resulting from those findings. These areas are followed by the theoretical implications emerging from this study.

### **9.0 Discussion of findings**

The findings of this research into the nature of gender assignment and variation in word-final pronunciation patterns for French nouns are set out below in relation to phonology, morphology and semantics.

#### **9.1 Phonology and gender assignment**

Previous research into gender assignment in French suggested that the ability of native speakers to acquire and predict gender assignment related to phonological principles associated with the word-final phone. It was argued that this explanation would account for the observed inability of deaf children and non-native speakers to acquire those principles.

A phonological analysis of the relationship between word-final phones and gender assignments for the 8000 nouns in the corpus created for the current research mirrors results produced in the 1950s in research by Mel'čuk (1974), and by Tucker et al. (1977). Results in this latter study, however, show that for nouns that have final vowel phones, gender assignments proved to be fully predictable only in four cases – the word-final nasal vowel /œ̃/ and consonantal phones /ŋ/, /tʃ/ and /dʒ/, where all examples in their corpus were masculine. No predictable relationship was found for other word-final vowel and consonantal phones. Tucker et al. (1977) observed certain tendencies but they are of little assistance in terms of predictability in any individual case.

#### **9.2 Morphology and gender assignment**

Examination of potential relationships between morphology and gender assignment raised in the discussion in Chapter 3 yielded no systematic regularities between compound nouns and masculine gender assignment suggested by Mel'čuk (1958, 1974), Tucker et al. (1977) and

Corbett (1991). The correlations they observed could not be maintained beyond the limited set of examples provided in those studies. For instance, the masculine *contre-mur* (M) 'outer or retaining wall' also finds several similar feminine examples, such as *contre-mesure* (F) 'counter-measure' and other compound nouns *mise en scène* (F) 'staging/production' and *garde-robe* (F) 'wardrobe'.

While Surridge (1993) notes the existence of these feminine forms, her argument is that they relate to different grammatical derivations – masculine compounds nouns being derived from verbs, eg. *savoir-faire* (M) 'experience', and feminine compound nouns from nouns, eg. *table d'hôte* (F) 'set-price menu', *morte-saison* (F) 'low season'. However, such distributions are not always clear, eg. *pot-bouille* (M) 'boiling pot', where one part is derived from a noun, *pot* (M) 'pot', and the other from the verb *bouillir* 'to boil'. Nor is it quite clear how a noun such as *tire-bouchon* (M) 'bottle opener' – formed from the verb *tirer* 'to pull' – is different from *garde-robe* (F) 'wardrobe', which also appears to be formed from a verb, *garder* 'to guard', yet they have different gender assignments – as have *pince à sucre* (F) 'sugar tongs' and *pince-nez* (M) 'eye glasses without side pieces', both derived from the same verb, *pincer* 'to grip'. The lack of regularity would suggest that an explanation for different gender assignments lies elsewhere.

However, the analysis of infinitive forms of verbs for present study – particularly *-er* verbs and *-ir* verbs – confirms that certain of them can be used in extension as nouns and that they are masculine, eg. *toucher* 'to touch' forming *toucher* (M) 'touch'. Some infinitives cannot be used as substantive nouns, eg. *danser* 'to dance', where the noun is *danse* (F) rather than \**danser*.

In the case of nouns used in semantic extension from pre-existing nouns, for the most part gender assignment of the original noun is maintained in the new meaning, but not in every case. Nor is there any regularity in the case of adjectives and past participles used as substantives in lexical fields covered by this study, as shown in (1) below:

- |     |               |   |                 |  |
|-----|---------------|---|-----------------|--|
| (1) | <i>fourré</i> | M | 'thicket'       | < past participle of verb <i>fourrer</i> 'to double in size' |
|     | <i>maigre</i> | M | 'meagre (fish)' | < adjective <i>maigre</i> 'thin'                             |



<i>barbue</i>	F	'brill'	< adjective <i>barbue</i> 'bearded'
<i>vieille</i>	F	'Ballan wrasse'	< feminine form of adjective <i>vieux/vieille</i> 'old'.

Morphological derivation cannot therefore account for the different gender assignments amongst this set of nouns. The generalisation offered by Mel'čuk (1974:11-12) that 'gender of a noun is determined by its grammatical properties' – in relation to infinitives, adjectives and other parts of speech – is substantiated only in relation to infinitive forms.

The phonological and morphological analysis of nouns bearing the word-final phones /it/ shows that they occur in suffixes and combining (bound) forms, such as *-ite*, a suffix which conveys several meanings – 'thing produced by an action', 'belonging to', 'passing through'. It occurs also in bound morphemes which also have certain semantics of their own, eg. *-cyte* 'cell', *-dyte* 'enter', *-lite* 'chosen', *-lyte* 'follower', *-lyte* 'substance able to be decomposed or broken down', *-lytel-lithe* 'stone', *-phyte* 'plant'. The present findings suggest that these bound morphemes and suffixes do not determine gender assignments of the forms to which they are attached, eg. masculine gender for *épiphyte* (M) 'epiphyte' (which grows on another plant but is not parasitic) and feminine gender for *bryophyte* (F) 'bryophyte' (which reproduces via spores), or *coprolithe* (M) 'coprolite' (stony nodules) and *chrysolite* (F) 'chrysolite' (a mineral). Some other explanation is needed to account for variations in gender assignments among such nouns.

Mel'čuk (1974), Tucker et al. (1977) and Corbett (1991) and Surridge (1993) all reached the same conclusion that some gender assignments were semantically based and others related to 'formal assignment rules' (Corbett, 1991:33) relating to phonological or morphological systems. The present study suggests a radically different distribution of semantic and formal motivation but does not so far completely exclude formal motivation, eg. with infinitives.

### 9.3 Semantics of gender assignment and word-final phonology

The analysis of nouns designating living things – birds, fish, other animals, plants (woody plants, fruits), humans – suggests that the different gender assignments of nouns can be accounted for by certain semantic features, for the most part in opposition. More importantly, certain of those features are associated with gender assignment while others are associated with word-final phonology.

Features associated with gender assignment include:

(2) Masculine	Feminine
• non-existent, privative, virtual	• real, existing
• unlike/various/indefinite/undefined	• same
• different	• unique
• inanimate, dead, extinct	• animate, living/alive
• quantity	• unquantifiable
• male/attributes associated with male	• female/attributes associated with female
• life-endangering	• life-creating/enhancing
• fine/linear or thread-like filament	• flat form
• upright (horizontal orientation)	• recumbent (horizontal orientation)
• tamed, captive, constrained, domesticated	• wild, free, unbound, unconstrained
• terrestrial/aquatic	• aerial
• indirect	• direct
• closed	• open
• stop (state or form)	• continuous (state or form)
• ephemeral	• eternal
• hard, rigid, solid, dense	• fleshy, soft, hollow, flexible
• processed/man-made/alterd state	• natural state
• dark	• bright
• sour	• sweet
• complete	• incomplete
• processed/man-made	• created from nothing/natural
• diurnal	• nocturnal
• ?	• layer

There do not appear to be ready oppositions for features such as 'tapering' and 'layer'. However, it is possible that 'filament' in the sense of thread-like refers to structure rather than shape and may form a contrast with 'flat', also a structural rather than spatial construct. 'Upright' and 'recumbent' also suggest oppositions in structure rather than shape.

Certain features are associated with word-final phonology, as in (3) below:

(3) Vowel-final	Consonant-final
• comparative	• superlative
• immotile	• motile
• part, apart/separate	• whole, together
• irregular (various, uneven, etc.) outline/shape	• even (straight, curved) outline/shape
• slender	• bulky, solid
• light	• heavy
• abstract	• concrete
• inedible/dry	• edible/moist
• intermittent/spasmodic; informal	• regular; formal
• textured (rough, leathery, wrinkled, etc.)	• smooth
• abstract	• concrete
• narrow, slender	• broad, wide
• irregular pattern (spotted)	• regular pattern (striped)
• convex	• concave
• ?	• tapering form

These semantic features relating to the two separate classification systems – the primary system associated with gender assignment and the secondary system associated with word-final pronunciation – are argued to account for classifications of nouns denoting living things (birds, fish and other animals, woody plants and fruits, and human beings). The various features above can also account for different gender assignments and word-final pronunciations among loan words and synonyms, as well as changes in gender assignment over time and alternative gender assignments or word-final pronunciation patterns for the same noun. Although features in this set are quite specific, attributes themselves can vary, some in an infinite number of ways. For instance, any creature that has even one of an extraordinary number of techniques or adaptations that increase its potential to obtain prey is likely to be feminine, while a creature that lies in wait for its meal to pass by is likely to be masculine.

Not every feature in the above sets appears, on the surface, to relate to another in binary

opposition, eg. 'layer' associated with gender assignment, and the notion 'tapering'. The notion 'layer' in Roget's (1972, #204) Synopsis of Categories is next to filament (#205), and their proximity suggests contrasting semantic relationships as different linear dimensions. However, linear dimensions relating to shape and outline, even comparative age/size, are associated with word-final pronunciation while 'layer' appears to be associated with feminine gender and 'filament' with masculine gender, as for *moustique* (M) 'mosquito' with its thread-like form, *fauchoux* (M) 'daddy long-legs', even *brin* (M) 'blade (of grass)', *cheveu* (M) 'hair', *fil* (M) 'thread' and *filament* (M) 'filament'. It may be that in French these semantic attributes provide a contrast in form or mode of existence rather than linear dimensions. With regard to 'tapering', this shape is formed by symmetrical lines that meet at a certain point, and it forms another kind of contrast with 'irregular', 'asymmetrical' or 'uneven'. Since these attributes are associated with vowel-final pronunciation, it would appear that the contrasting form 'tapering' may be associated with consonant-final pronunciation as are other shapes that produce an even shape or outline. Among creatures noted for their 'tapering' shape are *crocodile* (M) 'crocodile', *alligator* (M) 'alligator' and *lézard* (M) 'lizard', and in each case we find consonant-final pronunciation. These notions require exploration in future research. Also in regard to 'tapering', it is interesting to find 'tail' as a numeral classifier in various Austroasiatic languages analysed by Adams (1986:248).

In some cases, a single attribute can be linked with a multiplicity of oppositional notions. For instance, the feature 'textured' in its contrast with 'smooth' has a wide range of not quite synonymous terms, eg. 'rough', 'scaly', 'nodular', 'uneven', 'bumpy', 'wrinkled', 'hairy', 'scaly', 'wiry', 'scraggly'. There are, however, some attributes for which it is difficult to establish an immediate contrast, such as the notion 'convoluted mass' related to consonant-final pronunciation of plants that produce an above-ground mass of branching. However, a less direct semantic link may be found with some other notion, such as 'strong', an attribute that is salient not only for animals but for certain 'woody' plants, eg. *pruche* (F) 'Eastern hemlock' or 'spruce' and, like 'smooth', is associated with the same consonant-final pronunciation.

Some features become salient very rarely, as for oppositions between 'diurnal' and 'nocturnal',

which are salient in a division between members of a single set that are otherwise the same, as for 'butterflies' and 'moths', and for birds of prey. Contrasting notions 'edible' and 'inedible' are also less common, but they emerge in relation to word-final pronunciation in certain lexical fields that are pertinent, eg. 'game birds', 'fruit', etc.

At the very furthest extent of differentiation an entity becomes 'unique' – in relation to size, eg. *girafe* (F) 'giraffe', *autruche* (F) 'ostrich', etc., or hue, as for *écarlate* (F) 'scarlet' and *émeraude* (F) 'emerald', the most intense red and green possible and thus 'unique'. Other colours that emerge at various points along the spectrum are simply 'different' from others. This result is consistent with other nouns whose meanings are forged through the same semantic oppositions offered by 'different' and 'unique', eg. *individu* (M) 'individual', 'different' from others, and *personne* (F) 'person', since each of us has a 'unique' voice (discussed in §8.2.1).

As two of the finest distinctions among woody plants, notions 'deciduous' and 'evergreen' are only salient when they divide a larger group into two that would otherwise be the same, as for *azalée* (F) 'azalea' and *rhododendron* (M) 'rhododendron'. This is the very same context in which 'diurnal' and 'nocturnal' become salient. Nowhere else is 'deciduous' itself salient, even where it distinguishes one entity from all others since it then becomes 'unique' – as for the 'unique' *bourdaine* (F) 'alder buckthorn' that is deciduous where other buckthorns are evergreen. It is in this context that the imposed reclassification to masculine for *mélèze* (M) 'larch', the only deciduous conifer, makes us so very uncomfortable. It is not surprising, therefore, to find pockets of resistance even today among certain speakers who continue to use feminine gender assignment for *mélèze*. It would appear that those sixteenth century Latin-trained clerics involved in 'regularising' the French language were not able to recognise the 'unique' status of this tree amongst conifers. That period of the French language, and other changes introduced at that time, may provide another fruitful area for future study.

Attributes 'diverse' and 'various', which typically apply to collectives, may also apply to count nouns wherever a combination of attributes associated with different classifications occurs. In such cases they are associated with masculine gender assignment, eg. *pigeon* (M) 'pigeon' in its

application to cooing birds not only 'diverse' in their colouration but in their habits – such as 'captive' and 'free', 'sedentary' and 'migratory'. These notions 'diverse' or 'various' also appear to be salient in lexical fields beyond this thesis since they offer an explanation for masculine gender assignment of *mélange* (M) 'mixture' in its application to the mass resulting from the combination of different kinds of matter, and for the masculine gender of *meuble* (M) 'furniture', the 'diverse' range of household belongings that are not 'fixed'.

In terms of 'mass' we find a semantic contrasts between 'quantified' and 'unquantified', while in relation to a single body we find a contrast between 'complete' and 'incomplete' – both of which are associated with contrasting masculine and feminine gender assignment. In terms of 'amount' or 'totality', however, we seem to find a contrast between 'part' and 'whole', associated with contrasting vowel- and consonant-final pronunciations. Of course, another distinction relating to amount is degree where the contrast between 'comparative' and 'superlative' is also expressed in contrasting vowel- and consonant-final pronunciations.

Nonetheless, these rarer kinds of distinctions suggest that the future analysis of nouns in other lexical fields may reveal oppositional attributes not identified in the analysis of living things. Equally, the discovery of new information about creatures may expose other crucial attributes that are inconsistent with current classifications. The analysis shows that words may fall into disuse, or change gender assignment and/or word-final pronunciation patterns, or develop synonyms which sometimes become more popular and overtake the previous generic term. The extent of such changes against the overall stability of classifications in the lexicon reveals evidence of a system that is able to adapt where attributes are inimical to the classification of a noun – either to its gender assignment or to its word-final pronunciation pattern.

It is noted that size relations typically involve oppositions between 'large' and 'small' (Aikhenvald, 2000:273, Roget, 1972:31-32). However, as the analysis of trees makes clear, these gradable oppositions present difficulties in their operation since relative size depends upon an entity and the environment in which it is found rather than any independent measurement. In French these difficulties are overcome by a different approach where

'comparative' distinctions 'smaller/taller/bigger' form a binary opposition with 'superlative' (tiniest/biggest/tallest') forming polar opposites in various dimensions that are expressed in contrasting vowel- and consonant-final pronunciation patterns.

Many of the attributes identified in Chapters 4 to 8 are also shown to be salient in other lexical fields, such as 'nothing' and 'something' where 'void' and the 'absence of matter' appear to be associated with masculine gender, and 'something', matter in its own unique form, appears to be associated with feminine gender. This area is discussed further below. It is also interesting to note that some attributes lend themselves to meanings associated with count nouns while other attributes are better suited to meanings associated with collective terms, allied to their construction from otherwise separate and individual items.

The nature of duals further limits the kinds of attributes that can become salient. Evidence suggests that nouns denoting groups composed of two individual units that are otherwise 'unrelated', or 'solitary', or come together in a 'short-lived' or 'occasional' way, have masculine gender assignment, eg. *un couple de fripons* (M) 'a couple of rascals'. The masculine term *couple* (M) 'a couple' also applies to male and female of any species of animal including humans, particularly a married couple – presumably 'diverse' entities tied not by blood but by some legal apparatus. When denoting two individual units that are the same, in species or kind, *couple* is feminine, eg. *une couple d'œufs* (F) 'a couple of eggs'. Where individual units are not only the same kind but are typically found together, we find the feminine noun *paire* (F) 'pair', eg. *une paire de chaussettes* (F) 'pair of socks', *une paire d'amis* (F) 'pair of friends', *une paire de ciseaux* (F) 'pair of scissors'. These nouns reveal that different classifications can highlight features related to their aggregate composition at a semantic level. It will be interesting to consider the application of these various notions in lexical fields beyond this research.

Also important is the hierarchy between various attributes, particularly the nature of attributes that can be taken as given and their crucial interaction with saliency. In this regard, there are constraints on the extent to which certain attributes can become salient. One sphere that limits their operation relates to nouns whose semantics include more than one salient attribute

associated with different classifications that must compete, either for gender assignment or for word-final pronunciation – since only one can be salient. The different saliencies of conflicting attributes may be observed in regional synonyms and their contrasting gender assignments.

### 9.3.1 Features and attributes – their different roles in the classification process

It is crucial to make clear the distinction between 'features' of the two semantic systems – those associated with gender assignment in (2) above, and those associated with word-final pronunciation in (3) above – and the way those features might be expressed as 'attributes' that can vary from creature to creature, even within a single lexical field. For instance, the single semantic feature 'endangering' finds itself expressed in a quite extraordinary number of ways. In turn, the variety of attributes and their relationship with a narrow set of features in the semantic system allows a more global focus that is easier to operate than separate distinctions according to the variety of individual attributes. Global features, such as 'life-creating' or 'life-promoting', and 'life-endangering', can incorporate the fullest possible range of adaptations or modes of existence including potential to create life, protection from threat, the ability to vary diet or water intake, the ability to move safely between different environments – land, water, and air – and the instinct to flee/not flee from threat, and may ultimately capture 'male' and 'female', notions otherwise set out in their own right.

Oppositional notions 'not life-creating/promoting' are captured most simply in the feature 'endangering', although it does not encompass the full extent of 'not' in relation to attributes associated with feminine gender. However, 'endangering' can include failure to take advantage of adaptations that offer increased safety, or adaptations that are helpful in one context but endangering in another context, or cannot be switched off (such as constantly calling for a mate), or a behaviour or diet that is endangering to a whole kind. Endangering adaptations may also include absence or loss of the instinct to flee from threat or captivity, or attacking one's own kind, or attacking a potential threat individually rather than collectively in a way that places the individual, or the group, in danger. Thus, the term 'feature' relates to the classification systems of French, while the term 'attribute' relates to some aspect of the entity under classification.



In most cases, gender assignment and word-final pronunciation of a noun are motivated by certain attributes of entities and their association with specific features associated with gender assignment, as in set (2), and with word-final pronunciation in set (3) above. However, a restricted set of nouns have no fixed gender assignment, and some have no fixed word-final pronunciation pattern until it is assigned by the speaker. As noted above, in these cases gender typically reflects, or correlates with, the gender issuing from the real-world referent – animal or human. Such an example is *angora* (M/F) 'angora', a long-haired animal, where masculine gender is assigned to correlate with a real-world referent animal that is masculine, as for *chat* (M) 'cat', or *lapin* (M) 'rabbit', while feminine gender is assigned to correlate with the real-world referent animal that is feminine, as for *chèvre* (F) 'goat'.

The same process occurs for nouns designating a human referent, particularly in relation to

- personal roles, eg. *allié/-ée* (M/F) 'ally', *copain/-ine* (M/F) 'friend'
- occupations, eg. *boulangier/-ère* (M/F) 'baker',
- rank, eg. *duc/duchesse* (M/F) 'duke/duchess'.

These gender assignments can be related to contrasting attributes 'male' and 'female' identified in the set of attributes associated with gender assignment, listed in (2) above. Correlation can be said to have occurred when the gender (masculine or feminine) assigned to the noun matches that related to the 'male' or 'female' real-world referent. As discussed in Chapter 8, such nouns contain no semantic detail regarding biological sex of any referent, and we find that gender assignments are subject to changes in social and cultural norms as to what are acceptable roles for the two sexes. For instance, until recently *avocat* (M/F) 'lawyer' had fixed masculine gender but it now allows alternatives, while older forms that offered alternative gender assignments, such as *guerrier/guerrière* (M/F) 'warrior' have given way to a near-equivalent term *soldat* (M) 'soldier', which has fixed masculine gender assignment. French dictionaries published in different periods bear witness to these changing fortunes over time.

Gender assignment is predictable but irregular for certain other nouns relating to human activities – those that hold the greatest cachet, relating to high office, wealth and property, old historic distinctions between amateur (unremunerated pastimes/activities) and professional

(remunerated trade/employment) once considered crucial. For this small set of nouns the classification process is motivated according to past social distinctions rather than semantic principles that operate more broadly in relation to gender assignment (see Chapter 8). These nouns are discussed further below in regard to their fixed masculine gender assignments.

What still remain to be accounted for are alternative word-final pronunciation patterns of such nouns where they appear to be unrelated to features such as 'slender', or 'agile' identified in (3) above, and since the features 'male' and 'female' relate only to gender assignments for such nouns. Alternations occur not only between vowel- and consonant-final pronunciations but between different consonant-final patterns, eg *-eurl-euse* as in *chanteur/chanteuse* (M/F) '(male/female) singer'. Differences between this pair and *-eurl-eresse*, or *-eurl-riche* occurring in *demandeur/demanderesse* (M/F) 'plaintiff', and *directeur/-riche* (M/F) '(male/female) director' also require explanation as to their semantic basis, but also in their distributions alongside certain gender assignments, given that the only evidence so far of any interaction between the two semantic systems relates to the co-occurrence of 'superlative' with 'unique', and 'comparative' with 'different'.

### 9.3.2 Gender assignments unrelated to the semantic system

Gender assignments for a small number of nouns appear not to be related to any feature in the semantic system. This set includes two masculine nouns denoting woody plants, *mélèze* (M) 'larch', and *lierre* (M) 'ivy' – and possibly one other, *saule* (M) 'willow'. In each case, gender assignments appear to have undergone a sudden reclassification from feminine to masculine. Comparison with woody plants that remained feminine suggest that these reclassifications were motivated by a desire to regularise gender assignments that could not be explained combined with either a perceived relationship between masculine gender and imposing height, or its inappropriate association with feminine gender assignment.

Another noun whose reclassification appears to have been unrelated to the semantics of the noun itself is the change to masculine of the plural count noun *gens* (M/F) 'people' – everywhere and anywhere, in quantity undetermined. It was originally the plural form of *gent*

(F) 'race', and the plural 'races' gave it this meaning of 'people regardless of number, sex, and location (including background)' and it would appear that as a plural noun it, too, was feminine (which is not always the case).

There is considerable evidence of an association between masculine gender and collectives whose construction relates to a number of individuals – except where meanings identify 'regardless of number' or 'in numbers that are unquantifiable', as for *gens* – in which case nouns are feminine. The introduction of masculine gender for *gens* as a plural noun is suggested by Rickard (1974) to result from 'the common-sense tendency to make it both plural and masculine as the equivalent of *les hommes*' (1974:150) – which would suggest that masculine gender was philosophically rather than semantically motivated. Efforts to introduce masculine gender for this noun appear to have been taking place at the same time as the rationale was taking root in England regarding the natural precedence of males and was accompanied by similar efforts to promote the primacy of male in language (Spender, 1985:147, in §8.11.2). It is difficult to consider that they might be entirely unrelated. However, the introduction of masculine gender for *gens* was only able to obtain limited acceptance. It could not overturn older more stable feminine agreements involving the small set of adjectives that still precede the noun, reflecting the adjective-noun word order norm in Old French (which is noun-adjective in modern French) (Posner, 1997:363). *Gens* now finds itself with complicated agreements regulated by word order that consequently requires considerable dictionary explanation and exemplification, as demonstrated in LRPT (1994:517) and COFED (1986:249).

The plural term *hommes* referred to above is taken to mean 'mankind', and is another semantic oddity. While it underwent various orthographic changes, the count noun *homme* eventually replaced the Latin *vir* (M) 'male human'. Where gender assignments of another Latin term *homo* (M/F) 'human' offered alternative gender assignments to correlate with the 'male' or 'female' real-world referent, *homme* came to entail 'male' in the same way as *oncle* (M) 'uncle', and *frère* (M) 'brother'. *Homme* was eventually employed to denote 'human' in two different ways – as a singular count noun identifying either mâle or femelle, and as a collective noun *homme/hommes* incorporating *tous les deux sexes* 'both sexes'. These different applications are

documented in Ch. 8. However, in any one-to-one application of *homme* as a singular count noun, the entailment of 'male' removes any possibility of 'either/or'. In a collective sense *homme* violates sense relations between ungradable antonyms since both 'male' and 'female' are salient at the same time ~ unlike any other collective denoting 'people'.

The semantic challenge presented by *homme* in these separate grammatical categories do not arise in the case of the singular count noun *personne* (F) 'person', or collective terms *humanité* (F) 'humanity', 'humankind', *race* (F) 'race', *population* (F) 'population', *société* (F) 'society', or *gent* (F) 'race'/species', indeed any number of feminine collective nouns since their semantics contain no detail regarding sex of referents. And while the semantics of the masculine *peuple* (M) 'people' as a nation or cultural community, regardless of place of birth or cultural origin (LRPT, 1994:840) also exclude any detail regarding sex of referents, *homme* is not equivalent in its meaning. The sense relations involving antonyms mean that mutually exclusive attributes cannot both be salient at the same time. As Finegan et al (1989) put it, a door cannot be 'open' and 'shut' at the same time (1989:153). In this respect it is interesting to note that French has a feminine term *porte* (F) 'door' which applies in contexts related to 'open' or 'opening', which meaning excludes it from contexts involving 'closed', while *huis* (M) 'door' applies in contexts relating to 'closed', or closing off a space, particularly to ensure privacy, etc., avoiding any ambiguity. Where mutually exclusive attributes are present in meanings as, for instance, *population* which applies to 'young and old', 'male and female', even 'those present and those absent', etc., some other attribute is salient in their classification. The use of *homme* in either of its extended meanings will always require considerable effort to avoid ambiguity that occurs when fundamental semantic principles are violated.

Slightly different again are fixed masculine gender assignments of some few nouns denoting a human referent where meanings provide no detail regarding 'male' or 'female'. These nouns relate to activities and positions, in particular those associated with high social status, wealth, prestige and tradition, eg. *juge* (M) 'judge', *docteur* (M) 'doctor', *auteur* (M) 'author', *chancelier* (M) 'chancellor', etc, and ranks in the military. Over hundreds of years masculine gender assignments of these nouns would have been regular and predictable in their correlation with

real-world referents since, in the social conditions of the times, referents could only have been 'male' – until changes in social norms and expectations saw women entering these fields. While many of the nouns that, even in the 1980s had fixed masculine gender assignment today offer alternative gender assignments, for some few terms associated with high status, prestige, tradition, etc., masculine gender has become 'fossilised' – making it predictable, if irregular. A noun that demonstrates something of both of these sets is *savant/-e* (M/F), which offers alternative gender assignments in its application to 'learned person', an 'expert', even 'scholar'. However, the fixed masculine noun *savant* (M) applies to a (*p*)*ersonne qui par son savoir et ses recherches contribue à l'élaboration, au progrès d'une science ...* 'person whose knowledge and research contributes to the body of knowledge of a science' (LRPT, 1994:1015) which it exemplifies in the sentence *Marie Curie fut un grand savant* 'Marie Curie was a great scientist' – as though it is masculine gender that conveys her learnedness rather than her body of work.

In contrast, one noun today has fixed masculine gender assignment where an older term with a similar meaning offered alternative gender assignments – *soldat* (M) 'soldier'. This noun has the potential to provide alternative gender assignments but does not where an older noun *guerrier/guerrière* (M/F) 'warrior' did. The dictionary entry for *soldat* (LRPT, 1994:1045) offers neither alternative gender assignments nor alternative suffixes as is the case for other professions suffixed with *-at/-ate*, eg. *avocat/avocate* (M/F) 'lawyer'. Instead, 'female soldier' is given as *une femme soldat*. This dictionary entry does provide a feminine form, *soldate* 'female soldier', but indicates that its use is restricted to familiar or informal contexts. However, terms that originate in an informal way have the potential to spread into the wider community, and it will be interesting to observe any changes for this noun in the future. Nonetheless, masculine and feminine gender assignments and alternative word-final pronunciations for *soldat/soldate* reflect those of the older alternative pair *guerrier/guerrière*.

The change from fixed masculine or feminine gender assignment to alternative gender assignments are particularly noticeable in tracking various examples from the 1955 *Petit Larousse* used by Tucker et al (1977), through dictionaries used for this work, the (1985) CEFD and (1994) LRPT, to the online French dictionary ATILF (<atilf.atilf.fr>). These nouns

are further discussed below. Similar changes in classification in relation to changes in social norms are a feature of other languages, such as Khmer and Caucasian languages (Aikhenvald, 2000:347), Russian (Comrie et al., 1996, Ch. 6) and Austroasiatic languages Bahnar and Vietnamese discussed by Adams (1986:243ff).

### 9.3.3 Attributes and predictability of gender assignment and word-final pronunciation

The analysis shows that the specific gender assignment or specific word-final pronunciation of a noun does not itself identify a specific attribute of any item within these lexical fields, but they do narrow the range. On the other hand, our knowledge of the appearance and habits of a specific item can provide a level of predictability as to gender assignment and word-final pronunciation that is not available through other means.

What we can observe, however, are certain relationships between various features listed above that have emerged in this analysis of living things. Salient features of the primary system expressed in masculine or feminine gender assignments seem to relate to form, number in quantitative terms, and mode of existence (including habits, orientation), according to fundamental cognitive oppositions logically related to these areas. Salient features of the secondary semantic system expressed in contrasting vowel-final and consonant-final pronunciations seem to relate to dimensions relating to time and space, including movement. Interestingly, contrasts in 'animacy' between 'living' and 'dead' are found to be associated with masculine and feminine gender, while contrasts in 'motility' appear to be associated with vowel- and consonant-final pronunciation patterns. Such distinctions seem not to have occurred, or may not have been considered, for other languages that have the features 'animate:inanimate' associated with nominal categorisation.

Historically, semantic classifications relating to gender have been considered to centre around, even emerge from, a contrast between male and female. However, evidence in the analysis throughout suggests that a male/female opposition is part of a more integrated system of features in the classification of French nouns that stem from a fundamental contrast in the natural world between organic and inorganic, in which contrasting classifications – whether for

male and female, or between other attributes – serve to reflect the presence of other salient features.

### 9.3.4 Features, gender assignments, and nouns denoting human referents

The analysis in Chapter 8 and discussion above identifies different outcomes in relation to semantic features and gender assignment among nouns denoting human referents. As noted above, fixed gender assignments for some nouns denoting a human referent may result from the salience of certain features in the semantic system that are highlighted in the meaning of a noun.

Two such examples are *assassin* (M) 'assassin' and *familier* (M) 'close friend of the family'. For *assassin* fixed masculine gender is consistent with 'lying in wait' where it is salient elsewhere, but it may also result from an activity that historically is more closely associated with 'male', while for *familier* fixed masculine gender is consistent with someone closely related but 'not blood' and cannot be related to 'male' since it is as likely to apply to a 'female'. For *hermite* (M) 'hermit', masculine gender is argued to relate to solitary existence, and for *troglodyte* (M) 'troglodyte' to burying oneself underground – habits considered as endangering, for humans as for birds, or fish, or other living creatures.

Other similar nouns with fixed gender assignment are feminine. In certain cases they relate to 'living', eg. *victime* (F) 'victim', whose meaning is dependent on a 'living' body, as it is for *recrue* (F) 'recruit', denoting a 'live' body to replace the fallen or dead – and more crucial than its application to male referents over centuries. Elsewhere, feminine gender assignments may relate to 'unique', as for *dupe* (F) 'dupe', which identifies one picked out from all other possible candidates, and *majesté* (F) 'majesty', in a slightly different way – as a person above all others in their domain and thus 'unique'. For none of these meanings is there any sense of 'male' or 'female' – in French or in English.

Some nouns from other lexical fields can be applied to humans in figurative extension in order to convey something of that original sense in their new application. For these nouns gender assignments typically retain that of the original meaning. Such nouns may be feminine, eg.

*ruine* (F) 'person degraded by illness', from *ruine* (F) 'ruins'; they may be masculine, eg. *butor* (M) 'surly ill-bred person' from *butor* (M) 'bittern' (which has a constant bull-like call), and *singe* (M) 'lazy person/copy-cat' from *singe* (M) 'ape'. When gender assignment changes from that of its original meaning, it suggests a contrast in the new application of a notion within the original sense. For instance, feminine gender assignment for *grosse légume* (F) 'very important person', an uncommon or rare individual, provides an immediate contrast with the masculine *légume* (M) 'legume' – as common as it is plentiful and is thus not highly valued.

Many nouns identify a human referent according to a certain activity, or behaviour, role, rank, or political/social/personal characteristic or quality – senses that by and large limit their application to human referents. As such, for many of these nouns 'human' is less included in meanings than taken as a given, but in their specific application these meanings come to reflect 'male' or 'female' according to the specific gender assignments relating to real-world referents. For these nouns, speakers know the identity of the referent but hearers do not, and the gender assigned by the speaker isolates one set of potential real-world referents from another set according to features 'male' and 'female' in much the same way as 'diurnal' and 'nocturnal' for birds of prey. Where hearers are able to predict accurately that biological sex of the real-world referent from the gender assigned by the speaker, correlation can be said to have occurred. That is, the gender assigned by the speaker matches the gender associated with the real-world referent in the same way as for *angora* (M/F) 'angora' – which is masculine in its application to the masculine *lapin* (M) 'rabbit' or *chat* (M) 'cat' and feminine in its application to the feminine *chèvre* (F) 'goat', as observed in Chapter 6.

Historically, some nouns in the vocabulary of the sixteenth and seventeenth centuries appear to have had a higher level of correlation than they do today. For instance, over centuries many roles were limited to one sex or another, and gender assignments in these periods correlated with the sex of the real-world referent. For hundreds of years masculine gender of *hère* (M) 'heir' would have applied only to masculine/male referents since females could not inherit as the 'heir'; *docteur* (M) 'doctor' and *poète* (M) 'poet' would have applied to 'male' referents since they required an education that to a large extent females did not receive. In the same way, *garde-*



*malade* (F) 'nurse' would have applied only to females since such a role was not considered seemly for males. In addition, much older nouns offered alternative gender assignments, eg. *guerrier/guerrière* (M/F) 'warrior', even *savant/savante* (M/F) 'learned person' where alternatives today are limited to informal contexts, or to restricted meanings.

Over time some of these gender assignments that once correlated with male or female real-world referents came to be 'fossilised', their gender assignment fixed. Today, particularly over the last two decades or so, a more liberated French society has now come to accept alternative gender assignments in many professional roles, even *secrétaire* (M/F) 'secretary' in its application to Secretary of State. As a result, for the most part gender assignments relating to activities or roles correlate in a predictable way with male or female sex of the real-world referent – except in a very restricted number of cases that remain fixed mentioned above.

For some of these nouns (masculine and feminine), historical meanings have fossilised to the extent that their use today reflects times past, eg. *apothicaire* (M) 'apothecary', reminiscent of the Middle Ages and contrasts with the modern *pharmacien/-ienne* (M/F) 'pharmacist', while *garde-malade* (F) 'sister' suggests olden times in contrast to the modern *infirmier/-ière* (M/F) 'nurse'. Today, while *garde-malade* is rarely used, other 'fossilised masculine' forms continue – limited to domains imbued with the highest esteem, eg. *auteur* (M) 'author', or to arenas that celebrate tradition, such as the law, military, academia and medicine, or to certain roles still felt to be unfitting or inappropriate for a female, eg. *ingénieur* (M) 'engineer', *accordeur* (M) 'piano-tuner', *acquéreur* (M) 'purchaser' (in the sense of collector).

These examples, where fixed gender assignments are motivated by lingering effects of past practices, can be distinguished from those cases where speakers make no identification or have no knowledge as to male or female sex of the referent but assign masculine gender. In their application to 'someone', their meanings provide no possible identification regarding biological sex, and masculine cannot relate to 'male'. However, for a referent distinct from others but remaining impersonal, unidentified, it can be argued that 'indefinite' and 'privative' offer themselves as potentially salient in their association with masculine gender. However, gender

assignments designating 'someone engaged/ing in a particular activity' are largely determined according to 'masculine/male:feminine/female' oppositions.

Not included in this set are the few masculine and feminine nouns where gender assignment anticipated by the male or female lexical referent contrast with the gender assigned to the noun, eg. the feminine *lope* (F) 'homosexual male' indicating 'male' referent, the masculine *laideron* (M) 'ugly female' indicating a 'female' referent. Their non-correlation suggest that some feature associated with 'male', or with 'female', no longer have sufficient force to motivate correlating gender assignments.

As noted above, gender assignments of nouns used in extension to denote a human referent may change in their new application, eg. *légume* (M) 'legume' as a vegetable and changes to feminine in its application to *grosse légume* (F) 'important person'. French shows a decided preference for the richness of pejorative nuances able to be obtained through connotations expressed in by nouns denoting animals, or inanimate objects, in extension, as in Table 9.1.

Table 9.1: Nouns used in extension providing pejorative nuances in their application to 'human'

<i>butor</i>	M	'bittern'	'surly, ill-bred person'
<i>corbeau</i>	M	'raven'	'avid person'
<i>colle</i>	F	'glue'	'someone tiresome, difficult to get rid of'
<i>courge</i>	F	'marrow'	'idiot'
<i>lèche</i>	F	'lick'	'sycophant'
<i>patate</i>	F	'sweet potato'	'idiot'

Again, the different gender assignments among these nouns suggest that it is not the gender assignment that is crucial but some characteristic, or fine detail, that can be drawn on in their application to humans displaying the same characteristic. For nouns such as *lope* and *laidereon*, the question is what precisely these non-correlating gender assignments signify since 'not male' or 'not female' do not involve the mutually exclusive relationships as 'male' or 'female'.

#### 9.4 Word-final pronunciation - discussion

It is argued throughout this thesis that word-final pronunciation relates to a secondary semantic system expressed phonologically through contrasting vowel- and consonant-final

pronunciations according to a different set of features from those governing gender assignment – binary oppositions relating to contrasting dimensions in shape and size as well as other oppositional distinctions in time and space.

If gender assignment relates to a separate set of attributes from word-final pronunciation, how then should we treat alternative word-final pronunciation patterns, particularly in their application to humans? Grammatical accounts have suggested that they relate to 'male' and 'female', but these attributes are identified via gender assignments and such an account would mean a doubling-up – and one would not expect redundancy across the two systems. Nor is there any evidence that this is the case.

#### 9.4.1 Features in binary opposition – dimensions in time and space

It is interesting to consider the various dimensions in relation to time and space encompassed in the various oppositions listed as (3) in §9.3 above.

Dimensions in space include proportion where:

- 'light' contrasts with 'heavy'
- 'part' contrasts with 'whole'
- 'comparative' contrasts with 'superlative'
- 'narrow' contrasts with 'broad'
- 'rounded' contrasts with 'irregular'
- 'striped' contrasts with 'spotted'.

Other contrasting dimensions in space include surface contrasts, and contrasts in movement:

- surface texture, where 'smooth' contrasts with 'not smooth'
- movement, where the potential for independent movement 'motile', contrasts with 'immotile', and 'speedy' contrasts with 'lumbering'.

The various attributes relating to 'comparative' distinctions in size – 'diminutive', in relation to 'standard', in relation to 'augmentative' in relation to 'superlative' – can account for contrasting vowel- and consonant-final pronunciations across many otherwise similar entities in the various lexical fields in this research. When presented them alongside the gender assignments that are

consistent in such cases, (M) or (F) relating to gender and (V) and (C) to word-final pronunciation patterns, we can observe the systematic attention to increments in size:

diminutive (M/V) < standard (F/C) > augmentative (M/V) > superlative (F/C).

Temporal relationships, particularly those that involve movement, include:

- temporal distinctions, such as the contrast between 'momentary' and 'constant', 'instantaneous' and 'durative'.

The relationship of these attributes with 'direct' and 'indirect' – notions that might suggest an association with both time and space but which motivate contrasting gender assignments and not word-final pronunciations, requires future examination. There does, however, seem to be a division between form or mode of existence, associated with gender assignment, where other aspects of time and space are associated with word-final pronunciation.

Attributes of each entity then come to be assessed according to this set of features in binary opposition, one part of which is associated with vowel-final pronunciation and the other with consonant-final pronunciation. As observed in the analysis in Chapter 4 to 8, a feature may present itself in countless variations, eg. the feature 'not smooth' can relate to 'textured', 'wiry', 'dimpled', 'uneven', 'rough', 'hairy', 'knotted', 'curly', 'gnarled', 'nodular', 'crinkled', 'unkempt', etc. all of which are associated with vowel-final pronunciation, while the contrasting feature 'smooth' is associated with consonant-final pronunciation. This difference between a feature in the semantic system and attribute of an entity allows the same sets of feature to classify the extraordinary range of entities amongst living things.

This, too, is a system that allows for alternative features but not in binary opposition. For instance, contrasting word-final pronunciation patterns among members of animal families relate to motility and outer coverings which notions are unrelated and not in binary opposition. For example, vowel-final pronunciation for *lion* (M) 'lion' as the 'male' (rather than its generic sense) is argued to relate to its 'hairy' mane that distinguishes it from both from other cats and also from the female of the pair and is thus not reciprocal, while consonant-final pronunciation for *lionne* (F) 'lioness' is argued to relate to the speed and agility of cats whose large size might

suggest otherwise – which attribute the 'male' also shares.

Most of the attributes that are crucial in relation to word-final pronunciation are able to be assessed visibly, albeit at different ranges of proximity – although at some stage 'textural' and 'smooth' might involve touch. Other attributes require much closer contact – 'edible', where 'flavoursome' can only be assessed by taste, and contrasts between 'good to eat' and 'not good to eat' are identified via contrastive consonant- and vowel-final pronunciation patterns. Such examples suggests that in matters of the senses as well as intellect, volition and other areas are yet to be explored, further oppositions may come to light.

#### 9.4.2 Regularisation of word-final pronunciation for loan words

Word-final pronunciations of a good number of loan words have been regularised on entering the French lexicon. Evidence suggests that this regularisation relates to a misfit between a semantic attribute of the entity and the classification suggested by the word-final pronunciation pattern in its original form – particularly in relation to shape, texture, build, etc. This regularisation of loan words is accomplished through elision or epenthesis of word-final phones in the original noun. Elision occurs in the case of *wombat*, which is now vowel-final where all indigenous forms are consonant-final (see discussion, §3.1.3). Epenthesis occurs in the case of *cacatoès* (M) 'cockatoo' which is derived from two vowel-final sources, Dutch *kaketoe* and the original Malay form *kakatua*. These vowel-final pronunciations might suggest a slender form that belies its thickset appearance, and consonant-final pronunciation reflects its thickset appearance consistent with other birds having a *corps trapu* 'solid build'. However, for the consonant-final *grapefruit* (M) 'grapefruit', the underlying word-final phone represented in its orthography <P> comes to be pronounced in relation to the attribute 'edible', where the native French lexeme *fruit* (M) 'fruit' remains vowel-final in pronunciation, arguably since there can be no regularity with regard to the eventual shape of a fruit – even on the same plant.

The many changes in word-final pronunciation amongst loan words reveal the effect of the interaction between attributes of an entity, features in the semantic system, and the phonological system as it relates to word-final pronunciation.

9.4.3 Different word-final pronunciations for synonyms and members of the same family

Different word-final pronunciation patterns occur for members of the same family, eg. where vowel-final pronunciation for *lion* (M) 'lion' is argued above to relate to the shaggy mane that distinguishes it from *lionnesse* (F) 'lioness', whose consonant-final pronunciation is argued to relate to the strength and/or speed of these cats despite their great size. Both *tigre* (M) 'tiger' and *tigresse* (F) 'tigress' have consonant-final pronunciation, and these cats are equally agile, strong but in addition they are striped, which colouration distinguishes them from other cats (and occurs also for *zèbre* (M) 'zebra' and the many names of fish that have similar 'striped' camouflage colourations). These attributes – strong, speedy, agile, striped – are all associated with consonant-final pronunciation. It is noted that *tigre* has a word-final consonant cluster.

Alternative pronunciations that occur between members of the same kind are widespread among synonyms in French, as between *erlé* (M) and *marouette* (F) both of which can designate a 'crake' and which have not only different gender assignments but different vowel- and consonant-final pronunciations. However, alternative word-final pronunciations can also occur without any change in gender assignment, particularly amongst regional synonyms, eg. *pageau/pagel* (M) 'common pandora' identified in Chapter 5, and in Chapter 4 we observed that a change in meaning from *perdrón* (M) as 'newborn partridge chick' to *perdreau* (M) as 'small partridge' is accomplished via a change in suffixation rather than a change in gender assignment.

Other rare examples of variation in word-final pronunciation are identified in Chapter 6, between singular and plural forms of the same noun, as in (7) below.

(7)	<i>bœuf</i>	M	'one ox', 'one bull/head of cattle',	[ bœf ]	consonant-final /f/
	<i>bœufs</i>	M	'oxen', 'bulls/cattle'	[ bø ]	vowel-final /ø/

Contrasting vowel- and consonant-final pronunciation patterns occur not only here but also for *œil* (M) 'eye'/*yeux* (M) 'eyes', and *œuf* (M) 'egg'/*œufs* – also without any change in gender assignment. Contrasting word-final pronunciation patterns occur in the case of singular nouns ending in *-al* where plurals are *-aux*, in examples such as *chevall-aux* (M) 'horse/s', *total-aux* (M) 'total' – but not in every case, eg. *chacal/s* (M) 'jackal/s'. Some of these nouns are outside

the lexical fields covered by the present study, but in their irregularity these examples are of considerable interest.

It could be argued that these different pronunciations for *bœuf/bœufs* and others suggest that there is some attribute that is crucial and salient for a single entity that remains crucial but is no longer salient for more than one. It is possible, however, that maintaining consonant-final pronunciation for the plural form might suggest 'speedy', which is not the case for *bœufs*. For *cheval* (M) 'horse', consonant-final pronunciation can reflect both 'strong' build and 'speedy'; however, for 'maned' creatures whose skins are densely covered with hair and whose tails are used as horsehair, it can be argued that a crucial attribute denied in the singular becomes salient in the plural form. The change to vowel-final pronunciation for these plural nouns is highly unlikely to be associated with any locative sense 'wherever', as is argued for *gens* (M/F) 'people', since it would require a change in word-final pronunciation for all plural nouns – which is not the case in French.

In some rare cases dictionary entries identify alternative word-final pronunciations for the same orthographic representation, e.g. *anana(s)* (M) 'pineapple', where the <s> may or may not be pronounced. Evidence suggests that they relate to different attributes of the same entity, associated with contrasting but not oppositional attributes such as 'rough', associated with vowel-final pronunciation, and 'edible' associated with consonant-final pronunciation for *ananas*. For such nouns, the crucial attribute that is excluded by one pronunciation can become salient for in another form – a similar context in which contrasting word-final pronunciations occur in the singular and plural forms of *bœuf/bœufs*, and among regional synonyms.

Crucially, these phonological changes are argued to be associated with features in the secondary system. While they can occur alongside changes in gender assignment – particularly suffixed nouns denoting human referents – this is not always the case. It requires further discussion.

#### 9.4.4 Suffixation

French has a rich set of derivational suffixes. The *Petit Dictionnaire des Suffixes* (LRPT,

1994:1226-1235) suggests that certain suffixes form feminine nouns and others form masculine nouns. Of those forming feminine nouns, some have consonant-final pronunciation, eg. *-ade*, *-eur*, while others have vowel-final pronunciation, eg. *-é*, *-ée*, *-tion*, etc. Among those forming masculine nouns, some are consonant-final, eg. *-age*, *-eur*, and others are vowel-final, eg. *-ment*, *-eau*, *-é*, etc. As we can see, suffixes such as *-eur* and *-é* appear in both sets. Although *-é* in its association with feminine nouns commonly relates to the suffix *-té*, it is not always the case that the suffix *-té* relates to a feminine noun, eg. *décolleté* (M) 'low edge/neckline', *doigté* (M) 'fingering', etc., while *-eur* can occur with masculine nouns, eg. *honneur* (M) 'honour', as can *-ée*, eg. *lycée* (M) 'school'.

The majority of suffixes have fixed forms since they offer no alternative. Those fixed forms that are vowel-final include *-aie*, *-aison*, *-ation*, *-é*, *-ie*, *-illon*, *-ment*, *-o*, *-os*, *-son*, *-té*, *-u(e)*. Those fixed forms that are consonant-final include *-ade*, *-age*, *-ail(le)*, *-aire*, *-al(e)*, *-ance*, *-asse*, *-âtre*, *-el(le)*, *-ence*, *-esse*, *-iche*, *-ième*, *-ique*, *-ise*, *-isme*, *-isse*, *-iste*, *-ite*, *-oche*, *-oir(e)*, *-ose*, *-ouse*, *-ude*, *-ule*, *-ure*. We can compare these large sets of suffixes with fixed word-final pronunciations, with those that offer alternatives set out in (4), (5) and (6) below.

- (4) contrasting vowel- and consonant-final pronunciations, eg. *-ain/-aine*, *-ant/-ante*, *-ais/-aise*, *-at/-ate*, *aud/-aude*, *-eaul/-elle*, *-et/-ette*, *-in/-ine*, *-oir/-oire*, *-ois/-oise*, *-on/-onne*, *-os/-ose*
- (5) contrasting consonant-final pronunciations, eg. *-ard/-arde*, *-(at)eurl/-(at)rice*, *-eur/eresse*, *-iff/-ive*
- (6) orthographic alternatives unrelated to any phonological change, eg. *-all/-ale*, *-aill/-aile*, *él/-ée*, *-ell/-elle*, *-il/-ie*, *-ul/-ue*.

When compared with suffixes that have fixed forms, alternatives displayed in (4) and (5) provide a much smaller set. Alternative suffixes that offer contrasting word-final pronunciation patterns appear to be formed in the same way as alternative pronunciations produced by via elision of the word-final phone, eg. *salaud* (M)/*salope* (F) both of which identify 'someone immoral' (*dévergondé*, or *moralement répugnant*) – although *salope* is often translated as 'slut' (COFED, 1986:499). Dictionary entries do not identified them as related although both are derived from the adjective *sale* 'dirty'. It is suggested that the <d> in the masculine form *salaud*



represents orthographically the underlying presence of the elided [ p ], possibly in an earlier time before regular orthographic representations for suffixes *-aud/-aude*, particularly since they are derived from *-wald*, from *walden* 'to steer', from Franconian, the German dialect of the Franks. Alternative vowel- and consonant-final pronunciations for *salaud/salope* are achieved through elision in the same way as for nouns such as *pataud/pataude* (M/F) 'awkward, clumsy or unsteady child or person'. However, contrasting alternatives that are consonant-final are formed in different ways.

Despite similarities in *valeur* or 'equivalence' between suffixes – variously given as *qui a, dispose de* 'who has, is disposed to', or *indique l'appartenance* 'indicates appearance', or *un état, une fonction, une dignité...* state, function, honour (title) – these suffixes are not interchangeable. That is, while forms *assemblée* (F) and *assemblage* (M) can apply to different aspects of 'assembly', and *glissement* (M) and *glissade* (F) to different aspects of sliding, it is not possible to form nouns such as *\*assemblade, \*assemblément*, nor are forms *\*glissation, \*glissance, \*glissée* or *\*glissage* legal. Word formation appears to be constrained either by the semantics of the stems that determine which suffixes can attach, or by the semantics of suffixes themselves that determine the kinds of stems with which they are compatible.

The range of suffixes that can attach to any one stem varies, as illustrated above. A stem such as *habit-* may form a substantive, (M) 'dress'. It may also occur with various suffixes, as in Table 9.2.

Table 9.2: Nouns formed with *habit* (M) 'habit' via suffixation

Noun	Gender	Meaning	Suffix
Vowel-final suffixes			
<i>habitat</i>	M	'habitat'	<i>-at</i>
<i>habitabilité</i>	F	'carrying capacity'	<i>-abilité</i>
<i>habitation</i>	M	'occupancy'; 'housing'	<i>-ation</i>
<i>habitué/-ée</i>	M/F	'regular customer'	<i>-u + él/ée</i>

Consonant-final suffixes

<i>habitable</i>	M	'(poet.) 'abode'	-acle
<i>habitude</i>	F	'habit', 'custom'	-ude

Alternative vowel- and consonant-final suffixes

<i>habitant/-ante</i>	M/F	'inhabitant' (of country); occupier (of house)	{-ant, {-ante
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We can observe that the stem *habit-* allows only certain vowel-final suffixes and only certain consonant-final suffixes. One of two nouns denoting human beings in the above set, *habitant/-ante* offers contrasting word-final pronunciations, while alternative forms for masculine *habitué* and feminine *habituée* are orthographic only.

The meaning of *habitué/-ée* 'regular customer' is built on the combination of certain actions – coming in and going back out, repeatedly. While the habitual nature of that action appears to be established lexically through *habit-*, in the analysis of collective nouns denoting humans 'habitual' gatherings we also find the same vowel-final pronunciation, eg. *réunion* (F) 'reunion', *assemblée* (F) 'assembly'. For *habitant/-ante*, 'occupier/resident', the semantics are less about 'going/coming back over and over again' than about 'within' as a constant state. There is some evidence of an association between 'constant' or 'durative' and consonant-final pronunciation that requires further exploration, but more importantly, changes in meaning between the two nouns suggest that the semantics of a noun are contributed to by the stem and also by the suffix/es.

It is noted that other oppositions in meaning, such as 'buy and sell' appear to be associated with contrasting vowel- and consonant-final pronunciations in the case of *marchand/-ande* (M/F) 'merchant', which can apply to a male/female who buys and sells. The masculine form *marchand* has vowel-final pronunciation and the feminine form *marchande* has consonant-final pronunciation.

Just as interesting are contrasting suffixes of *fondeur/-euse* (M/F) 'cross-country skier', although here both forms are consonant-final. The semantics of this pair nouns suggests two different but not necessarily contrasting notions – one concerning forward momentum, the other location in relation to a surface – 'over/across', both conveying deictic information. The use of

different consonant-final suffix forms *-eur* and *-euse* as alternative suffixes suggests that they relate to different attributes both of which are associated with consonant-final pronunciation. The possibility that one suffix might be associated in some way with 'forward' and the other with 'across/over' requires further examination since suffixes have, in the past, been suggested to relate to – even motivate – gender assignments for nouns denoting 'male' and 'female'.

#### 9.4.5 'Agreement'? Reconsidering alternative pronunciations of suffixes

There is strong evidence that word-final pronunciation patterns relate to a separate classification system from that associated with gender assignment. What, then, should we make of 'agreement' for alternative suffixes? If it is not related to 'male' or 'female', what is the mechanism that generates the different usages? Why is the suffix *-eur* in *fondeur* associated with masculine gender when it typically forms feminine nouns?

For suffixes that offering alternative vowel-final (V) and consonant-final (C) pronunciation patterns, associations with contrasting gender assignments are set out in Table 9.3 below.

Table 9.3: Patterns of agreement among suffixes that offer alternative pronunciations

Suffixes	Associated with masc. gender	Associated with fem. gender
<i>-eux/-euse, -ant/-ante, -aud/-aude, -at/-ate, -on/-onne, -et/-ette, -ais/aise, -er/-ère, -is/-ise</i>	V	VC
<i>-ard/-arde</i>	VC	VCC
<i>-eur/-rice</i>	VC	CVC
<i>-(at)eur/-(at)rice</i>	(VC)VC	(VC)CVC
<i>-eur/-eresse</i>	VC	(V)CVC
<i>-eret/-erette, -ateux/-ateuse</i>	(V)CV	(V)CVC

Alternations for these pairs of suffixes are obtained in various ways – via elision of the word-final phone, by epenthesis of another or other phones, and the addition of a further syllable.

Other changes in word-final pronunciations differ again in their formation, as in (7) below:

(7)	<i>-iff/-ive</i>	[ if ] [ i:v ]	V C [-voice]	V C [+voice]
	<i>-eur/-euse</i>	[ œʁ ] [ œz ]	V C [-length]	V C [+length]

In the case of *-iff-ive*, alternative pronunciations are effected by devoicing of the final voiced consonant for the alternative associated with masculine gender. For alternatives *-eurl-euse* which share the same VC syllable structure, in the case of the voiced continuous sibilant [z], the preceding vowel lengthens in anticipation. This lengthening does not occur to the same extent for the uvular fricative [ʁ]. This phone is already weakened when preceded by a vowel, (although it is generally voiced) (Armstrong, 1932:116), but it weakens even further in word-final position – to the point, Armstrong suggests, that it may become voiceless particularly in unemphatic speech (1932:113). This weakening of the [ʁ] in *-eur* to the point of voiceless pronunciation is not unlike the devoicing of the word-final consonant of *-if* in relation to the voiced consonant in *-ive*. The cumulative effects of these changes reduce the length of the suffix *-eur* in its contrast with *-euse* for alternative pairs in semantic contrasts between masculine/male and feminine/female nouns, eg. *fondeurl-euse* (M/F) 'cross-country skier'.

In each case one of the alternatives is shorter or longer than the other. When these alternative suffixes co-occur with alternative gender assignments, that which is shorter co-occurs with masculine gender assignment and that which is longer co-occurs with feminine gender assignment – correspondences that were originally noted in Chapter 3 (§3.1.1). This template that brings these different gender and word-final alternatives together supports our intuition regarding some relationship between word-final pronunciation and gender assignment.

Lengthening and shortening of vowels and elision and devoicing of word-final consonants both occur in the historical development of the language from Latin to Old French, particularly in the loss of case marking. Elision of word-final consonants eventually led to the loss of all final unstressed syllables and an increase in vowel length for stressed open syllables, etc. Elision through devoicing was followed by further elision for masculine forms, as we can observe in the Old French *freit* from the Latin *frīgīdum* 'cold', where we find elision of the case-marking and devoicing of the word-final obstruent in the change from Latin to Old French (Posner, 1997:260). As an adjective, modern French provides alternative forms *froid/froide* that demonstrate the same elision and voicing of the word-final obstruent:

<i>froid</i>	[ frwa ]	(M)	'cold' (adj.)
<i>froide</i>	[ frwad ]	(F)	'cold' (adj.)

Alternative pronunciations for *vert/verte* (Adj.) 'green' are less regular in their formation from the Latin *virīde*:

<i>vert</i>	[ vɛr ]	(M)	'green' (Adj.)
<i>verte</i>	[ vɛrt ]	(F)	'green' (Adj.)

Although contrasting forms for *vert/verte* follow the same elision and sounding process as *froid/froide*, the feminine alternative *verte*, from the stem *verd-* 'green' does not maintain the voiced obstruent [ d ] where Old French obstruents regularly remained intact before the mute <e> (Posner, 1997:272). Posner accounts for the irregularity in this case by suggesting that it is 'morphologically conditioned', the mute <e> being added to the Old French masculine form *vert*. She suggests that, in the different outcomes for *froid* and *vert*, '... devoicing may have been a transient stage in the regular loss of word-final consonants' (1997:272).

For *grand/grande* (Adj.) 'great/grand', in modern French the word-final obstruent [ d ] is typically elided in masculine agreement and sounded in feminine agreement – although elision may also occur in the case of compounds formed with feminine nouns, eg. *grand-mère* (F) 'grandmother', *grand-croix* (F) 'Grand Cross', *grand(')-rue* (F) 'high street'. However, in *liaison* we can find a different set of masculine and feminine alternatives:

<i>grand hotel</i>	[ grɑ̃totɛl ]	(M)	'grand hotel'
<i>grande hauteur</i>	[ grɑ̃dotœr ]	(M)	'great height'

These alternative pronunciations maintain the longer/shorter contrast, but it comes about through devoicing and voicing of the final obstruent of *grand* rather than through elision and sounding of the final obstruent that occurs elsewhere – not unlike the effect achieved for in devoicing/voicing of [ ʁ ] in *-eur* in comparison with [ z ] in alternative suffixes *-eur/euse*. In the same way as for [ f ] and [ v ] above, we find the same voicing and devoicing in the different agreement forms of adjectival alternatives *neuf/neuve* 'new', and *vif/vive* 'living' and alternate nominal suffix forms *-if/-ive* in *sportif/sportive* (M/F) 'sports-mad person'.

The suffix *-eur* also forms a contrasting pair with *-eresse*, eg. *enchanteur/-eresse* (M/F) 'wizard/witch', practising magic, and with *-rice* for *directeur/-rice* (M/F) 'director', planning the way ahead. This is not to suggest that these two suffixes might not be associated with other

very different meanings – since *-eur* occurs also for *blancheur* (F) 'whiteness', the amount of white, for *aérateur* (M) 'ventilator', an apparatus that extracts air, for *accumulateur* (M) 'battery', which stores energy, and *honneur* (M) 'honour', a quality that can only be established by constancy. The suffix *-rice* also occurs as a suffix on *cicatrice* (F) 'scar'. Differences in the various suffixes, and the slight or vast changes in meanings that accompany them, require further exploration to tease out more precisely their relationship within the secondary classification system.

It is observed that other adjectival word-final alternatives, such as *-ant/-ante* for (Adj.) *brillant/brillante* 'sparkling', also occur as nominal suffixes *-ant/-ante* on certain nouns denoting 'male:female' oppositions, eg. *habitant/habitante* (M/F) 'inhabitant', *descendant/descendante* (M/F) 'descendent', while alternate word-final stems *-in/ine* for (Adj.) *fin/fine* also occur as nominal suffixes *-in/-ine*, eg. *lapin/-ine* (M/F) '(male/female) rabbit'. Other adjectival word-final alternatives *-eau/-elle* (var. *-el/-elle*) found for *beau/bel/belle* 'beautiful' also form nominal alternatives for male and female pairs of animals, eg. *chameau/chamelle* (M/F) 'camel'. We find alternative forms of the indefinite article *un/une*, occurring also as nominal suffixes *-un/-une*, eg. *tribun* (M) 'tribune', the historical title given to military or civilian officers in Ancient Rome, and *tribune* (F) 'tribune', a rostrum or elevated place from which to address a public assembly (LRPT, 1994:1137, COFED, 1985:565), as well as *commun* (M), which has several meanings, including 'majority', and 'ordinary', as does *commune* (F) 'township, municipality, and 'House of Commons', etc. (LRPT, 1994:209, COFED, 1985:111).

We can see that meanings of some of these nouns formed with *-un/-une*, are not related in the same way as for other pairs identifying 'male:female' oppositions of the same kind. Nonetheless, the similarity in French between forms relating to word-final pronunciation and also to gender agreement seems not unlike the 'alliterative concord' referred to by Corbett in his analysis of gender agreement for Swahili, where the form expressed in gender outside the noun may also be the same as the form expressed on the noun (1991:117) – although Corbett considers both to be overt gender markers.

#### 9.4.6 Word-final pronunciation elsewhere in the French lexicon

The above analysis provides some evidence to suggest that contrasting word-final pronunciation patterns in French may reflect semantic notions associated with deixis – the location of an entity in time and space – and oppositions within those two domains. In this respect it is interesting to examine semantic oppositions in other grammatical categories and word-final pronunciations associated with those oppositions, some of which are laid out in Table 9.4 below.

Table 9.4: Oppositions in time and space among other grammatical categories

<i>passé</i> <i>futur</i>	'time past/past tense' 'future/future tense'	M M	VF CF	past future
<i>dans</i> <i>dehors</i>	'inside' 'outside'	Adv. Adv	VF CF	in out
<i>entrée</i> <i>départ</i>	'entering' 'exiting'	F M	VF CF	inward outward
<i>(r)entrer</i> <i>sortir</i>	'to (re-enter' 'to exit'	V V	VF CF	inward outward
<i>allée</i> <i>retour</i>	'leaving from a point' 'returning to a point'	F M	VF CF	away towards
<i>au fond</i> <i>en face</i>	'at the back' 'in front'	PP PP	VF CF	back front
<i>retrait</i> <i>avance</i>	'retreat' 'advance'	M F	VF CF	behind front
<i>sous</i> <i>sur</i>	'under' 'on'	Prep. Prep.	VF CF	under above
<i>loin</i> <i>proche</i>	'far' 'close'	Adv. Adv.	VF CF	away next (to)
<i>de</i> <i>vers</i>	'from' 'to'	Prep. Prep.	VF CF	from towards
<i>sans</i> <i>avec</i>	'without' 'with'	Prep Prep	VF CF	with without
<i>côté</i> <i>ailleurs</i>	'nearby' 'elsewhere'	Adv. Adv.	VF CF	nearby/not nearby (of one's side)
<i>de long</i> ) <i>en large</i> )	'to and fro'	PP PP	VF CF	from to

For each of these pairs of deictic oppositions, one part has vowel-final pronunciation and the other has consonant-final pronunciation. The extent of these patterns suggests that, even across

other grammatical categories, meanings that involve temporal or spatial oppositions such as in/out, over/under, from/to, behind/in front, seem to be associated with contrasts in vowel- and consonant-final pronunciations. Notions 'in/away/behind/back/from/under' appear to be associated with vowel-final pronunciation, while contrasting notions 'to(wards)/over/above/nearby/front/out' appear to be associated with consonant-final pronunciation – although the principle on which these distributions are based is not yet clear. Further oppositions display the same contrasting vowel- and consonant-final pronunciations as other reciprocal meanings in Table 9.4 whose semantics relate to movement or location in time and space:

- between adverbs such as *près* 'nearby' and *ailleurs* 'elsewhere'
- between (infinitive) verbs *acheter* 'to buy' and *vendre* 'to sell', or *donner* 'to give' and *prendre* 'to take', or *aller* 'to go' and *venir* 'to come', or *entrer* 'to enter' and *sortir* 'to go out'.

These distributions relating to time and space in French are not unlike the illative/elative oppositions (motion or direction into/away from) also expressed in Finnish case-marking (Branch, 1987:607), and locative clitics in Anindilyakwa (Leeding, 1989) discussed in Ch. 2.

Contrasting features 'over:under' may also account for consonant-final pronunciation of *jupe* (F) 'skirt', outerware, and vowel-final pronunciation of *jupon* (M) 'petticoat', an article of clothing that goes under the skirt. However, *vêtement* (M) 'article of clothing', applies not only to 'outer wear' but also to 'underwear', and has vowel-final pronunciation. Similarly, contrasting features in meanings of *oubli* (M) 'oversight' as something forgotten, and *memoire* (M) 'remembrance' as something brought to mind, have contrasting word-final pronunciation patterns – vowel-final for that which is 'gone', consonant-final for that 'coming back'. These contrasting meanings are also found in verbs *oublier* 'to forget' and *se souvenir* 'remember' and these nouns also have contrasting word-final pronunciation patterns – vowel-final for *oublier*, something 'gone', and consonant-final for *se souvenir*, something 'retrieved/returned'.

For single terms whose semantics include reciprocal directions – such as 'to:fro' in the semantics of *oscillation* (M) 'oscillation', or 'ebb:flow' in the semantics of *marée* (F) 'tide', or



'under:outer', in the semantics of *vêtement* (M) '(article of) clothing', we also find vowel-final pronunciation. For other oppositional terms *loin:proche* 'far:near', and *près:ailleurs* 'nearby:elsewhere' we also find contrasting vowel- and consonant-final pronunciations, while *partout* 'everywhere', whose semantics includes both of these meanings in a reciprocal way, also has vowel-final pronunciation. It is not too much of a stretch to consider that vowel-final pronunciation of *gens* (M/F) 'people', which is not yet fully accounted for, may relate to people *partout* – 'in every direction'; its vowel-final pronunciation is consistent with other meanings that also involve 'multidirectional' if not 'reciprocal' locations.

Alternative word-final pronunciations are found for a number of nouns in the database dealing with people whose livelihood involves goods or produce 'coming in' and 'going out':

Masculine		Feminine		
<i>boucher</i>	M	<i>bouchère</i>	F	'butcher'
<i>boulangier</i>	M	<i>boulangère</i>	F	'baker'
<i>marchand</i>	M	<i>marchande</i>	F	'dealer'; 'shop-keeper'
<i>négoçiant</i>	M	<i>negotiante</i>	F	'merchant', 'trader'

This set could well include *caissier/-ière* (M/F) 'cashier', which involves taking in and giving out money, as well as *pharmacien/-ienne* (M/F) 'pharmacist' who receives and sells pharmaceutical materials. In each case, it can be argued that one feature is associated with one of the pairs of suffixes, and the other feature is associated with the alternative suffix. Since the features are contrasting, they result in contrasting vowel- and consonant-final pronunciation patterns. But why the masculine form has vowel-final pronunciation in each case, and the feminine form has consonant-final pronunciation in each case is an interesting question – particularly since this is not always the case.

In the light of these findings it is worthwhile re-examining male:female oppositions and the word-final variations they display, particularly those involving the suffix *-er*, eg. *boucher* (M) 'butcher', *barbier* (M) 'barber', *braconnier* (M) 'poacher', and similar suffixes elsewhere, eg. *aller* (M) 'outward journey', *baissier* (M) 'bear market', *chartrier* (M) 'chart-room' and *déjeuner* (M) 'breakfast'. The claim by Mel'čuk 1974:11-12) discussed in Ch. 2 and Ch. 3 that infinitive verbs used as nouns – such as *aller* and *déjeuner* above – are masculine appears to hold only if

the definition of infinitive forms is taken from their orthography. Comparisons of nouns based on orthographic infinitive forms of some verbs and nouns based orthographically on past participle forms shows that the former are masculine, while the latter may be masculine or feminine, as illustrated in (8).

(8) Infinitival orthography	Past participle orthography
<i>aller</i> (M) 'outward journey'	<i>allée</i> (F) 'garden path, lane'
<i>penser</i> (M) '(lit.) thought, thinking, train of thought'	<i>pensée</i> (F) 'thought, thinking, train of thought'
<i>lever</i> (M) 'getting up, rising, sunrise'	<i>levé</i> (M) 'plan, survey; (mus.) up beat'
	<i>levée</i> (F) 'raising, rising, gathering in; (eng.) embankment'

However, synchronically there is no difference in pronunciation between the masculine forms spelled as infinitives and the masculine and feminine forms spelled as past participles. It is in this sense that it is difficult to sustain any generalisation that the phonological form of some nouns is linked to gender assignment.

There remains, of course, the crucial question as to why some infinitive forms of verbs have vowel-final pronunciation, eg. *-er* verbs such as *arriver* 'to arrive', *former* 'to form/shape', *parler* 'to speak', *tomber* 'to fall', while others have consonant-final pronunciation, eg. *-ir* verbs such as *venir* 'to come', *-re* verbs such as *boire* 'to drink', *cuire* 'to cook', *-(p/t/d)re* verbs such as *rompre* 'to break (off), interrupt', *croître* 'to grow, increase', and *vendre* 'to sell'. Some explanation is offered in the discussion following Table 9.4 dealing with reciprocal oppositions in regard to movement or location, where vowel-final pronunciation appears to be associated with 'outwards, in/away/behind', etc., and consonant-final pronunciation with 'towards/over/above', etc. However, the full extent of this area awaits future exploration.

#### 9.4.7 Male:female oppositions – invariable word-final pronunciation

For some male:female oppositions, we find alternative gender assignments, but no alternative word-final pronunciation. Those that are vowel-final include *péri* (M/F) 'peri', a beautiful but supernatural being in Persian folklore (and therefore not 'real') (although today it is used as a female name), *accusé-ée* (M/F) 'the accused (defendant)', where a defendant can answer back but not pose questions ('back' being associated with vowel-final pronunciation as with

*habitué/ée* (M/F) 'regular customer', above). These meanings appear to involve a single crucial attribute that is associated with vowel-final pronunciation.

Examples of nouns with alternative gender assignments but are consonant-final only are provided:

<i>acrobate</i>	M/F	'acrobat'	'agile' (CF)
<i>filleul/-le</i>	M/F	'god-son/daughter'	'close' (CF)
<i>interprête</i>	M/F	'interpreter'	'forwards utterances' (CF)
<i>intime</i>	M/F	'close friend'	'close' (CF)
<i>professionell/-le</i>	M/F	'professional'	'consistent'
<i>artiste</i>	M/F	'artist'	'consistent'
<i>diplomate</i>	M/F	'diplomat'	? (CF)
<i>bureaucrate</i>	M/F	'bureaucrat'	? (CF)

The noun *intime* 'close friend' is consonant-final, as is *proche* 'close by' and there is thus a consistency for meanings associated with 'close' – for *intime*, therefore, we would not expect a vowel-final alternative. Orthographic changes in masculine and feminine terms for *filleul/-eule* and *professionell/-elle* do not involve any change in word-final pronunciation. The meaning associated with *filleul/-le* identifies a relationship as one so close as to suggest 'child of' – and 'close' is again associated with consonant-final pronunciation (as do meanings of other artistic practices, such as *auteur* (M) 'author', *sculpteur* (M) 'sculptor'). The term *professionell/-elle* involves the consistent practice of some occupation in the pursuit of money. For *amateur* (M) 'amateur' the pursuit relates to fame, or the enjoyment of competition, but it is the constant yet unrewarded practice that generates admiration and prestige. Each of these different fields shares something with the notion *docteur* (M) 'doctor'. The meaning of *artiste* also suggests the continuous practice of an art form, but has a different suffix.

The term *interprête* applies to someone skilled at forwarding or passing on an utterance without any additional input. This noun has the same consonant-final pronunciation pattern as other notions associated with 'forward' in Table 9.4, above. Other notions whose semantics similarly involve 'forwarding' something – such as the infinitive verb *offrir* 'to offer', and noun *offert* (M)

'an offering' relating to something put forward, even *transit* (M) 'transit', something en route, particularly something forwarded – also have consonant-final pronunciation.

The term *acrobate* involves someone who requires and displays extraordinary dexterity.

*Acrobate* has the same consonant-final pronunciation as previous examples where 'agile' is also salient – particularly fish that swim in darting movement, or jump out of the water, as well as among 'limbed' creatures. For meanings such as *diplomate* and *bureacrate* – officers acting as instruments of the state apparatus concerned with international and governmental affairs – it is not difficult to consider dexterity in 'juggling' between requirements of different and competing stakeholders as being equally salient. These meanings appear to involve a single crucial attribute that is associated with consonant-final pronunciation.

#### 9.4.8 Male:female oppositions and alternative word-final pronunciations – interaction with the phonological template

For certain nouns with 'male' and 'female' oppositions, both human and animal, alternative gender assignments may co-occur with alternative word-final pronunciations related to two equally crucial attributes. For some these two attributes may involve a deictic reciprocity, eg.

- *caisier/-ière* (M/F) 'cashier', whose job involves taking and giving out cash, deictic oppositions

Elsewhere these alternative pronunciations may provide some counter-balance, eg. *nain/-e* (M/F) 'dwarf', where 'diminutive' (in relation to a doll-like form) may suggest 'unreal' while 'motile', the capacity for independent movement suggests 'real', or *pigeon/-ne* (M/F) 'pigeon', a lightweight bird that is plump-chested.

Beyond these reciprocal or counter-balancing attributes, for some nouns identifying male:female oppositions the presence of two salient attributes associated with different word-final classifications appears to motivate alternative vowel- and consonant-final pronunciations via elision and retention of the word-final consonant, eg. *chat/te* (M/F) 'cat', *chien-ne/* (M/F) 'dog', *lapin/-e* (M/F) 'rabbit', *faisan/-e* (M/F) 'pheasant', *lion-ne* (M/F) 'lion', *loup/louve* (M/F) 'wolf', *paon/-ne* (M/F) 'peacock/peahen', *pigeon/-ne* (M/F) 'pigeon', *habitant/-ante* (M/F) 'inhabitant'. In these examples vowel-final forms co-occur with masculine gender and

consonant-final forms co-occur with feminine gender. Cases where both salient attributes are associated with vowel-final pronunciation can result in a vowel sequence, eg. *habitué/ée* (M/F) 'regular customer', where it is not the coming-and-going but the 'coming back'/'entering', over and over, that appear to be associated with the vowel sequence on the stem *habit-*.

For some male:female oppositions alternative consonant-final pronunciations, where two salient attributes are both associated with consonant-final pronunciation of suffixes, displaying similar phonological processes to those seen above:

- elision and retention of the final consonant within a consonant cluster, eg. *renard/-e* (M/F) 'fox' ('fast' as well as *perfide* 'wily')
- reduction and non-reduction of different consonant-final suffixes, eg. *fumeur/-euse* (M/F) 'male/female smoker' (a solid body through which smoke passes before emitting into the air)
- elision and non-reduction of compound suffixes, eg. *enchanteur/-eresse* (M/F) 'wizard/witch', a 'real' person capable of performing 'dextrous' feats, and the term *hôte/-esse* (M/F) that can apply to both 'host' and 'guest', through offering and receiving hospitality.

For both sets suffixes vary between 'male' and 'female', but the reciprocal or counter-balancing, nature of their meanings allow both 'male' and 'female' to share what are otherwise potentially distinguishing attributes.

In other cases meanings are built on differences and we find quite different structures for nouns identifying male:female oppositions. One such area relates to crucial differences in size.

Among birds, some 'males' and 'females' of the same kind may be similar in size, but in other cases 'male' and 'female' of the same kind may be significantly different in size. For *dindon/dinde* (M/F) 'male/female turkey', the male is significantly larger than the female and the masculine *dindon* has a suffix *-on* that is not present for *dinde*, the 'female'. In the case of *sacret/sacre* (M/F) 'saker falcon', the 'female' saker is significantly larger than the 'male' saker – but the female form *sacre* has no vowel-final suffix. Instead, the masculine term has an

additional vowel-final suffix, *-et* added to the stem. These differences in relative size are easily identifiable through the addition of a suffix. In some cases 'male' and 'female' of a kind differ not in size but in many other ways, e.g. *canard/cane* (M/F) 'male/female duck'. Again, the feminine term *cane* forms the stem denoting 'a quacking kind of bird', while the masculine term shares the stem which acknowledges its relatedness even though it has no quack, plus the suffix *-ard* 'like', perhaps reflecting a colouration developed by males that females do not share. One can observe differences in reciprocity and the different ways oppositions are constructed.

This discussion of the semantics of some nominal suffixes does not cover the full range of suffixes in the French language, but it suggests that semantics are crucial to our understanding of differences between their various applications.

## 9.5 Concluding remarks

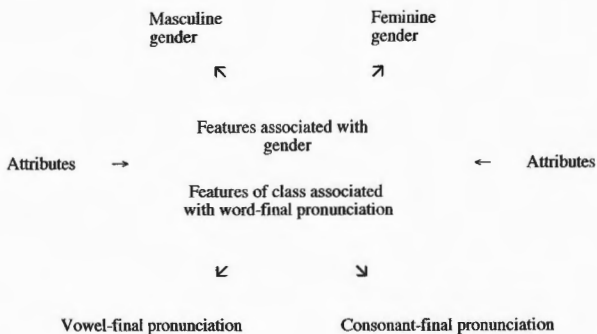
Any explanation must account not only for differences in gender assignment, but changes in gender assignment, and offer predictability for all nouns including potential counter-examples. Likewise, any explanation must also account for differences in word-final pronunciation, particularly changes in word-final pronunciation for loan words entering the French lexicon, and for consonants present in orthography that may, or may not, be pronounced.

### 9.5.1 A semantic explanation – dual classificatory systems

The semantic explanation identified above, while limited to five sub-fields in the domain of living things, can account for gender assignment and word-final pronunciation patterns of every noun – save a handful relating to human beings, two trees and a vine.

The interaction between attributes of individual entities, features of the two classification systems, and the eventual expression of those attributes in gender assignment and in word-final pronunciation, is displayed in the following diagram (Figure 1). It illustrates the directionality of the influence of salient attributes.

Figure I: Classification Systems



The motivation of gender assignment for French nouns can be explained with reference to a semantic system whose organising principles are based on a framework of a small number of binary oppositions or contrasting dimensions, although in rare cases a semantic opposition is not readily apparent, eg. 'layer'. These semantic features can account for different gender assignments among synonyms, as well as for variations in gender assignment for a single noun.

This analysis suggests that there is also a second semantic system that accounts for variation word-finally between vowel- and consonant-final pronunciations. It appears to be organised in a similar way as for that associated with gender assignment: according to features in binary opposition, again with a rare case where the semantic opposition is not readily apparent, eg. 'tapering'. However, unlike the primary system – gender, which is expressed in agreements outside the noun – this secondary classification is expressed on the noun through vowel-final or consonant-final pronunciation according to the semantic principles in (3) above. This secondary system also relates to suffixed nouns, the semantics of which include attributes of the stem and attributes of the suffix.

In relation to word-final pronunciation in French, there are two crucial conclusions: firstly, that it concerns a separate, morphological expression of semantic classification on the noun and,

secondly, that this additional semantic classificatory system incurs no agreement with any grammatically-related element outside the noun. In this respect, the second semantic system of French is not unlike the semantic systems that Aikhenvald (2000:82) characterises for Classifier languages, in having a semantically-based type of 'non-agreeing noun categorization device' (Aikhenvald, 2000:82) – although for French its expression is restricted to the noun, and it does not share other contingent properties of noun classifiers identified by Aikhenvald.

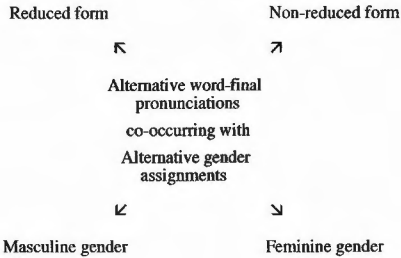
Thus, gender assignment and word-final pronunciation can be said to be explanatory according to semantic attributes, associated with specific features, in separate classification systems. In relation to other languages, gender of French nouns is similar to other gender systems in that it relates to a grammaticalised agreement system realised outside the noun; however, grammaticalisation of the second semantic system is realised through word-final pronunciation on the noun. These findings challenge previous accounts that have suggested – particularly in relation to nouns denoting human referents that have alternative gender assignments – that word-final pronunciation alone motivates masculine or feminine gender. Such a conclusion could not account for the fact that, although some alternations contain a vowel-final:consonant-final opposition, eg. *-ant/-ante*, other alternations are both consonant-final, eg. *-ard/-arde*, *-eurl/-rice*, *-eurl/-eresse*, *-atiff/-ative*.

#### 9.5.2 Third system - a phonological template

Some pairs of nouns denoting 'male' and 'female' of a kind are formed in the same way, and distinctions between them are generated via alternative gender assignments and alternative word-final forms – particularly alternative suffixes – motivated by their semantics. Where these alternative word-final pronunciation patterns relate to features that are reciprocal or counter-balance each other, a third system appears to constrain these alternative forms in a specific way – via reduction and non-reduction of the final consonant, or reduction and retention of compound syllables, in a way that maintains a contrast between more complex/longer (non-reduced) and less complex/shorter (reduced) phonological outcomes. The phonological template in Figure 2 represents the relationship between paired word-final forms on the one hand, and alternating agreement phenomena on the other.



Figure 2: Phonological template for male:female pairs with alternative word-final pronunciations



As illustrated in Figure 2, the reduced or less complex form co-occurs with masculine gender, while the retained or more complex form co-occurs with feminine gender. This phonological template includes alternative gender assignments for adjectives and participles that function as substantives denoting 'male' and 'female' pairs for humans and animals, eg. *caissier/-ière* (M/F) 'cashier', *renard/-e* (M/F) 'fox', *agneau/agnelle* (M/F) '(male/female) lamb', *faisan/-e* (M/F) 'male/female pheasant', *demandeur/-eresse* (M/F) '(male/female) plaintiff', *nain/-e* (M/F) 'dwarf', *éclusier/-ère* (M/F) 'lock-keeper'.

However, as noted above, certain nouns denoting pairs of 'male' and 'female' do not fit this pattern, eg. *sacret/sacre* (M/F) 'saker falcon', *dindon/dinde* (M/F) 'turkey', *canard* (M) 'drake'/*cane* (F) 'duck'. For these male:female oppositions, the masculine noun is more complex than the feminine noun. However, as the analysis above suggests, the structures relate to differences displayed by the 'male' relative to the 'female', particularly size for *dindon* and *sacret*, which difference is revealed in their vowel-final suffixes. In the case of *cane/canard*, the masculine form with its additional suffix *-ard* together identify the 'male' as 'like' the 'quacking' *cane* although it has no quack. Since features associated with alternative word-final pronunciations in these cases are neither reciprocal nor counter-balancing, the phonological template is not invoked.

Nor is the phonological template relevant in the case of alternative word-final pronunciations of

masculine and feminine nouns that are related in their derivations but not in their semantics as 'male' and 'female' pairs of a kind, eg. *commun* (M) 'majority', and 'ordinary' and *commune* (F) 'township, municipality', and 'House of Commons'. Such nouns are dealt with via processes relating to the two classification systems identified in Figure 1.

This phonological template reflects many of the historical aspects of Latin and Old French, particularly differences in the 'robustness' of syllable-initial consonants contrasted with syllable-final consonants which Posner (1997) wrestles with since the latter 'fade, open, assimilate and sometimes disappear' (1997:228). This explanation allows us to account for the long-held view of an association between word-final phonology and gender assignment. In this regard, the phonological template may also be significant for other gendered languages, given that '(i)n most languages that have classification by gender, the male category is unmarked' (Lakoff, 1986:23).

#### 9.5.3 Ranking among attributes

Saliency does not appear to relate to a specific hierarchy of attributes. Rather, findings throughout the thesis demonstrate that a crucial attribute, such as 'living/alive', may become salient for a lexeme at any level of meaning – superordinate, basic, general, or specific level – depending on other kinds of entities in their domain. There is some suggestion that distance and proximity to an object may have some impact on the saliency of an attribute, not unlike distributions between classes at a very general level based on 'visible:invisible' observed by Leeding (1989:252-268) in relation to Anindilyakwa. However, evidence from the French data suggests that saliency depends on the kind of entity being examined, proximity required for the salient feature to be observed, and degree of safety or danger that closer and closer proximity may hold in making finer and finer distinctions.

Evidence suggests that where the same creature has one attribute that promotes life and another that is endangering, it has masculine gender assignment. This outcome may suggest that the 'endangering' attribute is more crucial than one that promotes life but it whether or not this can be regarded as higher ranked in a domain that is driven by the promotion of life is questionable.

Other changes in saliency that question the nature of 'ranking' are found in nouns that can vary in their gender assignments, eg. *fauvette pitchou* (F) 'Dartford warbler'. In texts discussing this bird we find the feminine compound form, but the text switches to the masculine *pitchou* when describing its song, and reverts to the feminine compound form with a change in topic to the number of clutches laid in a season (see Chapter 4, §4.6.3). These alternations in gender assignment appear to be tied to attributes associated with 'female', and attributes associated with 'male'. However, while attributes relating to biological sex of the real-world referent outrank most other attributes in relation to gender assignment, this is not always the case – particularly when meanings relate to ameliorative connotations, eg. *légume* (M) 'legume' which changes to feminine in the expression *une grosse légume* (F) 'an important person'/'big shot', or pejorative connotations, eg. *lope* (F) 'homosexual male', *laideron* (M) 'ugly female'. In this respect, the bird world provides another interesting example, *sacre*, which form is feminine in any male:female opposition with *sacret* (M) 'male' saker'. However, as it is much larger than the male, it is the 'female' that is used in falconry and *sacre* as the generic term for 'saker falcon', a diurnal bird of prey, becomes masculine consistent with other 'diurnal' birds of prey.

There is some evidence to suggest that 'unique' is more crucial than other attributes. For example, in a case such as *mole* (F) 'sunfish', as an 'upright' fish it would otherwise be masculine but since it is the 'tallest' of all upright fish, its form is 'unique' and the noun is feminine. The *flétan* (M) 'halibut' denotes a 'flatfish', one which swims around in a recumbent posture that is otherwise associated with feminine gender. However, the *flétan* can be distinguished from all other flatfish through its 'enormous' size, and thus it is masculine.

As noted above, some attributes are restricted in their application and become salient only under certain limited conditions (bright/dark, deciduous/evergreen, diurnal/nocturnal, etc.).

Ranking elsewhere, like saliency, depends on the view of the speaker, the attributes presented for classification by any entity, and the semantic content of the lexeme. As meanings become more and more complex, distinctions must draw on other features in the semantic system. Thus, 'animate' in terms of 'alive' is crucial in gender assignments at the most general level of

meaning but loses saliency when it becomes a given – until there comes a point when it contrasts with 'dead', as for *recrue* (F) 'recruit', a living body to take the place of the fallen or dead. In terms of word-final pronunciation, 'motile' becomes salient among living things at a very general level of meaning, such as the contrast between *animal* (M) 'animal' and *mineral* (M) 'mineral'. It becomes salient again in relation to creatures particularly noted for their agility, speed, ways of moving, etc., even to plants where it can provide a distinction for vines between those that can 'climb', and those that cannot.

#### 9.5.4 Predictability of classifications

While this explanation may not allow us to predict the gender assignment or word-final pronunciation for all nouns such as trees, or birds, knowing the gender assignment and word-final pronunciation of an entity can tell us something about it. Equally, a small amount of knowledge of a certain tree, or particular bird, enables us to predict both gender assignment and word-final pronunciation and, equally importantly, take account of any mismatch between predicted outcomes and actual outcomes since they can direct our attention to some other less obvious, or perhaps more finely drawn, crucial distinction.

The explanations above fulfil all of the criteria required of descriptive studies outlined by Corbett (1991:319), particularly problematic cases, rules, gender resolution, and any overlapping that may occur between the systems, particularly between phonological and semantic systems.

#### 9.6 Theoretical implications

First and foremost, this conclusion challenges previously held assumptions regarding classification of French nouns. This conclusion may also have some relevance for a number of other languages for which gender assignment is considered to be partially semantically motivated, the remainder being accounted for through formal principles related to the final segment or segments. It also enhances our theoretical understanding of the principles linking women, water, fire, and dangerous things in Dyirbal, the Australian Aboriginal language researched by Dixon (1972). Specific theoretical implications emerging from this thesis are discussed further below.

### 9.6.1 Implications for lexical fields beyond 'living things'

This research covering 'living things' has also established connections between semantic features that are salient in other lexical fields. In many cases they appear to relate to semantic attributes in binary opposition, such as:

- 'closed' and 'open' for bodies of water, eg. *lac* (M) 'lake' contrasting with *lagune* (F) 'lagoon' and *baie* (F) 'bay', *huis* (M) 'door' (closed to give privacy) and *porte* (F) 'door' (an opening through which one may pass)
- 'direct' and 'indirect' for the distance between two points, eg. *chemin* (M) 'route' (that follows ... *les accidents du terrain*) and *route* (F) 'route' (the most direct way)
- 'continuous' and 'stop' for *ligne* (F) 'line' and *point* (M) 'full stop'
- deixis in time and space and the application of polar opposites to contrasting word-final pronunciation patterns – which seem salient not only for nouns in other lexical fields, eg. *tête* (F) 'head', *côte* (F) 'crown', *crête* (F) 'crest', the top-most point, and *fond* (M) 'bottom' and *bas* (M) 'lowest point', but in other grammatical categories – verbs such as *entrer* 'to enter in' and *sortir* 'to go out', prepositions *sous* 'under' and *sur* 'on'.

Given the potential oppositions for time not only word-finally but in relation to gender assignments, eg. *an* (M) 'year'/'*année* (F) 'year', and between *minuit* (M) 'midnight' as a point in time and historical *minuit* (F) as an expanse of time in the period between darkness falling and daylight commencing, what is not entirely clear yet is the basis on which some of these contrasting aspects of time and space are distributed. Further analysis is required, particularly in relation to suffixes.

These examples illustrate some of the more common binary oppositions that can exist between certain concepts. However, some meanings do not suggest a binary opposition, such as the three original sour yellow-coloured citrus fruits, the three 'black' crows', and in lexical fields beyond this thesis where the one in the middle, feminine, separates masculine entities on either side, eg. *la Manche* (F) 'the English Channel' as the part in the middle that separates two sides, and *ides* (F) 'ides', the middle day of any month with thirty-one days.

### 9.6.2 Prototypes and abstractions in French

There is some evidence that, in French, a single exemplar may come to serve as the prototype; it can then be used in extension to serve as the generic term. This process occurs in the case of nouns such as *baie* (F) 'laurel bay berry', *noix* (F) 'hazelnut', and *vigne* (F) 'grapevine', a climbing plant with fruit in bunches. These nouns are then pressed into service as generic terms: *baie* applying to any 'berry', *noix* applying to any 'nut', and *vigne* applying to any 'vine'.

A very different process occurs in cases where a model is created from a range of entities as, for instance, with *canard* (M) 'duck'. For this term there is no specific prototype, nor does any species serve as a better exemplar than any other. It would seem that the model is produced by abstraction, a process that not only allows us to create very specific terms but allow us to create very general meanings, as for superordinate terms such as *animal* (M) 'animal', *bête* (F) 'beast', *créature* (F) 'creature', even *nature* (F) 'nature'.

### 9.6.3 Organising principles for French – contrariety

For some languages, classification systems relate to more global organising principles, such as the small number of 'inherent characteristics' that determine noun classes provided by Allan (1977, 1991) – material, shape, consistency, size, location, arrangement, quanta and function – discussed in Chapter 2 (§2.1.1). In this current research, however, findings suggest that the organising frame work appears to be 'contrariety', which deals with the nature of oppositions or contrasts – between one thing and another. Although the crucial nature of oppositions was recognised by Saussure (see Chapter 2, §2.1.3) and appears to be observed widely among languages, as observed for 'duals' in Arabic and Hebrew (see Chapter 6), and in Japanese which has different conjunctions according to entities that are 'alike' (*ya*) and those that are 'unlike' (*to*) – its implication for French was not recognised. More particularly, the crucial nature of contrariety is that, while variety deals with diversity on the basis of difference, contrariety produces distinctions in an extremely limited number of ways, as in (9):

- (9)
- 'some' distinguished from 'others' according to some similar or contrasting feature
  - 'one' differentiated from 'another' or 'others', according to some parameter that is different, and

- 'one' distinguished from 'all others' according to a parameter that is different – but uniquely so.

These distinctions are able to be produced in French via contrasting gender assignments for some features, and via alternative word-final pronunciation patterns for others.

Craig (1986:5) raises the issue of differences between a twentieth century view of categorisation of objects in terms of their interactions with humans, compared with the classical view of categories where objects are considered in relation to how they are in the world and not how humans interact with them. The current thesis suggests that categories in French are somewhat related to both since many of the attributes concern the response of a creature to human intrusion – albeit as part of a more general response to any threat. Yet distinctions also concern how the object is in the world – in terms of form and mode of existence, shape, dimension, brightness, etc. It is recognised that this thesis is restricted to living things and it will be interesting to consider this area further in future research where meanings relate to the organic but inanimate world, abstract notions, and inorganic matter.

#### 9.6.4 Considerations of French vis-à-vis Noun Class and Classifier languages

The two systems in French seem reminiscent of the distinctions between Noun Class languages and Classifier languages (Corbett, 1991, Aikhenvald, 2000, Craig, 1986, Grinevald, 2002) – one dealing with agreement, and the other as a type of 'non-agreement device' (Aikhenvald, 2000:82). Grinevald (2002) attempts to characterise features of each system but notes that there seems to be a continuum (2002:161). Aikhenvald (2000) needs to resort to a distinction between 'multiple classifier systems' and 'agreement systems' to differentiate between the two, suggesting noun class markers and noun classifiers as extreme points of a grammaticalisation continuum (2000:95).

The primary semantic system of French which gives rise to gender finds its expression on the article (part of the noun phrase) and triggers agreement. This system falls clearly within the Noun Class categorisation provided by both Grinevald (2002) and Aikhenvald (2002). The secondary semantic system might seem more closely aligned with Aikhenvald's 'non-agreement

classification device' of Classifier languages (2000:82) because, for most nouns, word-final pronunciation is not linked to agreement. In French, its scope is restricted to the noun itself since gender is reflected in other constituents through agreements.

In many cases, the phonological template for French results in an 'alliterative concord' between the noun and agreement similar to that noted by Aikhenvald for Bantu, and also for !Xóó, a Southern Khoisan language (Aikhenvald, 2000:35, 396). For the latter language, noun classes are 'marked by suffixes on nouns and also ... in agreement on various targets. Noun suffixes bear a strong phonological similarity to agreement markers ...' (Aikhenvald, 2000:396).

Aikhenvald also draws attention to Reid's findings relating to Ngan'gityemerri (Reid, 1997, in Aikhenvald, 2000:95) where 'overt noun class markers of Ngan'gityemerri, too, are (most often) the same as agreement noun class markers on adjectives' (2000:95). For other cases in French, agreement markers are unrelated to word-final pronunciation of the noun, in a similar way to other classifier/noun class languages, such as Mayali, an Australian Aboriginal language, where nouns denoting male or female animate referents trigger agreements 'that may be different from the noun class prefix that appears on the noun' (Aikhenvald, 2000:396).

Latin, too, was a language where agreement was alliterative in some cases but not in others – since nominative case markers ending in *-us*, *-a* and *-um*, and nominative agreement markers *-us*, *-a* and *-um* do not necessarily go together. Examples of those nominative case markings (from ELD, 1966 and the on-line Latin Dictionary and Grammar Aid, University of Notre Dame @ <[archives.nd.edu/latgramm.htm](http://archives.nd.edu/latgramm.htm)>, 2009) are set out in (10) below:

(10)	<i>rubus</i>	M	'bramble bush'	Nominative suffix <i>-us</i>
	<i>castanea</i>	F	'chestnut tree'	Nominative suffix <i>-a</i>
	<i>rosa</i>	F	'rose bush'	Nominative suffix <i>-a</i>
	<i>ligustrum</i>	N	'privet'	Nominative suffix <i>-um</i>

We can observe that the nominative case-marker *-us* can occur with masculine nouns such as *rubus* (M) 'a bramble bush', *corvus* (M) 'a raven', with feminine nouns, e.g. *cupressus* (F) 'cypress tree', *balanus* (F) 'an acorn, fragrant nut, ben-nut', *populus* (M) 'poplar tree' and *platanus* (F) 'plane tree', and with neuter nouns such as *corpus* (N) 'a body (living or lifeless),



*genus* (N) 'a race/stock/family (etc.)', *pelagus* (N) 'sea', *vellus* (N) 'wool shorn off, a fleece'. The nominative case marker *-a* typically associated with feminine gender can occur with masculine nouns, eg. *agricola* (M) 'farmer', and neuter nouns, eg. *beta* (N) 'beta', the Greek letter β.

Agreements for masculine, feminine and neuter nouns ending in *-us* are set out in (11):

(11) Determiner/noun			Nom. case marking	Agreement case marking
<i>unus rubus</i>	M	'one bramble bush'	<i>-us</i>	<i>-us</i>
<i>una cupressus</i>	F	'one cypress tree'	<i>-us</i>	<i>-a</i>
<i>unum corpus</i>	N	'one body (living or lifeless)'	<i>-us</i>	<i>-um</i> .

It is noted that word order in Latin may vary, eg. *cupressus una*, but agreements follow gender rather than case-marking. The irregularities amongst nominal classifications in related languages in the Indo-European family occur in unrelated languages such as Australian Aboriginal languages discussed in Chapter 2. It may be that listing of members of a class may be better understood in light of the account offered above for French of two largely independent semantic systems that are expressed in different ways – one system expressed in agreement outside the noun itself, the other expressed on the noun.

#### 9.6.5 Dual classification systems identified in other languages

Aikhenvald notes that it was once considered impossible for a language to have two distinct systems of noun classes (2000:67), but more recent research suggests that this is not the case; for some languages the different systems are expressed outside the noun phrase (2000:33), and for others languages double agreement may occur (2000:32). Languages with more than one kind of noun class system seem to fall into two groups, one having different semantics and used with different modifiers and different agreement types (typically nominal and pronominal), the other having different semantics and used, at least partly, in the same environment (with the same modifiers). Aikhenvald (2000:67) suggests that both kinds of systems involve 'split agreement'.

Minangkabau (Western Austronesian: Marnita, 1996 in Aikhenvald, 2000:189) has both noun

classifiers and numeral classifiers. In this language numeral classifiers for animate entities are associated with semantic oppositions 'human:non-human', and for inanimate entities distinctions relate to form and shape according to attributes such as 'flat, foldable', 'round and hollow', 'long, vertical', 'flat/long/thin', 'round', 'solid', 'thread-like'. These same oppositions occur in French but features are split between gender and word-final pronunciation systems. Noun classifiers are formed by generic nouns (such as 'flower', 'tree', 'bird', etc.) that place the referent in a certain class.

While there is some similarity in relation to features within these dual classification systems, neither seems to be organised in the same way as French, where one system is located morpho-syntactically outside the noun, and the other system is on the noun in word-final pronunciation. In that this second system is independent of other constituents inside or outside of the noun phrase, word-final pronunciation seems more like devices that occur in classifier languages.

#### 9.6.6 Women, fire and dangerous things

The phrase 'women, fire and dangerous things' was used as a title by Lakoff in his (1987) publication. It came from earlier research by Dixon (1972) into noun classification in Dyirbal, mentioned above. More specifically, it came from some entities within one of the four noun classes in Dyirbal (discussed in Chapter 2). Lakoff suggests that, while the presence of these entities in the same class has the potential to create a '... chain of inference – from conjunction to categorization' leading us to infer that they have something in common, this is not necessarily so (1987:1). Lakoff also suggests that the importance of Dixon's (1972) research is that it determines that the process of categorisation is more complex than shared properties.

In a number of other Australian Aboriginal languages, notions such as 'female', 'fire', 'water' and various terms denoting certain 'dangerous' flora and fauna, e.g. 'echidna', are commonly found in the same category or noun class (Harvey, 1997, Reid, 1997). From another perspective, it may be less surprising to find 'female', 'sun', 'water' and 'fire' in the same class when one considers that each is vitally concerned in the creation of new life – even fire, as it is through fire that the regeneration process for many plants commences, especially gum trees and ferns. And while it

might be accurate to say that 'harmful' or 'pain-inflicting flora and fauna are classed together because of that shared quality, this explanation fails to capture the more global relationship between members of the set that we can observe in the French system – where seemingly unrelated features come to be considered as associated with either 'life-giving' properties, or with 'life-promoting' properties. This analysis suggests that we need to look more widely at members of the same set to uncover what is shared in order to make clearer the principles on which such distributions are based.

What is of great interest to this thesis is the similarity between entities found together in the same class and the oppositions they form in French, and similar findings for other languages, particularly the analysis by Harvey (1997:35) of a number of Australian languages which have contrasts between:

feminine:masculine  
edible:inedible  
air/tree/water-dwelling:ground-dwelling  
large/more potent:not large.

Harvey also finds a considerable number of counter-examples amongst trees, birds, etc. It would be interesting to re-examine these counter-examples in light of findings in the current analysis, as it would for the many counter-examples that exist in genders and classification systems of other languages. The similarities between these attributes in Australian Aboriginal languages and those found in French, and their oppositional nature that is crucial to the classification system of both, suggest that principles on which classification processes are based may be rather more universal than is currently considered to be the case. It is the different application of features that may be culturally, even environmentally based. For instance, water might well be viewed as a life-giving property in areas that are water-poor, while in the historically boggy, water-logged European environment, water might be better identified as something in a constant state of change: between freezing, thawing, evaporating only to return as snow or rain. Similarly, one might expect cultural differences relating to the sun, moon, and stars might influence the features by which they would be classified and we would not expect to find them always in the same class. For French, it can be argued that masculine gender for *soleil* (M) 'sun' may relate to a shape that is fixed, while *lune* (F) 'moon'. whose shape is

constantly changing, has feminine gender. We find reverse treatments in German where feminine gender of *die Sonne* (F) 'sun' can be related to the 'same' form that is maintained day-in day-out, while masculine gender of *der Mond* (M) 'moon' is suggested to relate to a 'different' form from day to day.

Metaphoric associations that we make, such as between 'female' and 'death' in Russian where death is often personified as a woman (Aikhenvald, 2000:313) (cf. English where 'death' is represented by the absence of life, the 'skull and crossbones'), or between 'echidna' and 'female' in some Aboriginal languages such as Wardaman and Warray (Harvey, 1997:27) seem to arise from a conscious awareness that entities share the same class or gender, and our delight in exploiting that connection – particularly where entities are otherwise entirely unconnected and unexpected. They do not appear to be related to any unconscious process operating beyond any level of awareness. Nonetheless, these metaphoric explanations are of interest since they can direct our attention to more fundamental semantic features that may be shared by otherwise unlike entities – particularly in relation to what seem to be unconscious processes operating beyond any level of awareness.

#### 9.6.7 Features in French - relationship with other semantic systems

Beyond the similarities mentioned above, many of the features found to be crucial in French – not only in the classification of living things but also for non-living entities in the course of this analysis – seem to be shared by other languages. Indeed, many can be related to the schema of eight parameters developed by Allan (1977, 2001) – material, shape, consistency, size, location, arrangement, quanta and function. For instance, 'material' can incorporate a range of parameters, 'hard:soft', 'textured:smooth', 'man-made:created', while 'quanta' can incorporate contrasting notions 'quantifiable:unquantifiable', 'part:whole', 'complete:incomplete', as well as differences in dimension. 'Quanta' is also significant in so far as it allows distinctions to be observed amongst singular nouns, dual nouns and collective nouns, but not in relation to each other. However, Allan's schema does not appear to form the organising principles in the distribution between masculine and feminine of semantic features in the classification system of French. Neither does it have any application to differences in the locus of expression in French among the

various features, since 'quanta' when it relates to oppositions 'quantifiable:unquantifiable' and 'complete:incomplete' is expressed in gender agreements outside the noun, while other 'quanta' oppositions 'part:whole' are expressed in word-final pronunciation on the noun. It seems that distributions relating to 'quanta' in French may be better understood in respect of differences between mode of existence or form and notions related to time and space. Again, oppositional notions 'hard:soft' are expressed in gender agreements, while oppositions in shape, such as 'slender:bulky', or movement, 'clumsy:dextrous', etc., are expressed on the noun through associated vowel- or consonant-final pronunciation patterns.

Notions of significance in the two French classification systems have been shown to exist in other languages, eg.

- 'elongated' in French associated with masculine gender, and *-hon*, meaning 'elongated', a Japanese numeral classifier
- 'flat', in French associated with feminine gender, and *-mai*, meaning 'flat', a Japanese numeral classifier.

However, in French these two parameters are treated slightly differently – 'upright' contrasting with 'recumbent' suggesting contrasting elements on a vertical plane, 'flat' contrasting with 'fine', suggesting contrasting elements along a horizontal plane. Again, however, cultural differences affect how we view these notions. Attributes related to shape and outline in space are associated with word-final pronunciation in French, but these attributes are associated with gender assignment. This would suggest that they are viewed less as spatial attributes than as attributes affecting mode of existence or form – 'how' a thing rather than 'where' it is in relation to the world around it.

In Akatek, a Mayan language, 'numeral classifiers' are associated with attributes 'long, vertical', 'separate', 'curved', 'round', 'flat', 'extended', 'big' and 'small' (in relation to three-dimensional objects) while 'noun classifiers' are associated with 'man', 'woman', 'human (unknown, appreciative)', 'animal', 'plant', 'earth', 'fire', 'water', etc. (Aikhenvald, 2000:284-5). Palikur, an Arawak language of Brazil, has three genders (masculine, feminine and neuter) that occur in agreements, and three systems of classifiers, numeral, verbal (where there are two sub-types)

and locative (Aikhenvald, 2000:193). Properties relevant to these classifier systems are similar to those associated with word-final pronunciation in French, although they are not organised in precisely the same way, namely 'animate', 'round/square', 'irregular shape', 'side', 'vertical objects', 'rigid/thin', 'flat', 'concave', 'edge', 'pointed', linear, 'road/river', 'inside part of', 'tree/plant/trunk', 'tree (branch-like)', water. Further, many of the classifiers in Vietnamese reflect the same features in French ('animate', 'inanimate', 'long/thin', 'flat/thin', 'small', 'rounded', 'colours', 'flat' surfaces, 'bursts', 'small grain-like objects', 'stringlike objects', etc.) (Downing, 1986:347). Features found in Austroasiatic numeral classifiers analysed by Adams (1986) discussed in Chapter 2, such as 'animate', 'inanimate', 'round', 'flat', etc. are also salient in French, although not precisely in the same way. Adams also finds a contrast between 'long and rigid' and 'long and flexible', and these features are also salient in French – though again not in that same way. It is also possible that the significance of 'tail' in its use as a numeral classifier in Austroasiatic languages may relate more closely to its tapering shape than to any association with 'tail' as a body part.

Another kind of similarity between Vietnamese French is equally interesting in that Adams refers to evidence in the analysis of Vietnamese by Huynh Sang Thong (1983, in Adams, 1986:244) where gardeners discussing plants use a greater variety of classifiers than the general population. In French, experts also use a greater variety of terms for various species of plants, or birds, indeed any lexical field, than the general population, such as *pic épeiche* (F) 'great spotted woodpecker', a more complex term that is masculine, where the general population uses *épeiche*, a simple noun that is feminine. However, classifications in French may change even for the same speaker. As mentioned above, general discussion by ornithological experts at <www.oiseau.net> (2004) concerning the *fauvette pitchou* (F) 'Dartford warbler' favours the compound form, but switches to the masculine simple form *pitchou* when describing its song, and reverts to the feminine form when describing the number of clutches laid in a season (<www.oiseau.net>, 2004, in Chapter 4). These examples from French show how and why changes in classification for the same entity can occur – not only in relation to different levels of expertise amongst speakers, but to the specific context for the referent.

The shared features and similar variations in the classification of a single entity amongst speakers in these languages suggest that concepts may be more universal in their application to the natural world and the kinds of attributes that we may attend to, and that languages are able to find ways to express differences among speakers of the same language through similar processes.

Of particular significance is the 'alliterative concord' identified above for !Xóõ, the Southern Khoisan language, where noun class suffixes are strikingly similar phonologically to agreement markers, and for Ngan'gityemerri, the Australian Aboriginal language, where noun class markers regularly take the same form as agreement markers on adjectives (Aikhenvald, 2000:396). However, equally important are cases where agreement markers are unrelated to the word-final pronunciation of a noun – as can occur in Latin, Italian, Spanish, and Romance languages generally.

Ultimately, what is exciting about this research is that it illustrates the salience of a wide variety of semantic features to the French gender system that are similar in type to many of those already identified as salient to classifier languages of the world. It calls into question the dichotomy generally drawn between Noun Class languages on the one hand, and Classifier languages on the other, since this account of gender in French reflects characteristics of both types.

## Déclaration faite par l'Académie française en séance du 14 juin 1984

L'Académie a appris par la presse l'existence d'une Commission de terminologie, créée à l'initiative du Gouvernement (décret du 29 février 1984), "chargée d'étudier la féminisation des titres et des fonctions et, d'une manière générale, le vocabulaire concernant les activités des femmes".

Le décret précise que "la féminisation des noms de professions et des titres vise à combler les lacunes de l'usage de la langue française".

On peut craindre que, ainsi définie, la tâche assignée à cette Commission ne procède d'un contresens sur la notion de genre grammatical, et qu'elle ne débouche sur des propositions contraires à l'esprit de la langue.

Il convient, en effet, de rappeler qu'en français comme dans les autres langues indo-européennes, aucun rapport d'équivalence n'existe entre le genre grammatical et le genre naturel.

Le français connaît deux genres, traditionnellement dénommés masculin et féminin. Ces vocables hérités de l'ancienne grammaire sont impropres. Le seul moyen satisfaisant de définir les genres du français eu égard à leur fonctionnement réel consiste à les distinguer en genres respectivement marqué et non marqué.

Le genre dit couramment masculin est le genre non marqué, qu'on peut appeler aussi extensif en ce sens qu'il a capacité à représenter à lui seul les éléments relevant de l'un et l'autre genre. Quand on dit "tous les hommes sont mortels", "cette ville compte 20.000 habitants", "tous les candidats ont été reçus à l'examen", etc., le genre non marqué désigne indifféremment des hommes ou des femmes. Son emploi signifie que, dans le cas considéré, l'opposition des sexes n'est pas pertinente et qu'on peut donc les confondre.

En revanche, le genre dit couramment féminin est le genre marqué, ou intensif. Or, la marque est privative. Elle affecte le terme marqué d'une limitation dont l'autre seul est exempt. A la différence du genre non marqué, le genre marqué, appliqué aux êtres animés, institue entre les sexes une ségrégation.

Il en résulte que pour réformer le vocabulaire des métiers et mettre les hommes et les femmes sur un pied de complète égalité, on devrait recommander que, dans tous les cas non consacrés par l'usage, les termes du genre dit féminin - en français, genre discriminatoire au premier chef - soient évités ; et que, chaque fois que le choix reste ouvert, on préfère pour les dénominations professionnelles le genre non marqué.

Seul maître en la matière, l'usage ne s'y est d'ailleurs pas trompé. Quand on a maladroitement forgé des noms de métier au féminin, parce qu'on s'imaginait qu'ils manquaient, leur faible rendement (dû au fait que le cas non marqué contenait déjà dans ses emplois ceux du cas marqué) les a très vite empreints d'une nuance dépréciative : cheffesse, doctoresse, poétesse, etc. On peut s'attendre à ce que d'autres créations non moins artificielles subissent le même sort, et que le résultat aille directement à l'encontre du but visé.

Il convient enfin de rappeler qu'en français la marque du féminin ne sert qu'accessoirement à rendre la distinction entre mâle et femelle. La distribution des substantifs en deux genres



institue, dans la totalité du lexique, un principe de classification, permettant éventuellement de distinguer des homonymes, de souligner des orthographes différentes, de classer des suffixes, d'indiquer des grandeurs relatives, des rapports de dérivation, et favorisant, par le jeu de l'accord des adjectifs, la variété des constructions nominales... Tous ces emplois du genre grammatical constituent un réseau complexe où la désignation contrastée des sexes ne joue qu'un rôle mineur. Des changements, faits de propos délibéré dans un secteur, peuvent avoir sur les autres des répercussions insoupçonnées. Ils risquent de mettre la confusion et le désordre dans un équilibre subtil né de l'usage, et qu'ils paraîtrait mieux avisé de laisser à l'usage le soin de modifier.

(Georges Dumézil, co-auteur avec Claude Lévi-Strauss, de cette déclaration, la commente dans une "interview", pour laquelle il a rédigé questions et réponses, parue dans Le Nouvel Observateur 7 septembre 1984 et reproduite en annexe de Hervé Couteau-Bégarie L'oeuvre de Georges Dumézil : catalogue raisonné Paris Economica 1998.)

(<[www.academie-francaise.fr/langue/francois.html](http://www.academie-francaise.fr/langue/francois.html)>, 2005)

## Déclaration sur la féminisation des noms de métiers,

fonctions, grades et titres: 21 mars 2002

En 1984, après que le gouvernement eut pris une première initiative en faveur de « la féminisation des titres et fonctions et, d'une manière générale, le vocabulaire concernant les activités des femmes », l'Académie française, fidèle à la mission que lui assignent ses statuts depuis 1635, fit publier une déclaration rappelant le rôle des genres grammaticaux en français. Les professeurs Georges Dumézil et Claude Lévi-Strauss, à qui la Compagnie avait confié la rédaction de ce texte, concluaient ainsi :

« En français, la marque du féminin ne sert qu'accessoirement à rendre la distinction entre mâle et femelle. La distribution des substantifs en deux genres institue, dans la totalité du lexique, un principe de classification, permettant éventuellement de distinguer des homonymes, de souligner des orthographes différentes, de classer des suffixes, d'indiquer des grandeurs relatives, des rapports de dérivation, et favorisant, par le jeu de l'accord des adjectifs, la variété des constructions nominales... Tous ces emplois du genre grammatical constituent un réseau complexe où la désignation contrastée des sexes ne joue qu'un rôle mineur. Des changements, faits de propos délibéré dans un secteur, peuvent avoir sur les autres des répercussions insoupçonnées. »

Cette analyse scientifique irréfutable était donc assortie, voici dix-huit ans, d'un avertissement dont il n'a été tenu aucun compte. Un catalogue de métiers, titres et fonctions systématiquement et arbitrairement « féminisés » a été publié par la Documentation française, avec une préface du Premier ministre. La presse, la télévision ont suivi avec empressement ce qui pouvait passer pour une directive régalienne et légale. Or, peu auparavant, la Commission générale de terminologie et de néologie, officiellement saisie par le Premier ministre, avait remis à celui-ci un rapport dans lequel elle déconseillait formellement la féminisation des noms de titres, grades et fonctions, par distinction avec les noms de métiers, dont le féminin découle de l'usage même. De ce rapport, le gouvernement n'a pas non plus tenu compte, alors qu'aucun texte ne lui donne le pouvoir de modifier de sa seule autorité le vocabulaire et la grammaire du français.

Sans revenir sur les arguments qu'elle exposait en 1984 et auxquels elle reste attachée, l'Académie française déplore les dommages que l'ignorance de cette doctrine inflige à la langue française et l'illusion selon laquelle une grammaire « féminisée » renforcerait la place réelle des femmes dans la société.

### 1. Valeur collective et générique du genre masculin

Il est inutile, pour désigner un groupe de personnes composé d'hommes et de femmes, de répéter le même substantif ou le même pronom au féminin puis au masculin. « Les électrices et les électeurs », « les informaticiennes et les informaticiens », « toutes celles et tous ceux » sont des tours qui ne disent rien de plus que « les électeurs », « les informaticiens », « tous ceux ». On évitera également d'indiquer entre parenthèses ou après une barre oblique la marque du féminin :

« les adhérent(e)s », « les animateurs/trices », etc. De même au singulier, lorsque le masculin revêt un sens générique, de telles surcharges (« recrutement d'un/une technicien(ne) diplômé(e) », etc.) n'apportent aucune information supplémentaire et gênent considérablement la lecture. Au surplus, elles s'opposent à la règle, très générale en français, de l'accord du pluriel au masculin. Il est impossible d'écrire : « Le fauteuil et la table sont blanc(h)s. »

Ces redondances et ces alourdissements révèlent sans doute que, dans l'esprit de certains, le masculin est devenu un genre marqué au même titre que le féminin, et ne peut plus désigner que des personnes de sexe masculin. C'est ainsi que la féminisation peut introduire un déséquilibre dans les structures mêmes de la langue et rendre malaisée la formulation des phrases les plus simples.

## 2. Néologismes

L'application ou la libre interprétation de « règles » de féminisation édictées, de façon souvent arbitraire, par certains organismes français ou francophones, a favorisé l'apparition de nombreux barbarismes.

Il convient tout d'abord de rappeler que les seuls féminins français en -eure (prieure, supérieure...) sont ceux qui proviennent de comparatifs latins en -or. Aussi faut-il éviter absolument des néologismes tels que professeure, ingénieure, auteure, docteure, procureuse, procureure, rapporteure, réviseure, etc. Certaines formes, parfois rencontrées, sont d'autant plus absurdes que les féminins réguliers correspondants sont parfaitement attestés. Ainsi chercheuse à la place de chercheur, institutrice à la place d'institutrice. On se gardera de même d'user de néologismes comme agente, cheffe, maîtresse de conférences, écrivaine, autrice... L'oreille autant que l'intelligence grammaticale devraient prévenir contre de telles aberrations lexicales.

Enfin, seul le genre masculin, qui est le genre non marqué (il a en effet la capacité de représenter les éléments relevant de l'un et de l'autre genre), peut traduire la nature indifférenciée des titres, grades, dignités et fonctions. Les termes chevalière, officière (de tel ordre), députée, sénatrice, etc., ne doivent pas être employés.

Comme l'Académie française le soulignait déjà en 1984, l'instauration progressive d'une réelle égalité entre les hommes et les femmes dans la vie politique et économique rend indispensable la préservation de dénominations collectives et neutres, donc le maintien du genre non marqué chaque fois que l'usage le permet. Le choix systématique et irréfléchi de formes féminisées établit au contraire, à l'intérieur même de la langue, une ségrégation qui va à l'encontre du but recherché.

(From web site <[www.academie-francaise.fr/actualites/feminisation.asp](http://www.academie-francaise.fr/actualites/feminisation.asp)>, 16/08/06)

**Declaration on the feminisation of names of jobs,  
professions, grades and titles, 21 March 2002**

In 1984 after the government had made an initial attempt in favour of 'the feminisation of titles and functions and, in a general way, vocabulary concerning activities of women', the *Académie française*, faithful to the mission assigned it in statutes since 1635, published a declaration recalling the role of grammatical genders in French. Professors Georges Dumézil and Claude Lévi-Strauss, to whom the Company entrusted the wording of this text, concluded thus:

In French, the marking of feminine is used only subordinately, to provide a distinction between male and female. The distribution of substantives into the two genders establishes, across the lexicon, a principle of classification, allowing when the occasion arises to distinguish between homonyms, to underline different orthographic representations, to classify suffixes, and to indicate relative size, connections with derivation, and supporting, according to rules of accord with adjectives, the variety of nominal constructions. All these needs for grammatical gender constitute a complex network where the contrasting designation of the sexes plays only a minor role. Any changes, made deliberately in any sector, can have unsuspected repercussions on others.

This irrefutable scientific analysis was therefore matched, 18 years ago, combined to serve as a warning which was then entirely ignored. A catalogue of jobs, titles and functions systematically and arbitrarily 'feminised' was published by the Documentation française, with a preface by the Prime Minister. The press and television media have followed it with an enthusiasm that could have passed for a royal and legal directive. However, a little earlier, the General Commission on Terminology and Neology, officially taken over by the Prime Minister, had delivered to him a report in which it formally advised against feminisation of names of titles, grades and functions, as distinct from names of trades (occupations) of which the feminine followed the same usage. The government has never taken any notice of this report, despite the fact that no text gives it the power to modify on its own authority the vocabulary and grammar of French.

Without going back over the arguments that it put forward in 1984, which it still supports, the *Académie française* deplores the damage that ignorance of this doctrine inflicts on the French language and the illusion that a 'feminine' grammar would reinforce the real place of women in society.

1. Collective and generic value of masculine gender

It is not unnecessary, in designating a group of people composed of men and women, to repeat the same substantive or the same pronoun in feminine as well as masculine. 'The electors (female) and electors (male), IT specialists (female) and IT specialists (male)', 'all (females) and all (males) are turns of phrase which indicate nothing more than 'electors (male)', IT specialists (male)', 'all those (male)'. It equally avoids indicating marking feminine between parentheses or after a slash, as for '*les adhérent(e)s*', *les animateurs/trices*', etc. Likewise, in the singular, where masculine assumes a generic sense, such added burdens, eg. recruitment of a (male/female) diplomaed (male/female) technician (male/female) carries no supplementary information and is a nuisance for the reader. Furthermore, such cases oppose the rule, generalised in French, that plural accords to masculine. It is impossible to write 'the armchair and table are *blancs/ches*'.

These redundancies and cumbersome efforts betray without doubt that, in the minds of certain people, masculine has become a marked gender marked in the same way as feminine, and can only designate masculine sex. It is thus that feminisation can introduce a disequilibrium in the same structures of the language and render uneasy the formulation of the simplest of phrases.

## 2. Neologisms

The application or free interpretation of 'rules' of feminisation decreed, often arbitrarily, by certain French, or French-speaking organisations, has encouraged the appearance of numerous barbarisms (errors of speech?).

It is timely first of all to recall that the only feminine French suffixes in *-eure* (*prieure*, *supérieure* ...) are those which come from comparative Latin forms in *-or*. Neologisms such as *professeure*, *ingénieure*, *auteure*, *docteure*, *provisseure*, *procureure*, *rapporteure*, *révisseure*, etc. should be avoided. Certain forms occasionally found are even more absurd since regular feminine correspondents are perfectly acceptable. Likewise *chercheure* in place of *chercheuse* (F) 'researcher (female). *institutrice* in place of *institutrice* (F) 'teacher (female). Also to be similarly avoided are neologisms such as *agente*, *cheffe*, *maîtresse de conférences*, *écrivaine*, *autrice* ... The ear as much as a grammatical intelligence should caution one against using such lexical aberrations.

To sum up, only masculine gender, which is the unmarked gender (it has, in effect, the capacity to represent relevant elements of both genders), can translate the undifferentiated nature of titles, grades, honours and professions. The terms *chevalière*, *officière* (of some order), *députée*, *sénatrice*, etc., ought not be used.

As the Académie française earlier stressed in 1984, progressive establishment of a real equality between men and women in political and economic life renders indispensable the preservation of collective and neutral denominations in producing the unmarked gender each time that usage permits. The systematic and irresponsible choice of feminised forms establishes to the contrary, within the same interior of the language, a segregation that works against the objective sought.

Trans. M à Beckett

<[www.academie-francaise.fr/actualites/feminisation.asp](http://www.academie-francaise.fr/actualites/feminisation.asp)>, 16/08/06)

## SINGLE SYLLABLE NOUNS

## MASCULINE, VOWEL-FINAL

an	M	year, twelvemonth; conventional duration of time rel. to one revol'n of Earth
bain	M	bathing; act of plunging body/part of body into liqu. (wash, swim)
ban	M	(hist.) summoning of vassals/mil. service; (law) proclamation of marriage
banc	M	long seat w/ w.out back, to sit on together; bench; coll. of fish
bas	M	bottom, lower part; stocking; supple vêtement covering feet/legs of females
bât	M	pack-saddle
bau	M	(naut.) beam, width of boat, meas. of width
bien	M	good, benefit, moral/material advantage; what is agreeable, useful, moral value
blanc	M	colour white; white meat (of poultry), white of egg, etc. cf blanche/minim
blé	M	wheat (gen.); oatmeal (colour); wheat: any ann./bi./grass of gen.
bleu	M	blue; blue cheese; new recruit
bon	M	moral qualities seen as single abstr. entity; good, -ness;
bond	M	boud, leap, spring, jump (humans, animals) V: bondir to leap I. bombire
bout	M	part which ends obj in sense of its length; tip, remaining fragment, part
brai	M	pitch, tar, heavy dark viscous substance cont. as residue from distill. of tars
bras	M	segment of upper member compr. bet. shoulder to elbow; (fig.) hand, handle;
brie	M	brie, soft cheese with white crust made in Brie
brin	M	filament constituting thread (long thin piece of veg. matter); blade of grass, shoot
bris	M	act/break into pieces/its result (fragments); law-breaking opp. brise/breeze
brou	M	external pericarp of diverse fruits (peri/encl.+carp/reprod part of plant
broust	M	spring growth (grass) (not in LRPT) (Ger. brust/burgeon (V brouter 'to graze'
bruit	M	noise
brun	M	brown
buis	M	(bot.) box-tree
camp	M	camp, regional form of 'champ' (orig. 'champ' from L. campus)
cas	M	single instance/occurrence, that wh. happens; med./gramm.; event, occasion
cens	M	official count of population, census (not in LRPT)
cent	M	(coin) cent
chai	M	wine & spirit warehouse
champ	M	field
chant	M	emission of musical noise/sound by human voice; singing; song,
chas	M	eye or thread hole of needle (L. capsus/LRPT, capsula/CED)
chat	M	cat (L. cattus, gattus, also poss. <u>M.L.</u> word) (F: chatte)
chaud	M	warmth, heat (also adj.)
chien	M	dog
chou	M	cabbage (cruciferous plant/veg); chou pastry
clamp	M	clamp (surg.)
clan	M	ethnic group, tribe (group composed of parents w. same single ancestor
clos	M	paddock, orchard; enclosed parcel of land; enclosure
clou	M	nail, stud, tack
coin	M	triangular wooden or metal instru.-die, stamp; corner angle
coing	M	quince
con	M	(vulg.) also conne; female sexual organ; swearword; imbecile
cou	M	neck
coup	M	hit, blow (L. colpus, Gk kolaphos/smack)
cran	M	nick, notch made in hard material for purpose of stopping sthg
crêpe	M	crepe (material/rubber) ?manuf
crêt	M	ridge, escarpment on edge of deep valley
creux	M	that which is empty inside; shallow concave area/hollow; void;
cri	M	cry
crin	M	long thick hair wh. grows on neck of horse, horsehair
cyon	M	NOT IN ANY DICTIONARY
daim	M	fallow deer; suede leather
dais	M	canopy, baldachin (NB <u>not</u> dais); ouvrage qui descend au-dessus de qch (altar/bed)
dam	M	detriment, harm; damnation (dommage comes from this term)
dan	M	dan, each of the grades of black belts in martial arts
dé	M	thimble; die, dice
deux	M	two; deuce
dieu	M	god; source of explan'n for the existence of world, conceived with

doigt	M	(anat.) digit; (fig.) small quantity or distance, finger's breadth
doit	M	(accounting) debit
don	M	act of freely giving object or joy from sthg; gift, present w/out expecting return
dos	M	back (from shoulders to kidneys of human)
doux	M	mild; sweet (opp acid)
drain	M	land drain, pipe or channel carrying off water/sewage; (surg.) draining
droit	M	1. right; duty; law (from L. dirigere/guide; 2. boxer's (from L. dextra) boxer's R fist
fait	M	act, deed, sthg done or performed; sthg known to have taken place; fact (opp idea)
faix	M	burden, load, weight, encumbrance; builder's rubbish
fat	M	fop, conceited ass (Adj as Subst.N)
faux	M	lie, falsehood
feu	M	combust'n throwing out heat & light; fire; material gathered together
fion	M	finish, final touch (Not in LRPT) Possibly: completed
flan	M	baked custard; blank coin-plate
flanc	M	flank, side
flein	M	punnet, chip basket
flet	M	flounder
foin	M	hay, grassland seed-bearing plant;
fond	M	lowest part of sthg deep, hollow (of sea, glass, etc.); sthg
frai	M	laying (ponte) eggs by female fish, spawning, spawn, spawning season
frais	M	expenses occasioned by an operation (anc. Fr. franc); (Subst. N)
franc	M	franc
frein	M	(obs.) bit (of bridle); (mech.) dispositif wh. serves to
fret	M	freight, cost of/price of transport of merchandise
froid	M	cold, chill, cold weather; coldness
front	M	forehead, brow; frontage
freux	M	rook, blackbird (corneille) w. narrow beak
fruit	M	fruit; produce
gain	M	act of gaining, winning; success (V: gagner/to win)
gant	M	glove, piece of clothing for hand w. individual slots for fingers/
geai	M	jay
gland	M	acorn, fruit of an oak tree; tassel, ornamental trimming in form
gnon	M	(pop.) blow, clout (coup) (from <i>oignon</i> )
gnou	M	(zool.) gnu
gond	M	hinge; metallic piece around which pivots door
goût	M	taste, flavour
grain	M	grain, edible fruit of graminaceous (grass) plants, seed-like fruit of
gras	M	coating of fat; greasy solid; fat, fat part
grau	M	(south of France) channel connecting salt lake or river
gré	M	will, pleasure, inclination, liking, gratefulness
grès	M	sedimentary rock formed of sand & cementing, sandstone, grit-
gris	M	grey, the colour
groin	M	snout (of pig, etc.) for digging, burrowing (NB NOT groin)
grau	M	finest (wheaten) flour; oatmeal, groats; grist
guet	M	action of V to watch, watching, surveillance, night-patrol
gui	M	1. mistletoe. 2. (naut.) boom
han	M	grunt
haut le	M	height (determined dimension); measurement from
houx le	M	holly
huis	M	(obs.) door (eg. fermer l'huis); privacy (opp. porte F/
jais	M	(min.) jet; jet-black (colour)
jet	M	action of throwing; movt of sthg launched in certain trajectory,
jeu	M	phys./mental activity for pleasure; game, play, sport, pastime,
joint	M	(anat., geol.) joint; articulation
jonc	M	rush; bracelet wh. circle has same thickness throughout
joug	M	yoke (wooden frame/bar with collar piece/work oxen as team)
juin	M	June (month of)
kan	M	khan, caravanserai (khan/title of mongolian leaders, Tartars)
lais	M	alluvium, silt; (pl.) (law) foreshore (terrain que les eaux découvrent
leu	M	wolf (obs.)
liais	M	lias, freestone (also lias) Lias/lowest series of rocks of the
lien	M	bond, tie; band, strap, cord, string; ligament; chain
lieu	M	place, spot, scene; ground; reason, occasion; position;
lin	M	flax; (text.) linen

lit	M	bed, piece of furniture to be used as bed
lot	M	lot, portion of whole shared bet. sev. people; batch,
loup	M	wolf (ravenous eater of ...)
mai	M	May, name of month; maypole
man	M	larva of grub
mas**	M	farm, farmhouse (pron. both mas/ma/), Prov./Languedoc word)
mât	M	mast, long poteau dressé on bridge of ship to carry sails
mets	M	dish, each of the articles of prepared food which are part of a
mi	M	third note of scale doh ray mi
moins	M	less; fewer
mont	M	mountainside, mount
mot	M	word, expression
muid	M	hogshead (unit of capacity, esp. alcoholic beverages)
nez	M	nose, bit that projects above lip
nid	M	nest, shelter for young birds
nœud	M	unit of speed, knot; entwining of flex. cord etc wh. contract if drawn
nom	M	name, surname; (gram.) noun; called sthg (animal/place/
ope	M	(constr.) hole for scaffolding
os	M	bone
pain	M	bread, food made from flour, water, salt and yeast
pan	M	piece, panel of material, flap; section, surface
pieu	M	stake, post; piece of wood w. one of ends pointed to drive into
pin	M	pine (tree); Scotch fir
pis	M	woodpecker, brightly coloured plumage, strong chisel-
plaid	M	feudal tribunal, judicial assembly in Middle Ages/
plain	M	(naut.) high water
plan	M	l. plane, flat surface; (fig.) sphere, point of view;
plant	M	ens. of plants of same species in the same area/terrain, that terrain
plat	M	dish, pan, plate (flat)
plein	M	full part, full quantity; plenum; height (of season, power, etc.) solid part
plomb	M	lead metal; weight of lead; shot; plumb-line; sink;
plouc	M	Peasant (M/F); person with poor/vulgar manners
poing	M	fist, hand w. fingers clenched into palm as for hitting
point	M	point, dot, tiny mark; speck; full stop
pont	M	bridge, structure (piece of work) providing passage over
pot	M	pot, jug, tankard
pou	M	louse
pré	M	terrain' producing grass which is used to feed cattle
prêt	M	loan, advance; (mil.) subsistence allowance
quai	M	wall where boats come alongside; quay; public way aménagée
ra	M	ruffle (of drum) (onomat.)
rai	M	ray (of light); spoke; point of light
rang	M	rank, station, order; row/line of people in order side by side
rat	M	rat; (fig.) miser (F: rate)
raz	M	(orig. Scan.) tidal race, marine current (violent movt of sea-
rein	M	kidney; (pl.) loins;
rets	M	snare, trap, net
Rhin	M	Rhine
rien	M	mere nothing, trifle, trace, nothingness
riz	M	rice, erect grass <i>Oryza sativa</i> , of EAsia, on wet ground, drooping
roux	M	paste (sauce) (rouille/rouiller same family: to rust/redden
sang	M	blood, reddish viscous liquid circul. in/pumped thru vaisseaux;
sas	M	cloth sieve/screen, of silk in round wooden frame for liquids;
saut	M	jump, leap; spring from ground by flexion + sudden
sein	M	breast, bosom; that part of body in front of chest
shoah	M	(Hebrew) genocide perpet. against Jewish people by Nazi
sien	M	will; (pl.) family
soin	M	care, attention, concern, worry (state/feeling of
son	M	sound
sou	M	sou (5 centimes) (money units all M-franc, cent, centime)
suint	M	grease (of sheep's wool), shorn fleece before cleaning
tain	M	metal amalgam (tin or mercury) applied behind glass
tan	M	tan, tanbark used in preparation of hides (tannin/tanning agent)
taon	M	horse-fly, gadfly



tas	M	heap, pile, mass (amas of material, pieces, objects/dissimilar)
tau	M	shepherd's stick
taud	M	(naut.) tarpaulin (waterproof canvas)
té	M	letter T
tee	M	(golf) tee, little stand for placing golf ball on
teint	M	act of colouring; dyeing, tinting;
temps	M	indefinite continuity for succession of events/phenom./changes
thé	M	tea
thon	M	tunny-fish
toit	M	upper surface of bldg, roof (L. tectum, tegere/cover, protect)
ton	M	tone, sound w. ref. to quality, pitch, quantity
train	M	convoy; series, ensemble; train; pace, speed; course
trait	M	act of treating (agir); projectile launched by hand, eg. dart, arrow;
tri	M	sorting, picking out (action de trier/extract)
tronc	M	trunk, under part of leafy body; part of main body
trou	M	hole (L. pop. poss. Gaul.), area hollowed out in sthg
un	M	one
veau	M	calf, both male and female
vent	M	wind, breeze (hunt.) scent; LRPT: déplacement d'air;
vin	M	wine
vingt	M	twenty
vœu	M	wish, will (faculty of conscious choice of action, etc), prayer
zoo	M	zoo

#### MASCULINE, CONSONANT-FINAL

acre	M	acre
acte	M	each of the large divisions of a piece of theatre; act of play
acte	M	1. written piece constituting oblig'n; document, instr./deed 2. human action, deed
age	M	plough-beam (no further info avail.)
âge	M	age, span of life; number of years; old age
air	M	mixture of gases in atmosphere; air, gen. appearance;
air	M	tune or a song, melody (not <i>meiodie</i> is r); song
amble	M	amble, ambling; leisurely motion
ange	M	angel; (ichth.) angel-fish
angle	M	(geom.) figure formed by two intersecting lines, angle; corner;
antre	M	lair, den of wild animal
arbre	M	tree (generic)
arc	M	section of geom. curved figure, circle limited by two points
are	M	(land meas.) are (=100sq mt, 100th of hectare
art	M	means of ob. result; art; ens. of knowledg required to obtain skill
aulne	M	alder tree
bac	M	ferry-boat, ferry; tank, vat
bagne	M	convict prison; sojourn where one is forced to do painful work
bail	M	(law) lease, contract by wh. one person leases to another
bal	M	gathering where one dances, ball, dance; conseq. where
bar	M	(meteor.) bar, unit of pressure (measure)
bar	M	(ichth) bass; (meteor.) bar, unit of pressure (measure)
bar	M	bar, public house (Eng.)
barbe	M	barb (breed of horse of Nth African origin)
bard	M	tray, board, with handles for transporting materials)
barde	M	bard, poet
baume	M	balsam, balm; any of various oily aromat. subst. obt. from
beige	M	beige: light brown colour
bel	M	(physics) unit for comparing 2 power levels
berthe	M	Bertha collar, wide deep cape-like collar/small cape often
beurre	M	butter, edible fatty solid made from cream by churning
bide	M	(echech) total stop/failure; (pop.) stomach (recipient, from
bief	M	S watercourse
bièvre	M	(obs.) beaver
blair	M	(pop.) nose, from blaireau/pointed nose (of badger,
blâme	M	disapproval, criticism; blame, reprimand, reproof
bled	M	(Afr.) bush (in Africa); back-of-beyond;

bloc	M	solid heavy mass in one piece
blues	M	blues, jazz
bluff	M	bluff, promontory
bock	M	1/4lt beer; also (med.) douche
bœuf	M	domestic ruminant bovine (male, opp. vache)
bogue	M	bug (in computer programme/ing leading to functional
boire	M	act of drinking, drinking;
bol	M	Eng. bowl, basin, dish, hemispheric piece of crockery;
bord	M	side of ship; edge, perimeter of ship
bore	M	boron
bouc	M	male goat, billy goat
bouffe	M	buffo (in It. 18thC opera) comic part, esp. for bass; bass
bouge	M	hollow, bulge, convexity (outwards); low dive
bourg	M	market-town; Hist. fortified town; (mod.) commercial
bourre	M	(pop.) policeman, copper
boute	M	(naut.) dhow, small boats on Red Sea (Arab. bût, Eng.
braille	M	Braille, system of writing in points wh. jut out from surface,
branle	M	swing, oscillation, swinging
braque	M	hound (back-formation from brachez/hunting dogs)
break	M	Engl. 'break', kind of car, open, w. wheels, benches for
Brême	M	Bremen
brick	M	Eng. (naut.) brig; Arab. salted fritter
bridge	M	(Engl.) bridge, dental work; card game
broc	M	ewer, pitcher, for transporting liquids
brome	M	simple chemical body, suffocating gas extr. from marine
bronze	M	bronze (colour, material, figure)
bruche	M	bruchus, weevil
buffle	M	buffalo (L. bufalus, alteration of bubalus,
bugle	M	(mus.) bugle; (bot.) bugle; short for 'bugle horn'/ox horn
bulbe	M	bulb (rounded underground organ of certain plants; bulging,
bulle	M*	manila paper
bure	M	(mining) shaft (long, narrow vertical passage-way into
busc	M	bone (in corset); shoulder (of rifle butt); sill (of dam),
cab	M	(obs.) hansom cab (transport)
câble	M	(naut.) chain; coll of plaited threads; cable, rope, cord;
cade	M	savin(e), small spreading juniper bush
cadre	M	frame of picture, door, etc; setting, surrounding; crate
caire	M	coir, coconut fibre
Caire, le	M	Cairo, capital city, on Nile, Arab. name El Qahira
cairn	M	(Scot.) cairn, mound of stones erected as memorial,
cake	M	Eng. fruit-cake
cal	M	callosity, callus L. callum/hardened skin
calme	M	absence of movt, calm, calmness; quiet, stillness
calque	M	(tracing; (fig.) copy, imitation
cancro	M	pauper; dunce (Q: no F7)
car	M	Fr: autocar (has 30 seats); motor coach
carne	M	Carmelite, order of mendicant friars (White Friars)
catch	M	catch-as-catch-can; tag-wrestling
causse	M	calcareous plateau (in central & southern France) - wide mainly
cave	M	S M/M
cèdre	M	cedar
centre	M	centre, interior point equidistant from edges; L. centrum,
cep	M	vine-stock, vine-plant
cèpe	M	edible mushroom, boletus
cercle	M	ring, hoop; flat curve formed with all points equidistant from
cerf	M	stag, deer, red deer, hart; adult male of this species
cerne	M	ring (round, under eye; bruising; outlining of contour)
châle	M	shawl, large piece of fabric draped over the shoulders
change	M	exchange, rate of exchange (transfer for an equivalent)
chanvre	M	hemp
charme	M	spell, magic; amulet; charm, attraction; beauty
chaume	M	part of stem of cereal crops left on ground after harvest,
chèche	M	(Arab.) long scarf/turban cloth of light cotton from Magreb
cheik	M	sheikh

chiffre	M	numeral, each of characters rep. no's;
choc	M	clash, collision, impact (V: choquer)
chott(e)	M	chott, shott; shallow temporary salt lake or marsh in
cidre	M	cider
ciel	M	heaven, paradise; visible space limited by horizon;
cierge	M	(eccles.) candle, taper; (bot.) candle-tree; trop. Amer. grass
cil	M	eyelash; any of short threads proj. from organ which
cinq	M	number
cippe	M	(arch.) cippus, upright stone slab or column used as mile-
cirque	M	(hist.) arena, amphitheater for public games; circus for perform.
clame	M	clam
clip	M	(Engl. word) clip, (by ext. to 'brooch' held on by pin (bijou
cloître	M	cloisters; cloister, convent; monastery;
clope	M	mégot: cigar stump, cigarette-end (bout)
clown	M	clown
club	M	Engl. (hist.) political assoc'n; club, group of people w.
club	M	(Eng.) large deep chair made of leather; (hist.) political
coach	M	(COFD has t + sh) (car) two-door vehicle (saloon) w. 4-6 seats
coche	M	horse-drawn coach
code	M	system of letters or symbols rep. comm'n; code, cipher;
cœur	M	heart, central organ of the circulating system
coffre	M	meuble de rangement (tidying); coffer which opens by
cogne	M	(pop.) policeman
col	M	(obs.) neck of body; (mod.) narrow portion; passage
colt	M	Colt, Trademark, a type of revolver
comble	M	heaped measure; utmost degree
comte	M	count; (Britain, Ireland) earl
cône	M	geom. solid; obj. in conical form, eg. skull, top of head,
conge	M	copper vat (for distilling)
congre	M	conger (eel)
coq	M	male of domestic fowl, cock
cor	M	tine (of antler), horn; metal wind instrument, horn;
corps	M	body, solid part of animated being; individ. human; trunk,
coude	M	elbow; bend, turning (in road)
cours	M	continuous flow of water of rivers, time, etc; learning
crabe	M	salt-water crab (decapod) (Ger. from OHG, Norse)
crâne	M	skull of vertebrates that encloses the brain; top of head
crawl	M	(swimming) crawl
crime	M	crime, unlawful act/omission (L. crimen/accusation, verdict) judic.
crosne	M	Japanese artichoke; edible root
croup	M	(med.) diphtheria (laryngite diphthérique très grave)
cube	M	(geom.) solid (6 planes/right-angled)
cuir	M	skin of animals, sep. from flesh, tanned, made into
cuivre	M	copper, red metal; (pl) metal objets d'art
cul	M	(pop.) bottom, posterior; (vulg.) idiot
cygne	M	swan
dais	M	canopy, baldequin (not dais)
dard	M	dart; small harpoon; sting; snake's tongue; spur (of fruit
derme	M	(anat.) dermis, derm, derma
deuil	M	mourning, bereavement, feeling & expt. of, obs. customs of,
dièse	M	(mus.) sharp (from Gk diesis, separation)
dire	M	that which someone declares, states; (law) statement
disque	M	disc; (Gk. anc. sport) discus, palet thrown by athletes;
dix	M	ten (number)
djinn	M	jinn, djinn
dogue	M	mastiff (or similar breed of guard dog) w. large head, strong
dol	M	(law) fraud
dôme	M	dome; hemispherical roof/vault, top part of cert. huge blgs
doum	M	(bot.) doum-palm
doute	M	state of mind that is uncertain about reality of deed,
drachme	M	drachma
drag	M	drag-hunt; drag (carriage)
drame	M	drama; play (usu. serious); (fig.) tragedy, drama
drill	M	drill, old world Monkey (from W. African lg)

drive	M	Loanword
dronte	M	(ornith.) dodo
duel	M	prearrang. combat; duel; (gramm.) dual (number) L. duellum
dur	M	that wh. is hard (en matière dure);
dyne	M	(phys.) dyne (the cgs. unit of force (rel. to acceleration))
elfe	M	elf
éloge	M	eulogy (formal speech/words of praise), encomium;
erg	M	(geog.) erg (of Sahara, area of shifting sand dunes); (phys.) erg
être	M	living being/animé; human being; state of existence, quality
faîte	M	top, zenith, summit, ridge; ?top bit (fig.) pinnacle;
fan	M	fan, devotee, supporter, ardent enthusiast (?F: form??)
fard	M	make-up, paint, rouge; (fig.) pretence, disguise,
fart	M	wax (for skis)
faîte	M	pomp, splendour, magnificence, ostentatious display/
fastes	M	(pl.) records, annals
faune	M	(myth.) faun, rural deity (Pan, hairy body, pointed ears, hooves, etc.)
fauve	M	fawn colour; wild beast; name given to Fr school of painters
fer	M	iron; object made of iron
feutre	M	felt hat, felt cloth
fibre	M	each of filaments which grouped in bundle, constitute cert.
fief	M	(feud.) fief, domain granted by lord to vassal for service,
fifre	M	small wooden flute; fife (Swiss-Germ.)
fil	M	filament, strand, thread of fibre/textile materials; fine cord of
film	M	film (Engl. word)
fil	M	son
filtre	M	filter, strainer; filter coffee
fisc	M	Treasury, the Exchequer, tax dept., Inland Revenue
fixe	M	fixed salary (salaire: payment for work, service)
flair	M	(of dog) scent, nose; (fig.) perspicacity, flair
flash	M	(photo.) flash(light); news flash
flegme	M	(med.) phlegm
flirt	M	amorous relation; person w. whom flirt.(fig.) rapproche-
fluide	M	fluid (not solid or thick, wh flows); flux; emanation (from stars)
fluor	M	fluorine
flush	M	flush, assemblage of cards containing only one suit)
flux	M	flux, flow; incoming tide; (fig.) abundance, flood,
fort	M	fortified bldg (encl.); strong point; person who has force or
foudre	M	electric discharge prod. in storm etc.; lightning
foudres	M	large cask, tun; (techn.) housing for (fan) blower
four	M	(L. furnus) oven (ouvrage de maçonnerie)
frêne	M	ash (tree)
frère	M	brother
gage	M	pledge, deposit, security, surety, bond, guarantee; stake
gal	M	(phys.) gal, unit of acceleration
galbe	M	harmonious curve/outline/contour (contour/outline of mass of
gang	M	(Engl.) gang (of criminals) (?collective)
Gange	M	Ganges R.
garde	M	warden, guardian, keeper, warder
gars	M	young fellow; boy, lad (abbrev. garçon)
gaufre	M	(cook.) waffle, wafer; honeycomb
gauss	M	gauss, cgs unit of magnetic flux, named after Karl Gauss
gave	M	torrent, river (in Pyrenees) (violent stream of water, other liq.,
gaz	M	gas (as fuel); (tech.) gas
gel	M	freezing weather (temps de gelée); frost, freezing; (phys.) gel
genre	M	S group/same?
germe	M	germ, seed, sprout; (fig.) germ, seed, origin
geste	M	gesture, motion, movement; act, action
gille	M	S M/M, C-E
gin	M	Loanword
gîte	M	home, lodging, shelter, quarters, refuge; (geol.) layer
globe	M	globe, sphere, 3-dimens. closed surface; objects of such
glume	M	(bot.) glume (one of pair of dry membran. bracts/spikelet of
gneiss	M	(geol.) gneiss (coarse-grained metamorphic rock)
gnome	M	gnome

goal	M	goal; goal-keeper
goinfre	M	glutton ???no F? (personne qui)
golf	M	golf (Scottish word)
golfe	M	gulf, bay (It. golfo, from L., Gk kolpos>gouffre>hole, gulf)
gord	M	fishing weir; kiddle (barrier constr. of nets & stakes)
gouffre	M	gulf, abyss, chasm, pit
goum	M	(mil.) native contingent of Algeria; cavalryman of a goum
gour	M	eroded hillsides (in Sahara)
grade	M	ran k, grade, position; (uni.) degree; (geom.) grade
gramme	M	unit of weight, gram, gramme; (fig.) grain, ounce
graphe	M	(math.) drawing of rel'n betw. 2 sets of no.'s; instr. that writes
grief	M	(obs.) damage, injury; grievance, wrong, injury, complaint
grime	M	(theatr.) silly old man; actor playing such part
gringue	M	flattery, being aimable/nice to s'one
grog	M	grog, toddy (Eng. Old Grog, nickname of Adm. Vernon who diluted rum)
groom	M	(obs.) groom; (mod.) page boy
groupe	M	bringing together of sever. people/things in same place,
guelfe	M	Guelph (mbr of It. political party supp. Pope r/t Ger. emperors)
hadj	M	pilgrimage to Mecca
haik	M	outer garment draped over clothes/face, Algerian Arabic
harem	M	harem (Arab. 'haram'/sthg prohibited and sacred)
haume	M	helmet, helm (cup-shaped armour to protect head)
hère	M	wretch; poor miserable man (WOT: NO F?); young stag (male)
heur	M	good fortune (L. augurium/omen, sign)
heurt	M	(action de) knock, shock, bump, collision, clash
hic le	M	L. word: 'Hic est quaestio', (fam.) delicate matter
hile	M	helum (?hilum - scar, fissure or depression on surface)
hoir	M	(obs.) heir (L. heres, heredis, Gk kheros/bereaved)
homme	M	man
hourd	M	(ant) palisade (fence made of stakes; one of the stakes);
huile	M	oil, grease; oil-paint; (fig.) midnight oil, great labour L oleum/
huit	M	eight (w/w.o final phone dep. on following V or C)
hydre	M	hydra
iambes	M	iambus (metrical foot of 2 syll's, short-long)
if	M	yew, evergreen conifer with broad rounded form
inde	M	indigo blue (col., dye)
iodé	M	iodine (Gk. ioeides/violet, from ion and iodes/rust-coloured)
ion	M	ion (named by Faraday) electr. charged atom
isthme	M	narrow passage
jade	M	jade, semi-precious stone w. var. of colours Sp. piedra de
jard	M	river gravel
jarre	M	kemp (coarse hair, wool or fur)
jars	M	gander, M of domestic goose (oie/F)
jaspe	M	jasper, rock siliceuse (red)
jaune	M	yellow; yolk (of egg)
jeténe	M	fast, fasting; voluntary abstinence from nourishment
jour	M	light, clarity; light that sun shines on Earth; time
jugé	M	judge, magistrate, arbiter, umpire, referee, arbiter
jute	M	jute
kriss	M	weapon: Malaysian dagger (Malay./Sing., from Malay)
lac, lacs	M	lake (enclosed - water entirely surr. by land)
lad	M	(Eng.) lad, young stableman who takes care of
lange	M	square of wool/cotton used for wrapping baby; swaddling
lard	M	lard, firm fat forming a thick layer in subcut. tissue
lare	M	(Rom. antiq.) lar, household god
legs	M	legacy, bequest
lemme	M	lemma
leude	M	liege lord, great vassal
leurre	M	appât(M) bait;(OF: lôthr) decoy, lure (designed to deceive)
liard	M	(hist.) old Fr. coin worth quarter of a 'sou'
lias	M	(geol.) lias (lowest series of rock of Jurassic system)
liège	M	cork; stopper for bottles; outer layer of cells on
lierre	M	ivy, evergreen shrub w. spreading/climbing /trailing
lièvre	M	hare (M), gnawing mammal, cousin of rabbit

limbe/s	M	graduated arc of measuring instrument (sextant); (math.) edge,
linge	M	linen, collection (ens.) of pieces of cloth, material for
lis, lys	M	(bot.) lily (Nthn temperate plant); bulb/flower of such
litre	M	litre (from L. mediaev. litru, Gk from Sicil. litra,
livre	M	no. of pages of writing/print held/bound together into whole;
lloyd	M	Lloyd's underwriters
loch	M	(Scottish) lake found at bottom of valleys
loir	M	doormouse
lombes	M	(anat.) loins (posterior region beh. abdomen on
Londres	M	London
lougre	M	lugger
loutre	M	otter; otter-fur, otter-skin
Louvre, le	M	the Louvre, national museum and art gallery (formerly
lucré	M	profit or gain; money or wealth (increase in size)
lunch	M	
lustre	M	flash of brilliant obj.
lustré	M	lustrum, period of 5 years (relig. ceremony of purific'n);
lux	M	(phys.) lux, unit of light
mage	M	magus, magician; (les 3) magi (3 wise men)
maigre	M	diet without meat; lean; shallows (shallow part of river)
mail	M	(obs.) malle, pall-mall (game); terrain pour le jeu de mail, mall
maire	M	mayor (M, Mme le maire)
maître	M	master; owner; ruler, lord; instructor, teacher
mal	M	that which causes pain; bad/immoral/unjust action;
mâle	M	male (human, coq, buck, dog, fox, rabbit, bull tom-cat
manche	M	person maladroit; elongated part (of instr./tool) for holding;
manque	M	S act/lack
marbre	M	marble, hard crystalline metamorphic rock from limestone
marc	M	marc (brandy made outside cognac area) from residue of pressed grapes
mark*	M	German monetary unit
mars	M	month of March
Mars	M	(myth., astrol.) Mars (god of war)
mas	M	(S of France, Sp.) farm, farm-house ?permanent accomm?
masque	M	disguise, mask, covering to disguise face at balls; clay or
match	M	game, competition betw. 2 or more players/teams;
mauve	M	mauve
mec	M	(slang) energetic man; bloke
merle	M	blackbird, songbird w. (generally) black plumage (in male);
mess	M	mess, place where officers gather to take meals together
mètre	M	metre, element of measure for Greeks and Romans
meuble	M	(obs) useful obj. for la ménage/domestic arrangements; (mod.)
mil	M	old form of 'millet'
mille	M	mile (1609 metr), naut. mile (1852 metr)
mioche	M	enfant/kid, brat, urchin (M&F - TLR i/d as M only)
mode	M	(techn.) mode (mus., philos., ling.); expr. mode
moine	M	monk, friar; bed-warmer, warming pan; (ornith.) puffin;
môle	M	pier, mole (stonework constr. to protect port entry)
monde	M	world, universe, cosmos (ensem. of Earth, stars, planets)
monstre	M	monster; monstrosity (fantastic & terrible being/anim.
morne	M	(in W. Indies) bluff, hillock; small isolated hill with circular form
mors	M	bit (of bridle); jaw (of vice, pincers, etc.)
morse	M	walrus; Morse code (named after inventor)
moss	M	[Not in dictionaries]
moule	M	mould, form, cast; shaped cavity into which liquid is poured and
muffle	M	snout, muzzle, proj. part of face of animal incl jaws/nose;
muge	M	mullet
mur	M	vertical work of masonry wh. serves to enclose/separate/
mur	M	wall
musc	M	(zool.) musk; also scent
muscle	M	muscle, organic structure of contractable fibres for movt.
mythe	M	LL from Gk. muthos
nard	M	nard, aromatic plant from India; perfume from such plant
nase/naze	M	Adj (incorrectly i/d as N by TLR) broken down (machinery)
negre	M	(fig.) ghost-writer; negro (M/F - occ. negresse)

nerf	M	nerve; sinew, tendon;
neuf	M	nine; (Adj. Subst.) that wh. is new (collective?)
neume	M	neum(e), sign for noting down plainsong (group of notes)
nombre	M	number, quantity
nome	M	name of any of provinces of anc./mod. Greece
nuage	M	cloud, mist, (fig.) shadow, gloom; collection of particles
obit	M	(Cath.Liturg.) memorial service
ocre	M	ocre (colour) - see ocre (F)
œil	M	eye, organ of sight incl. eyeball, socket, etc.; hole (in cheese)
œuf	M	egg; body hard and rounded that produces females of birds,
oncle	M	uncle
ongle	M	extreme tip of human fingers, toes; nail; claw, hoof (of animal),
onze	M	eleven
or	M	bright yellow element, gold (money, ornament, colour)
orbe	M	orb, ornam. sphere rep'ing power of sovereign; celestial body;
ordre	M	order, regular disposition, succession
orgue	M	1. large resonating wind instr. with pipes, etc.; 2. struct. unit/organ
orme	M	elm, tall deciduous tree with rounded crown
ose	M	Not in dictionary (Fr V exists, oser, to dare??)
oued	M	(Arab. ouadi) North African river bed or ravine; wadi,
ove	M	ovum (?)
pack	M	(Eng.) forward pack, in Rugby; packaging (pack of beer)
pacte	M	pact, entente, accord of formal nature, esp. to sign a
page	M	(hist.) page-boy, young noble placed in household to
pagne	M	loincloth, vêtement d'étoffe/clothing of textile or leaves, att.
pair	M	peer, equal; (fin.) par; (of bird) mate
pal	M	piece of wood or metal sharpened at one end, pale, stake;
pape	M	Pope
Paques*	M	Christian festival cel. resurrection of Christ
parc	M	park, enclosure, paddock, fold, 'parricus'
part	M	(law) infant; (obs) parturition
pauvre	M	poor person (F: pauvresse, LRpT, 1994:822)
peigne	M	instr. w. serrated, fine teeth w. which to comb hair;
peintre	M	artist/artisan who applies paint to surface; painter (? peintresse?)
père	M	father
piaf	M	(pop.) (little) sparrow (moineau/M)
pic	M	miner's tool, pick-axe; mountain w. pointe aiguë/comes to
piège	M	trap, snare (device to trap animals, birds. (fig.) humans)
pif	M	(pop.) nose, beak (orig. onomatopaeic)
pique	M	(in card game) one of 'couleurs' - spades; 'pique' in card game
plaid	M	Scottish plaid; travelling-rug
plâtre	M	gypsum, colourless white mineral
pleur	M	tear, drop of secretion of lachrymal glands; shaped like
poêle	M	stove, heating/cooking apparatus
poème	M	poem (Gk poema/composed, created, from poiein to make
poil	M	hair, threadlike production on skin of cert. animals
pois	M	pea
poivre	M	pepper; (lit, fig.) spice, piquancy, spiciness
pôle	M	(geog., astron., electr., math) pole
pool	M	(Eng.) group of people assoc. in same business (LRPT);
porc	M	hog, swine, pig; pork (opp. truic (F), sow)
porche	M	construction projecting out, wh. shelters entrance (of big)
pore	M	pore, any small opening in surface of animal
port	M	harbour, haven, port (L. portus/harbour);
pote	M	friend, comrade
pouce	M	thumb, big toe; inch
poulpe	M	mollusc w. long arms (tentacles) armed w. suckers
pourpre	M	the colour 'purple'
prêche	M	relig. discours/verbal expr. of thoughts/sermon, preaching
psaos	M	(anat.) psaos (muscle)
pub	M	(Engl.) public establishment serving beer/alcoholic drinks
punch	M	mixed drink w. base of rum, cane sugar
punch	M	boxer's punch
putsch	M	(Ger) (soulèvement/rising, revolt) military coup d'état, putsch

quartz	M	quartz, colourless min. often tinted by impurities eg. amethyst
quatre	M	four, the number 'four'
rade	M	(argot) bar; bistro (same sense as comptoir/'bar')
raft	M	small inflatable boat used for rapid descent
raid	M	raid; long-distance flight or run, endurance test
rail	M	(railw.) rail, each of the steel bars installed in 2 parallel lines
râle	M	rail; (pathol.) rille; (règlement) death rattle;
ranch	M	(US) farm on North American prairies
rap	M	(US) music
rash	M	rash, med. cond. of skin (some kind of skin eruption)
règle	M	rule, ruler; register, account-book; (mus.) register; (mech.) inlet valve
règne	M	reign; exercise of sovereign power; absolute power/influence;
reitre	M	reiter; (hist.) rough soldier
reste	M	rest, residue, remainder, remanant, remains (reliquat)
rêve	M	dream; idle fancy, day-dream, illusion; suite of psychic phenom.
rum	M	(Engl.) rum
rhumb	M	imagin. line on earth's surface intersect.all meridians/same angle
rhume	M	cold
riche	M	rich person, people
ring	M	(Eng.) estrade entourée de cordes sur laquelle se font les
rire	M	laugh, laughing, laughter
roc, rock	M	rock; (ornith.) rock; rock (music/poss. Loanw.) (cf 'roque':
rôle	M	role, list, catalogue; social conduct
rose	M	rose in colour (colours are masculine)
rouage	M	cog, each of small round pieces that together make up
rouf	M	(naut.) deck-house, bridge-house
rouge	M	red
rouvre	M	English oak
rythme	M	rhythm, (fam.) tempo; repetition at regular intervals to/at
sable	M	sand, (ensemble de petits grain minéraux); (med.)
sabre	M	sabre, sword with simple edge, pointed
sac	M	cont.of suppl. material w. top opening for transp. things;
sacre	M	saker (kind of falcon)
sage	M	sage, wise man, sane or sensible person
sceptre	M	sceptre, ceremonial rod or staff as used symbol of authority
schème	M	scheme, abstract representation; (art) style; Gk. skhema/form
schism	M	schism, split, separation of group into opp. factions, thus
schiste	M	(geol.) schist
schlamm	M	sludge, tailings (?HEAP, GATHERING?)
schuss	M	(skiing) direct descent, schuss
scinque	M	(zool.) skink
scons	M	spell'sconse', skunk
scotch	M	
scout	M	meaning cannot be established: scout/person sent out to
scribe	M	scribe, beaucrocat; (Old Test.) recog. scholar (pop/pej.) old man
séide	M	fanatical supporter
seigle	M	rye, annual grass w. bristly fower spikes, l.brown grain;
sel	M	salt (sau/sal in OF) white friable substance which dissolves in
sens	M	direction; posit. in space, way; sense, senses, instinct;
sept	M	the number seven; (also septante/70)
set	M	set (in tennis, etc.), one of number played in seq.
sexe	M	conformation wh. distinguishes M from F
siège	M	(arch.) throne; (mod.) seat, chair; place of princ. residence
signe(s)	M	sign, sthg that indicates/acts as token of sthg else not immed.
singe	M	monkey, ape (F: guenon); (mech.) windlass, hoise; (fig.) imitator,
sirop	M	solution of sugar dissolv. in water often flavoured w. juices
site	M	site, situation, lie of the ground, beauty spot; (archael) site
sium	M	(bot.) caraway (umbellif. plant w. div. leaves, clusters of flowers),
six	M	six
skai	M	(text.) Skai cloth
sketch	M	sketch (theatr.), short scene, comical, uplifting for small no.
skiff	M	skiff
sloop	M	sloop (single-masted sailing vessel
smalt	M	smalt, blue glass or pigment used in enamelling



smocks	M	(dressm.) smocking (Engl. word), type of stitching
soc	M	ploughshare
socque	M	(Antiquity) chaussure basse worn by actors of comédie; (mod.)
soir	M	evening, night
sol	M	soil, superficial crust of Earth; flat surface/lower limit of a construction
solde	M	balance of account; bargain, sale, (pl.) goods
somme	M	nap, sleep (cf/opp of action)
songe	M	dream, illusion
sort	M	fate, lot, destiny
soth	M	Not in dictionary (only Tucker et al (1977)
souffle	M	movt. of air prod. by breathing;expir. of air thru mouth;
soufre	M	sulphur
souk	M	(North Mr.) market, souk; (fig.) bedlam
spasme	M	spasm, invol. muscular contraction; sudden burst of activity
spectre	M	terrifying apparition of death; spectre, ghost, phantom
sperme	M	sperm, semen, liquid cont. male reproductive cell
spleen	M	(fit of) depression, melancholy, gloom (not (spleen/organ)
stade	M	stadium; measure, based on anc.Gk. course for
staff	M	(Ger.) material made of plaster/veg. fibre (empl. as decor'n,
stand	M	stand to rest gun for target-shooting (German)
stretch	M	(Eng.) process/treatment of material to render elastic
stupre	M	débauche/defilement, debauching, debauchery/instance,
style	M	style, long slender extension of the ovary bearing the
style	M	style (no gender in CED; LRPT as M); individual expr.
suc	M	juice, extract, secretion; (fig.) essence
sucre	M	sugar, sweet food substance soluble in water
sud	M	south; Sud/Southern Hemisphere
subde	M	suede (leather)
suif	M	tallow, animal fat; extracted from suet of sheep & cattle
swing	M	(boxing, golf) swing (coup de poing); swing (dance) style/era
sylphe	M	sylyph, slender graceful girl or young woman???; genic (M)
tac	M	(onomat.) tick, tap, tapping; riposte
talc	M	natural silicate of magnesia (min. in metamorph.
tank	M	(Eng.) petroleum reservoir for ships; water-container
tartre	M	tartar
teck/tek	M	teak, large tree (Tectona grandis) of East Indies
terme	M	1. term, expression, word used for sthg else; 2. fixed limit,
thème	M	theme, topic, subject; exercise, composition expanded/discussed
thym	M	(bot.) thyme, small scraggly woody plant
tic	M	(onomat.) spasmodic twitch
tigre	M	(male) tiger (F: tigresse)
timbre	M	bell, sound, tone quality
tir	M	firing, shooting, line of fire
titre	M	honorific; distinctive name (literary comp'n, etc.); proport'n
toc	M	(onomat.) knock-knock; fake or trash
top	M	electronic time
torque	M	In neither dictionary- Engl (1944) necklace of twisted metal
tour	M	turn, turning; tour, circuit; trip; rotation
trac	M	fear, stagefight one feels before facing the public/undergoing
traître	M	traitor, F: traîtresse/traïress
tramp	M	tramp (steamer), merchant ship w.out regular schedule
tremble	M	aspen
trick	M	Eng/Amer.(whist, bridge) trick, batch of cards won cf. trique (f)/cudgel
trigle	M	gurnard, gurnet
trille	M	trill, melodic ornament involv. rapid alternation betw. principle
troc	M	truck, exchange, barter
troll	M	(Scand). troll, goblin of Sc.legends, small supernatural
trope	M	(rhet.) trope, form of rhetoric by which word/expression
troubles	M	state of disorder;(TLR i/d as pl) disorder, disturbance
truc	M	gadget creating illusion; knack, dodge; thingummy jig
truck	M	Eng. any wheeled vehicle for carrying goods
tuf	M	(geol.) tufa, tuff; (fig.) bedrock: porous rock
tulle	M	tulle, net (Tulle name of city in Scentr. France where
turc	M	Turkish language (like le français)

type	M	model, form, symbol, prototype, type
tweed	M	tweed (English word)
val	M	in place names, Le Val de Loire/-dale; in expr: mountains
vase	M	vase, vessel (LRPT: to contain liquids (cf NF: mud, mire, slime))
velche	M	Loanword (Ger.) foreigner (esp. used by Germans of French/Italians)
ventre	M	abdomen
ver	M	maggot, grub, larva; moth
verbe	M	(gramm.) verb (see also adverb, noun, past part., adj.)
vergne	M	alder
verre	M	glass (made from vitreous/glossy appearance of sulphates)
vers	M	line (of poetry), fragment defined by rules of length;
veuf	M	widower
vide	M	empty space, void, blank; vacuum; gap, hole
vivre	M	living, board food
viol	M	rape, violent act (NB not musical instrument)
voile	M	piece of fabric cover monument, face (veil); (fig.) disg.,
vol	M	1. flying, flight; soaring; flock (of birds); L. volare
volt	M	unit of electric force
watt	M	unit of measure of power
whig	M	(Eng. hist.) member of Brit. political party
yod	M	(Hebrew) semi-consonant /y/ written orthog. in
zèbre	M	zebra
zend	M	Zend (Ig)
zest(c)	M	zest of lemon/orange rind, outermost layer of fruit
zinc	M	simple element, whitish blue metal, used for its resistance to
zone	M	zone

#### FEMININE, VOWEL-FINAL

baie	F	(geog.) bay (indentation, cut-out portion of coast); 2. (bot.) berry
broie	F	(text.) card, machine for combing fibres
clai	F	lattice of wicker (w. holes) for drying cheeses, etc.; any lattice of wood/wire
clé/clef	F	that which opens; key (mus., fig.); Chinese character which classifies another ch.
craie	F	chalk, natural limestone; chalk red. to powder and set in batons
croix	F	post w. cross-piece, 2 intersecting lines/pieces
dot	F	dowry, portion woman brings to her husband
faïm	F	hunger, sensation that accompanies need to eat;
fée	F	fairy, imag. being w. F. appearance (L. Fata/goddess of destiny)
fin	F	point of stopping, end, stop; moment at which
foi	F	pledge, promise to be faithful to one's word; absol. confidence
fois	F	time, occurrence, marking frequency/return of event; circum-
fuie	F	dovecote
gent	F	race; tribe, people, nation (espèce: species, kind, sort, ie. human???)
grue	F	crane (bird/machine/F), long strong legs, gregarious, fly in bandes (orig. 'legs')
hie la	F	pile-driver (machine) (instr. serving to 'enfoncer'/push
joie	F	pleasurable deep emotion, exalted feeling, happiness, felt;
joue	F	cheek (from source close to 'cramming', ie. food storage?)
laie	F	wild sow; (forest.) service-path
lie	F	natural deposit forming at bottom of receptacle cont.
lieue	F	league, ancienne mesure (F)/measure of distance of varying length,
maie	F	kneading-trough; bread-bin (coffre à pain)
mie	F	soft part inside bread; (COFD: crumb, opp. to crust)
moue	F	pout, pouting (?V mouiller/to wet?)
moye/oie	F	soft vein in stone
noix	F	walnut, fruit of walnut tree (noyer); (by ext.) any edible fruit
noue	F	gutter, valley (in roof); meadow pasture
nuit	F	night, (obscurité) darkness wh. envelops daily a part
paie	F	pay, wages; act of paying in return for work/services (opp payment
plaie	F	opening in the flesh, wound, sore; (fig.) hurt, evil, plague
proue	F	(naut.) prow, forward end of boat (la figure /human rep/d'une proue)
queue	F	tail, ext. part of vertebral column of some mammals; tail-piece;
raie	F	1 straight line, long thin band on sthg; 2 ray/fish
roue	F	wheel, disk wh. turns on axle used as means of movt/advancing

soue	F	pigsty (souille/wallowing place for boar) (not in LPRPT)
strie	F	score, grove, channel; (pl.) fluting;
suie	F	soot, carbon (black remains prod. by fire, not completely boiled)
toux	F	cough (forced expulsion of air res. from irritation) (L. tussis)
Troie	F	Troy
truie	F	(zool.) sow

## FEMININE, CONSONANT-FINAL

ache	F	wild celery, smallage, strongly scented umbellif. plant of
affres	F	terrors, horrors, pangs
aide	F	aide, action intervening in favour of/helping; assistance
aire	F	area, space (région étendue);erie (nest of bird of prey)
aise	F	ease, comfort, freedom from discomfort
ale	F	(Engl.) ale, "blond" English beer (pale ale)
algue	F	seaweed, alga, aquatic plant found in fresh & seawater; class
alpe	F	alpine pastures
âme	F	conscience, spirit, source of human b., of feeling (sensibilité)
anche	F	reed (of clarinette, etc.); thin piece/languette of hollow cane
arche	F	arch, vault; curved (usu. vertical) structure spanning opening
aube	F	first glimmer of rising sun starting to lighten horizon; dawn;
bâche	F	piece of strong waterproof wh. protects sthg from weather;
bâcle	F	(obs.) bar for door or window; (mod.) V: poorly done
Bade	F	Baden (former Ger. province)
bafe	F	(pop.) slap, box on the ear (slap given with flat or back of
bague	F	ring one wears on a finger; obj having form of ring
baile	F	(naut.) tub, rust-bucket; (slang) water
baisse	F	fall, decline, reduction, drop
balle	F	ball; bullet, shot; bale, pack; (also sp. bale, F: chaff, glume
banche	F	(big) form, shutter (for moulding concrete)
bande	F	band, group of people assoc. for purpose;
bande	F	(naut.) list, act or instance of leaning to one side
bande	F	band, strap, strip; long thin piece (of material) used to hold/
banque	F	bank, establ. for custody of money (rel. to bench/office of)
barbe	F	beard; fin (of fish)
barde	F	(cook.) larding; (armour) bard, ornamental caparison (for
barge	F	barge (flat-bottomed, with sails) for transp. of
barque	F	sailing ship w. 3 or more masts; small boat (rowing, fishing,
barre	F	device/mechanism for closing windows long, rigid
base	F	base (partie inférieure on wh. sthg placed), foundation, bottom
basque	F	shirt-tail (hanging out)
batte/bat	F	beater, beating (of gold) ; (sport) bat, mallet
bauge	F	lair (of wild boar); pigsty (by anal.) filthy place
bave	F	dribble, slime (left by snail, slug); (fig.) slur, smear
bêche	F	spade, garden tool compr. flat steel blade w. cutting edge
beigne	F	(pop.) blow, clout (idée de souche/F, that which rests on a trunk,
benne	F	skit, truck, scuttle; tip lorry; loader (of crane)
berge	F	bank (of river, canal); raised pavement, banked edge;
berme	F	footpath (along embankment)
bête	F	any animate (animal) except man; person dominated
bible	F	sacred writings; Bible; L. biblia, Gk biblos/papyrus (paper)
biche	F	hind, female deer, doe; (fam.) darling
bielle	F	(mech.) connecting rod (for transmitting motion, esp.
bière	F	coffin, bier: platform or stand on which coffin cont. corpse
bière	F	beer, ale
biffe	F	(pop.) infantryman
bile	F	bile, fluid secreted by liver and stored in gall bladder
bille	F	billiard-ball, marble, game of marbles; log, billet (of wood)
bise	F	(German word) dry cold wind blowing from north, north-east
bise	F	to embrace on cheeks/kiss on cheeks L. basiare/baiser
blague	F	pouch, small bag of suppl. material for tobacco
blague	F	joke, esp. hoax/invented story; (also, see 'pouch (small bag of
blanche	F	(mus.) note, sign indicating certain value/minimum (2 noir);

blatte	F	black nocturnal insect with flat body & biting mouth
boguc	F	enveloppe piquante of chestnut tree, marron;
boite	F	container of rigid material, easily transportable, often
bombe	F	hollow projectile filled w. explosive, launched by guns, etc.
bonde	F	standard opening for emptying water from reservoir/bath, etc.
bonne	F	(resident) maid, servant
borne	F	boundary-stone (pierre), milestone; landmark; (pl.) limits,
bosse	F	bump, lump, swelling
botte	F	réunion/collection of veg. matter, att. together;
botte	F	boot, shoe which encloses foot & leg
botte	F	boot - chaussure which enferme foot/leg;
bouche/s	F	mouth, lips; entrance, opening
boucle	F	buckle
bouffe	F	(pop.) eating (act of eating) (chère/cheer, fare)
bouille	F	basket for grape-harvest; (fam.) face
boule	F	ball; bowl; bowls; (fam.) head
bourbe	F	mire, sludge, mud, sediment wh. accumulates at bottom of stagnant
bourde	F	blunder, clanger, howler
bourre	F	(amas de poils) stuffing (for furniture); waste in textile ind.
bouse	F	cow dung
braise	F	embers (?from Ger., ->V braiser, braisiller), fading remains of
branche	F	lat. subdiv. of tree trunk/tree; division of complex system,
brande	F	1. heath, heathland; (? Might it be F as related to region??? esp.
brèche	F	opening, gap, hole; breach; any severance, separation;
brème	F	(slang) playing card
brette	F	rapier, long narrow 2-edged sword w. hilt (?pointed);
brève	F	(lg.) short vowel, short syllable
bribe(s)	F	scrap, crumb, morsel, small amount (onomat.)
bride	F	bridle, rein, reins; bonnet string; strap (of bra)
brigue	F	intrigue, underhand scheming
bringue	F	(pop.) gawky girl; spree (session: revelry, drinking-bout
brioche	F	light patisserie, often round; (am.) full stomach
brique	F	brick
brise	F	breeze LRPT/CED O.Span. briza/north wind
brisque	F	(mil.) long-service chevron (V-shaped stripes a/c length of
broche	F	pointed instr.; skewer, spit; pin, rod, spindle, spike, needle
bronche	F	each of the 2 main cartilaginous passages/conduits of the
brosse	F	cleaning utensil, assembl. of threads fixed on mount
brouette	F	wheelbarrow, simple vehicle for carrying small loads,
brousse	F	bush, undergrowth; (LRPT: shrubby degraded vegetation of
bruine	F	drizzle (petite pluie) (L. pruina, après bruma)
brume	F	light mist, haze; (fig.) vague conception L. bruma/cont-
brun	F	(obs.) dusk, nightfall; (mod.) (at) dusk (not in LRPT)
brute	F	brute; any animal except man (bête); not man;
bube	F	NID
bûche	F	log; (fig.) blockhead; (lit.&cook.) yule-log
buire	F	(archaeol.) ewer, flagon (lg jug, pitcher with wide
bure	F	lg piece of brown woolen fabric; monk's habit
buse	F	S ornith
butte	F	natural or artificial hillock/mound on which one places
cache	F	hiding-place
cagne/khagne	F	prep. class, highest form on arts side (slang in Fr. schools)
caille	F	quail
caisse	F	box, case, packing-case; chest; (mus.) drum; case, casing
cale	F	wedge, chock, block; (naut.) hold of a ship; slip-way, drydock;
came	F	(mech.) cam (rotating cylinder)
canche	F	hair-grass
cane	F	(female) duck
cange	F	(naut.) cangia (no further info. available)
canne	F	stem, rod, reed, cane
caouane	F	S zool.
cape	F	overcoat
carde	F	edible stalk of beets, chard, etc.; (text.) card,
cargue	F	(naut.) brail (furling, using brails) (brail - one of several

carne	F	bad, tough meat; (pop.) (horse) nag; (woman) slut, old cow
carré	F	cross-section; edge (of skate, ski)
carte	F	S form/flat/thin
case	F	traditional house (in 'exotic' countries); square/rectang. drawn
casse	F	breaking, breakage, damage (division of whole into bits);
cave	F	S cavity/vault
cendre	F	ash, ashes; cinders (remainder, residue)
Cène	F	relig. feast - the Last Supper, the Lord's Supper, Holy Communion
cesse	F	ceasing, respite (V cesser: to stop, come to an end)
chaîne	F	chain, suite of interlocking rings; (lit, fig.); bond, tie
chair	F	fleshy substance; flesh tints; nude portions; meat
chaire	F	official position; seat of pontif (apostolic see); pulpit
chambre	F	bedroom, space/room where one lies down' (ant.) encl. space,
chance	F	chance, fortune; (good) luck; risk, hazard; possibility,
chape	F	cope (cape worn in liturg. ceremonies);
charge	F	load, burden; function, appointment; OF carrier/move by
chasse	F	hunting, shooting, chase; the hunt; chase, pursuit;
chatte	F	female cat (M: chat)
chaude	F	(cook., metall.) heat
chèvre	F	adult female goat (opp. bouc); fromage de chèvre
chiffe	F	poor quality cloth; flimsy material; (fig) person of
chope	F	beer-mug, tankard; its contents (eg. mugful of beer)
chose	F	thing (vs. thingummy-jib) / ?Sen choice rel. to specificity?
chute	F	fall, descent, slope; waterfall; (by ext.) failure;
cible	F	target against wh. one draws/aims at; (fig.) butt
cime	F	S pointed
claque	F	slap given w. flat of hand
classe	F	coll. or div. of people, class, caste, set; type, series,
clenche	F	latch, fastening for door consisting of bar that can be slid
cloche	F	hollow bell-shaped instr. wh. resonates; bell; dish-cover;
cloque	F	blister (bubble, hollow structure); (hort.) rust, peach-leaf curl
coche	F	notch, cut, nick; (obs.) sow
coiffe	F	head-dress, head-scarf; (anat.) caul (cover); (bot.) calyptra
colique	F	colic, inflamm of gastrointest. tract causing acute pain
colle	F	sticky material; size, glue, gum, paste;
combe	F	coombe, comb; depression, deep valley (shape? of V?)
compte	F	act of evaluating quantity; count, reckoning; amount
conque	F	conch; (anat.) concha
coque	F	shell of certain fruits encl. nut/seed etc., eg. coque d'amande
corde	F	twine, rope, string (cf cordon M cord/line)
Corse	F	Corsica
cosse	F	shell, pod; envelope wh. cont grains of certain legumes;
couche	F	coating, layer; (obs.) couch, bed;
couche	F	(obs.) bed; (mod.) baby's nappy; childbirth (period of time);
coule	F	S clothing/hood
coupe	F	stemmed large glass/dish/bowl; prize given to winner of comp.
courbe	F	round line; curve, bend (cf. limbe/rounded edge)
courge	F	cooking/culinary plants cultivated for their fruits, eg.
crase	F	(med., lang.) crasis (fusion or contraction of 2 adj. vowels into one)
crèche	F	(obs.) manger, food trough; (mod.) the Manger, crib; day
crêpe	F	crepe (f) thin flat pancake (L. crispus/curled) (from pâte?) (ext:
crête	F	fleshy outcrop, red, serrated, cockscomb; line of ridge;
crève	F	(pop.) death)
croche	F	(mus.) quaver
croupe	F	posterior part (of whole); crop, haunch, hind quarters (of quadri-
croûte	F	crust, exterior layer of bread wh. hardens during cooking
cruche	F	(fam.) silly fool, personne; rounded container, pitcher, jug;
cuisse	F	thigh, leg of cooked fowl; others: cheveruil/cuisseau, gigue
cure	F	course of medical treatment; parish;
dague	F	dirk; first growth of antler (of young deer); tusk (of wild boar)
daine/dine	F	female fallow or red deer, doe
dame	F	lady; married woman; (cards, chess) queen; (draughts) king!!!
danse	F	series 'suite' of rhythmic movts of body (to music, etc.)
darne	F	(cook.) steak (of cod, salmon, etc.)

date	F	date, indic. of day, month, year, where act has occurred,
datte	F	(bot.) date, fruit of date palm (dattier)
daube	F	(cook.) daube; method of cooking (cooking slowly in closed
dengue	F	dengue-fever, acute viral disease trans. by mosquitos
dette	F	debt, sthg owed (money, goods, services)
dextre	F	right hand; (obs., exc. jest)
Diane	F	Roman goddess Diana
diane	F	(obs., exc. Lit.) reveille
diète	F	(restricted) diet; starvation diet
digue	F	dike, long construction/structure dest. to cont. water; (fig.)
dime	F	(hist.) tithe. 10th part, ancient tax on crop by church;
dinde	F	turkey-hen; stupid girl or woman (cf dindon/turkey-
donne	F	(cards) deal, action of distributing cards in a game
dope	F	(Eng.) drug(s), dope (drogue/F.médicament(M), remède(M)
dose	F	dose, proportion (of ingredients) (quantity, amount)
douane	F	admin. charged w. estab./oversight of taxes on merchandise;
douche	F	shower, douche
drague	F	(Eng. drag/pull) filet of fish in form of pocket; (mech.) dredger,
draille	F	(naut.) stay/rope/cable/chains (usu. one of set) to brace uprights,
draine	F	(ornith.) mistle-thrush (Turdus viscivorus), feeds on berries of
drave	F	whitlow grass
drê/èche	F	(brewing) draff, husk (outer covering) residue left after fer-
drège	F	(fish.) dredge, drag-net (heavy or weighted net to scour
drille	F	(techn.) drill
drisse	F	(naut.) halyard, line for hoisting, lowering sail
drogue	F	(obs.) pharmaceutical ingredient; (narcotic) drug
droite	F	from (straight) line/ligne droite; also (opp. left) to the right
droite	F	right; right hand;
drome	F	(naut.) spare masts, etc; (naut.) ships boats; main beam
duègne	F	(Spanish) duenna
dupe	F	dupe, person deceived w. out least suspicion
dure	F	earth, hard surface of (par terre)
èche	F	bait fixed to hook (for fishing), L. esca/food
encre	F	ink, coloured liquid (fluid/paste), used for writing
ère	F	era, epoch
fable	F	fable, allegory
face	F	face; front, face, front surface or aspect, part/area facing
faille	F	fault, fissure
faîne	F	beech-nut
faite	F	S slit
fane	F	turnip-tops, carrot-tops (incl. tiges (thin/long), feuilles (thin/flat)
fange	F	mud, mire, dirt, sludge; filth; (fig.) filth, squalour
farce	F	farce; trick, joke, prank; joke item, novelty; pièce comique
farde	F	bale (of coffee, 185 kg) (sthg heavy req. lifting/transp'ing)
fargues	F	(naut.) gunwales/gunnel, top of side of boat, topmost plank
fauche	F	state, fact of being broke/without money
faune	F	fauna (ens. of animal life of region); (pej.) people frequ. place who
fèces	F	(chem.) sediment, precipitate; (physiol.) faeces,
femme	F	woman (opp. man or girl); female
fente	F	long narrow opening (on surface of sthg solid, in thickness
ferme	F	farm, farm-house; farm-lease
fesse	F	buttock, each of the two fleshy masses at posterior end of
fête	F	relig. ceremony celebr. on certain days of year, esp. specific
feuille	F	leaf; sheet (of paper)
fiche	F	peg, cheville/peg, tige (tubular); ticket, tab, label (sheet of
fièvre	F	fever, abnormal elevation of temperature
figue	F	fig
file	F	file, row, suite (of people, things) in order, one behind other
filie	F	daughter, female descendant; girl; spinster
fines	F	(pl.) filler (substance, paste?) for compacting concrete) (not in LRPT)
firme	F	(comm.) firm
flache	F	wane, flaw (in wood), rounded surface/defective edge of plank
flambe	F	(bot.) iris; kris (Malay./Indon. slashing knife)
flamme	F	flame; (fig.) fire, ardour (lumière vive.; (mil., naut.) pennant

flèche	F	arrow, dart; spire (of church); that which advances to a point,
flemme	F	(fam.) laziness, sloth (grande paresse)
fleur	F	flower
fleuve	F	large river; river flowing into the sea
floche	F	tuft, puff, wreath (of smoke, etc.)/circular or spiral
flore	F	flora, the entirety of plants (of region, sp. area, etc.)
flotte	F	fleet; réunion of boats sailing tog. in same activity/
flûte	F	(mus.) flute, flautist; champagne glass
foëne/ène	F	(fish.) fish-gig, eel-spear (pole w. barbed prongs for impaling fish)
foire	F	large public market held on fixed dates/places; fair
foute	F	fourreau de cuir/leather holster attached to a saddle (to
fonte	F	melting; thaw, thawing; alliage of iron & carbon obt.
force/s	F	(often pl.) strength, vigour, energy, power, ability;
forge	F	forge, smithy; iron-works OF. forgier, L. faber/crafts-
forme	F	form, shape; (human) figure, ext. appearance; state; kind,
fosse	F	pit; hole in ground, trench; (mining) pit; tomb; (hole/cavity
fouille	F	digging, excavation into earth to discover/study ruins;
fouine	F	(zool.) marten, beech-marten (V: fouiner/to pry, nose about)
fraise	F	strawberry (fruits fem.); (tech.) milling-tool (?toos fem.)
France	F	France
frange	F	band of material around border, ie. fringe; (fig.) borderline
frappe	F	knocking, act of touching roughly w. several blows; knock;
frime	F	(fam) sham, make-believe; pretence
fringues	F	(pop.) clothes
fripe	F	rags
frite	F	pomme de terre frite
fronce	F	gather, crease (eg. jupe à)
fronde	F	(bot.) frond
fronde	F	frond, leaf of plants w. out cotylédons; compound leaf of a fern
frusques	F	old clothes, rags (from Saint Frusquin
fugue	F	act or action of flight, escape; (mus.) fugue, composition in counter
fuite	F	flight, running away, escape
gâche	F	piece of metal furnished w. opening in wh. engages itself
gaffe	F	interpolate/clumsy act, words (V accrocher avec une gaffe
gaffe	F	(naut.) gaff, boat-hook to catch fish/mooring; gaffe, blunder
gaine	F	sheath, case, cover, sleeve, env. having the form of the object it protects (étui, etc.)
galle	F	(bot.) gall; gallnut (abnormal outgrowth of tissue)
Galle	F	Wales
gambe	F	(naut.) shrouds, set of ropes/cables to stay (brace upright) mast;
gamme	F	suite; (mus.) scale; gamut; range, gradation, series
gangué	F	(min.) gangue; (fig.) matrix, covering, wrapping
garde	F	action de/situation, of guarding; guard, watch;
garde	F	woman who looks after sick person or child
gare	F	railway station; (river) lay-by, basin; (bgs/install.
gauche	F	L-hand side
gaude	F	dyer's weed, weld (several plants yielding dye, eg. woad, dyer's
gaze	F	(material) gauze (from Arab. town Gaza (?Fr gazer/to conceal)
gemme	F	gem, precious stone; pine-resin
gêne	F	(obs.) torture, torment; (mod) illness (malaise) or trouble, difficulty
Gênes	F	Genoa
gerbe	F	(agric.) sheaf, stook; bunch/spray of flowers (bound, bunch)
gesse	F	vetch; everlasting pea; leguminous plant cult. for food
geste	F	(lit./hist.) tale of adventure/romance involv. hero,
gifle	F	S flat/hand
gigue	F	haunch (of venison); (fam.) leg; (pop.) lanky girl
gildes	F	(mediaev.) guild, assoc. of mutual help among
glace	F	ice; glass; (fig.) chilliness, iciness (of soc. atmosph.);
glair	F	raw egg-white; by ext. any white viscous liquid secreted by
glaiive	F	two-edged sword; sword, blade; act of war; (fig.) power
glande	F	cell or organ whose function is to produce a secretion; gland
glane	F	gleaning, act of gathering sthg (small) carefully, slowly; small
glase	F	clay, mart, potter's earth/clay, loam (Gaulish, from glu/sticky)
glass	F	(slang) glass (of sthg to drink) (analogous w. F. boisson/
glèbe	F	cultivated soil, earth

glène	F	(anat.) glene, socket, (glenoid: having shallow cavity)
gloire	F	praise, exaltation, honour accorded by general consent
glose	F	comment, gloss; short explan/interpr. of word/expression;
glotte	F	(anat.) glottis
gomme	F	gum; (india) rubber, eraser; (hort.) gum, gummosis
gonze	F	(slang) man, chap
gorge	F	partie antérieur du cou' neck, throat; bosom, breast
gouge	F	(tech.) gouge; type of chisel w. blade used for gouging
gouine	F	(obs.) prostitute; female homosexual
gourde	F	var. of marrow, calabash, gourd, for using as container, cup, etc.;
gourme	F	(med.) impetigo, contagious bacter. skin disease;
goutte	F	drop of liquid, small round form; mouthfull or nip;
grace	F	favour a/c freely to s'one; grace of movt/form/expr., act of
graine	F	part of flowering plants which, wh. germinated, assure
graisse	F	fat, grease, unctuous substance spread around various parts
grange	F	barn (Not 'grange')
grappe	F	coll. N.: assembl. of flowers/fruits on common axis; coll of
grèbe	F	(M or F/LRPT 534.) grebe, aquatic bird w. downy silver plumage
greffe	F	graft, grafting; (V: greffer/ to graft, metaph. from stylet>
grègues	F	(pl., obs.) breeches, trousers ext. to the knee for riding, etc.
grêle	F	hail, hailstorm; (fig.) hail, volley
grève	F	stretch of flat land bet. on edge of sea, strand, shore; beach; strike
griffe	F	claw; pointed hooked talon/nail
grigne	F	(not in LRPT) pucker; slit (in breadcrust)
grille	F	assemb. of parallel/crossed bars; wrought-iron gate/railings;
griotte	F	(bot.) morello cherry; kind of marble with red and brown
grippe	F	flu, influenza; dislike/aversion of s'one
grive	F	thrush
grogne	F	(fam.) grouse; grouching, moaning; dissatisfaction/annoyance
grotte	F	enormous cavity in rock, the side of a mountain
grume	F	1. bark (left on felled trees); undressed timber;
guèpe	F	wasp
guerre	F	war; warfare, hostilities; armed fight bet. States
gueule/s	F	face, mouth, etc.; mouth of animals;
guigne	F	heart-cherry; (fam.) bad luck (chance F/maichance F)
hache	F	hatchet, short axe used for chopping wood (instr. a larme
haire	F	hair-shirt; (text.) rough sackcloth
hampe la	F	shaft, long wooden handle (M) for fixing weapon/symbol;
happe la	F	cramp, cramping-iron; strip of metal w ends bent at R.
harde	F	herd (of deer); flock
hargne	F	peevishness/irritability expr. in acerbic/agressive comments
harpe la	F	harp; (moll.) harp-shell (res. harp); (masonry) tooting
hart la	F	strong flexible twig, esp. willow, for binding together
hausse	F	obj./mech. used to raise sthg; heightener, prop, block;
herbe	F	grass; herb, plant
heure	F	hour, period of time equal to 1/24th of day, subd. 60 mins
honte	F	shame, disgrace, painful emotion res. from awareness
horde	F	horde, rabble
hotte	F	large basket or container carried on back
houille	F	coal, pit-coal, combustible mineral
houppe la	F	tuft, coll./assemb of shoots of grass, threads, crest, top-knot
housse	F	loose cover, dust-cover, dust-sheet (as w. feuille, etc.)
huche	F	chest, bin; large coffre (wh. opens w. lifting of lid) - use
hune	F	(O.Sc. hunn) platform fixed to mast of ship at certain height
huppe la	F	tuft of plumes of certain birds worn as headdress
hure	F	(cook.) head of boar, jowl of salmon, etc.; brawn
hutie	F	hut, small house or rudimentary shelter made of wood,
hydre	F	Hydra, serpent with 7 heads Gk hydra, hudra/water
ides	F	(pl.) (Rom. antiq.) ides, 15th Mar/May/July/Oct, 19
Inde	2	India
ire	F	(obs.) wrath, anger, ire
jambe	F	leg, shank; stem (of glass)
jante	F	rim (of a wheel); fellow, felly
jarde	F	(vet.) bone spavin (enlarg't of hock w. bony growth)



jarre	F	jar, earthenware vessel, large basin, vat
jauge	F	gauge; capacity; instrument for measuring quantity,
jeep	F	(US) Jeep
jupe	F	skirt
laine	F	wool; woolly hair; fibre; (bot.) down
laisse	F	leash, lead, strings (geog.) tide mark
lame	F	(metall.) plate, sheet, foil; wire; (wave, billow)
lampe	F	lamp, container holding liquid or combust. gas for
lande	F	étendue/expanse of earth that only specific wild plants will
langue	F	fleshy musc. elong/slim mobile organ in mouth/tongue;
larme	F	tear; drop (goutte de liquide salé wh. runs in a/c emotions
larve	F	larva, grub; (ant.) spectre, ghost (C-E to M repres)
latte	F	long strip of wood (planche/F)
laudes	F	lauds, traditional morning prayer
lave	F	lava
lèche	F	someone who flatters slavishly
lente	F	nit; egg of louse
lettre	F	letter, form of 26 signs in alphabet; sign of writing; words of text;
lève	F	mallet, mail (game wh. ball driven along alley by mallet);
lèvre	F	lip, each of the 2 fleshy parts surrounding mouth
liane	F	liana, climbing plant of tropical forests
liasse	F	bundle of papers, file of papers placed on top of each other;
liesse	F	merriment, collective joy (esp. public mass)
ligne	F	line; row; formation; outline; L. linea, from linus/textile thread
ligue	F	league; confederation; association/union of persons, nations, etc.
lime	F	(bot.) lime, lime-tree (citrus); (techn.) file;
lippe	F	thick prominent lower lip (under-lip) (either of 2 fleshy
lire	F	lira, Italian standard monetary unit (unité)
lise	F	(COFD trans into Eng) quicksands, deep mass of loose wet sand
lisse	F	limbs, frame of hull;
loche	F	loach, freshwater fish w. edible flesh, carp-like, long narrow
loge	F	caretaker's/porter's lodgings
longue	F	(mus.) long syllable, long note
lope	F	homosexual (or is it F due to human/generic?)
louche	F	Norm., Picard soup-ladle, large spoon w. long handle for
loupe	F	magnifying glass (convex shape); (pathol.) tumour (con-
lourde	F	Subst. N.; (fam.) door (F. Adj. /difficult to move due to
loure	F	loure, kind of bagpipe; dance played on the loure
lueur	F	glimmer, gleam; glint, feeble or faint light
luge	F	light one-man toboggan (on runners)
lutte	F	bodily combat betw. 2 adversaries who try to knock each other
luxe	F	luxury, richness, sumptuousness; magnificance;
lyre	F	lyre, anc. stringed instrument of tortoiseshell/crossbar, plucked
mâche	F	valerianac. plant w. small elongated leaves eaten as salad
maille	F	link, stitch, chain mail; maille (old copper coin (from médaille/
manche	F	part of clothing wh. wraps arm, sleeve; flexible pipe;
mangue	F	mango, fruit of trop. Asian tree; Port. from Malay manga, from
manne	F	(O.Dutch: mande) large wicker basket (open weave)
manne	F	manna, miraculous nourishment sent to Hebrews in desert;
marche	F	flat surface, outer limit of body; act of walking; suite of steps
mare	F	shallow stagnating pool, pond (petite nappe d'eau); or
marge	F	margin (of paper, books); border, edge; (fig.) latitude,
marque	F	mark, imprint, stamp, sign, indic. of; superior quality
masse	F	mass, large quantity; mace;
mèche	F	S shape/plait
mer	F	sea, expanse of open water ('vaste étendue d'eau salée)
merde	F	excrement, shit, turd; expr. of admiration of
merdre	F	faecal matter
mère	F	mother
messe	F	Mass, celebration of the Eucharist
miche	F	large round loaf
mine	F	look, appearance (exterior, opp. to mental, internal); mine, pit;
mire	F	sight, aim, imaginary line of fire;
mise	F	putting, setting, laying; stake, outlay; dress, manner

mûte	F	parasitic of freelifving arachnid
mode	F	fashion/mode/way/manner/style/custom (coll. ways of doing
moelle	F	marrow; (anat.) medulla; (bot.) pith; (fig.) gist,
mœurs	F	manners, habits, customs, ways; morals; (animal) behaviour
moire	F	watered or shot silk; watered effect; textile wh. presents
moise	F	(techn.) cross-piece (transverse beam/joint), tie-beam (horiz.
mole	F	(sci.) basic SI unit of amount of substance -
môle	F	sunfish, w. long pointed dorsal & anal fins, fringe-like tail fin
montre	F	watch; show, display, shop-window; show-case; (pottery)
moque	F	(naut.) heart, dead-eye/round flat 3-holed block for extending
morgue	F	haughtiness, arrogance
morgue	F	morgue, mortuary
mort	F	cessation of life; end of a human life (circ.'s of that end)
mouche	F	fly; winged dipt. insect, numerous species: pierce skin to suck
moule	F	edible mollusc - mussel (shell in two hinged halves)
mule	F	hybrid F of donkey and F horse
mule	F	slipper with toe cut-out (today worn by women); hybrid
mûre	F	fruit of mûrier (used in pharmacy); fruit of blackberry bush
muse	F	muse; poetic inspiration (V musert to idle away time)
nacre	F	mother-of-pearl, nacre, inner layer of shell
naïve	F	Not in dictionaries
nage	F	movt, act of swimming; (naut.) rowing; sweat,
nappé	F	tablecloth (to cover meal table); (fig.) vast even layer or
nasse	F	bow-net, lobster-basket
navé	F	(obs.) sailing ship(à voile), vessel; nave (of church) where
néfle	F	medlar, fruit of medlar tree res. crabapple but not edible
neige	F	congealed water in upper atmosphere falling as flakes;
népe	F	(ent.) water-scorpion
niche	F	recess made in width of a wall/side/inner surface to protect/
nielle	F	(bot.) ear-cockles, corn-cockle / family of flowering
nippe	F	poor, used clothes, or dirty badly-fitting; (fam.) togs,
niqûe	F	sign of mockery
noise	F	quarrel (obs. exc. chercher noise a qu'un)
none	F	noones, ninth hour; noones (Roman calendar)
norme	F	norm, rule, pattern, standard, type
nûque	F	nape, back of neck (cou), back of/hinder surface of human body
ocre	F	ocre (mineral, pigment)
ode	F	ode, lyrical poem sung accomp. by music
oille	F	NID
ombre	F	shadow created when object intercepts sun's ray;
once	F	ounce (weight) (zool.) snow-leopard
onde	F	(lit.) water in natural setting (sea, lake, river); wave
orge	F	barley (grass with simple corn-like ear); widely cultiv. for grain
page	F	leaf/sheet of paper as a unit, in book, newspaper, etc.
paille	F	straw, chaff, ens. of stalks (tige/F) of var. cereals; flaw, mote
paire	F	pair, couple, brace
palme	F	palm leaf, frond (thin, flat leaf; (fig.) success, victory
pampre	F	branch of a vine with its leaves and grapes; (poet.) vine,
panne	F	1. fat (of pig) 2. breakdown, engine failure (arrêt); 3. (big.) purfin (of
panse	F	rumen, paunch; (fam.) belly; bulge, body or oval portion
pâque	F	Heb. Passover, Easter (fem.) feast of unleavened bread
part	F	share, part, portion; side; after portioning is returned
passé	F	pass, passage, turn, Fr. V. passer
pâte	F	firm preparation made of flour consumed after cooking;
patte	F	member that supports body, used for walking (animals)
paume	F	palm (int. of hand); (real) tennis, tennis-court played in
pause	F	pause (interruption momentanée - period/F of stop) sim. to
payé	F	pay (see /paie/); act of paying salary, solde (F); time between
pêche	F	fruit of peach tree, w. v. hard nut, and delicious flesh; act/manner
pêche	F	fishing, act or manner of fishing; (coll.) catch, fish/fruits de mer
peille	F	rags (cotton or linen cloth waste for manuf. of paper)
peine	F	punishment; sanction applied to title of punishment/repairation for
pelle	F	tool composed of thin 'plaque' fitted with handle; spade,
pente	F	incline (of a surface) in relation to horizontal; horiz.

Perce	F	Persia; (text.) chintz
perce	F	(faire une perce) pierce; piercer, borer (Fr V percer'to pierce')
perche	F	perch, teleost (spiny-finned) freshwater fish with delicious flesh
perche	F	large piece of wood, pole/rod; (gaule, gaffe)
perle	F	pearl, bead
perte	F	fait/événement de perte q'un/loss (sep'n by death); d'être
pesse	F	(bot.) mare's tail (pond plant)
phase	F	phase (of moon, planets), any distinct or charact. period or
phrase	F	(lang., mus.) phrase (unit forming constituent structure
pièce	F	part detached from whole; each object/element or unit (of
pierre	F	Earth's solid crust, earth's surface; block or fragment
pipe	F	measure, dimension of sth measured, standard;
pîc	F	hail of blows; crushing defeat; heap of objects piled
pilule	F	medicine in shape of small ball, to be swallowed
pince	F	instr. composed of 2 articulating levers to seize/pull
pinne	F	Pinna, wing shell (none in dictionary, no cap. P); feather, wing, fin
pinte	F	pint, former measure of capacity for liquids
pioche	F	tool made of iron w. 2 opposing pointed ends of wh one is
pipe	F	pipe, conduit/tuyau (both M) ending in small bowl filled
pique	F	cutting remark (parole, allusion qui blesse)
piste	F	track which leads from s'wh to s'wh else, trail;
place	F	public space, surr. by constructions (part of a lieu/space, or
plage	F	beach, strand; sea-shore;
plaine	F	vast stretch of flat/gently undulating countryside (opp. plan/
plainte	F	complaint, plaint, lamentation; wail, moan, groan;
planches	F	board, plank, shelf
plante	F	sole, inferior face (of foot) along base from heel to toe
plante	F	vegetable, plant, esp. w. root, stem, leaves of small
plaque	F	plate, slab, star, lid, etc.
plate	F	(regional) small light boat w. flat bottom
plèbe	F	(Rom. ant.) plebs, 2nd order of Rom. people; (pej.) lower orders
pleuvre	F	pleura
plonge	F	work of 'plongeurs', ie. divers, dishwashers
plume	F	feather, plume, quill; pen; (fig.) style of writing
poche	F	pocket, small bag in garment for putting objects into;
poêle	F	cooking utensil with shallow pan and long handle
poigne	F	grip, grasp; strength of the fist/hand to grasp/grip; ability to
poire	F	pear
poisse	F	(fam.) malchance/bad luck; (idea of 'evil eye')
pomme	F	apple; pippin; apple-shaped fruit
ponte	F	clutch of eggs, action of laying eggs;
porte	F	(vx) gate, opening in surrounding wall of a town, for
pose	F	place, pose (V poser/to place)
poste	F	post, place or stage for horses, transport of travellers
poudre	F	powder, dust; solid substance formed from tiny loose particles;
pouf	F	pad, bustle (in dress); pouffe, low seat (onomat.)
pouilles	F	(chanter p.à) to jeer at, make offensive remarks to
poupe	F	(naut) stern; (fig.) luck
pourpre	F	deep red pigment (matière colorante) extracted from a mollusc;
pousse	F	shoot, sprout (Fr V pousser'to push, impel'
presle	F	horsetail (fern, reprod. by spores)
presse	F	press (mechanism ex. pressure on solid to compress);
preuve	F	S senses
prime	F	premium; bonus, bounty, prize; free gift (esp. exch for
prise	F	taking, capturing; (law) appraisalment (V. prissr/to value
prude	F	prude (can men not be prudes too?)
Prusse	F	Prussia
pub	F	(abbrev) publicity, (fait de) exercising psych. action on
puce	F	flea, small wingless blood-sucking insect that jumps,
purge	F	remède purgatif; purge, purging, the act or process of
pute	F	prostitute (from 'putain/F)
quiche	F	quiche, savoury tart made w. eggs, cream etc.
quinte	F	interval of 5 degrees in diatonic scale (gamme/F);
race	F	family consid. in its continuity; race, categ. of people

rade	F	large basin of water w. outlet to sea for ships to take shelter
rage	F	rage; state, emotion of anger; violent desire, mania,
rame	F	1. oar; 2. (obs.) branch, bough; (hort.) stake prop stick;
râpe	F	utensile de cuisine used for grating food/condiment;
rate	F	spleen, organ situated nr stomach (consid. as source
rate	F	female rat (M: rat)
rène	F	rein
rente	F	periodic revenue, regular investment income
ride	F	wrinkle; ripple (on water); ridge (on snow or
rime	F	rhyme, rel to terminal seq. of sim.sounds at ends of lines of verse
ripe	F	(mason.) scraper
rive	F	bande de terre qui borde un cours d'eau important; bank of river,
rix	F	violent quarrel accompanied by blows, in public place
robe	F	(anc.) men's clothing in one continuous piece to knee/ankle;
roche	F	rock, boulder (as debris); stone, esp. hard, eg. eau de roche
rogne	F	anger, bad humour (colère)
ronde	F	a circular space; round; patrol (by analogy)
roque	F	(chess) castling (from V roquer/to castle (see also 'roc'(m)
ruche	F	colony of bees; swarm; hive, beehive/shelter fitted for bees
ruelle	F	narrow street, lane, alley; space bet. bed and wall
ruine(s)	F	(sg, not pl.) ruin, collapse, decay (esp. of anc. bldg); loss, destruct'n;
ruse	F	craft, cunning, wile, deceit; behaviour put on to deceive
salle	F	hall; entrance-hall; large room, assembly-room; (theatr.) house;
salve	F	volley, salvo, burst, salute; (fig.) round (of applause)
sangle	F	broad flat band to hold/pull in sthg; girth, saddle-girth;
sape	F	(fam.) clothes (les vêtements)
sape	F	(obs.) hoe, mattock, scythe; (mil.) sapping
sauge	F	sage, salvia, herbaceous plant having medicinal/culinary uses
scène	F	stage, area, scene, stage, scenery; theatre; part, division of an act;
schlague	F	flogging (Is this a Loanword forced to become F by strength of
sèche	F	cigarette (tobacco enveloped vs. cigar/tobacco rolled)
secte	F	sect, org'd group of people w. same doctrine, common
seiche	F	cuttle-fish, edible marine mollusc (squirts dye for protection)
seime	F	(vet.) sandcrack, deep crack or fissure in wall of horse's
self	F	self-induction; coil, choke; (abbrev.) self-service
selle	F	saddle
sente	F	path (regional word LRPT petit chemin, sentier)
serf	F	serf (F: serve)
serge	F	serge
serre	F	talon, claw; (fig.) clutch, grip (to close on sthg?)
serte	F	setting, mounting (equiv. of sertissage: same meaning)
sève	F	sap, solution of nutritious minerals circulating in plants; (fig.)
sicav	F	sicav (sigle de société d'investissement à capital variable)
sieste	F	(Span.) siesta; repose taken after midday meal during
sixte	F	6th note on musical scale (gamme/F:)(fenc.) sixte, 6th
sœur	F	sister
soif	F	thirst, feeling of thirst, craving to drink, dryness in mouth
solde	F	remuneration paid to military (reward for work/service)
sole	F	floor (of furnace); sole of hoof (bottom-most layer)
sole	F	sole, flat round fish with delicious flesh
somme	F	1. sum, total, amount
sonde	F	sounding-line; (mining) instr. meas. altitude, depth, etc.
sorbe	F	sorb-apple
sorte	F	class; sort, kind, species; manner, way
souche	F	stump, remainder of trunk base w. its roots after tree felled
soude	F	saltwort, odd-shaped (chenopodiaceous), prickly leaf, flower
soupe	F	(anc.) slice of bread sprinkled w. soup (bouillon); (mod.)
source	F	water wh. comes out of earth; place wh. such water emerges;
sphère	F	sphere, 3-dimen. closed surface; solid figure bounded by sur-
squame	F	squama; scale
steppe	F	steppe (huge uncultivated plain) (from Rus.)
sterne	F	(ornith.) tern, acqu. bird of subfam. Sterninae, fam. Laridae
strate	F	stratum, layer
strige	F	vampire, corpse rising at night to drink blood

strombe	F	Not in dictionaries
strophe	F	first of 2 movts by chorus; first of 2 metrical systems
Suède	F	Sweden
sueur	F	sweat, perspiration, secretion from sweat glands
suite	F	retinue, train, attendants following; pursuit; sequel
syrphe	F	Not in dictionaries
tache	F	spot, stain, flaw, petite étendue de couleur; surface soiled
tâche	F	task, job, specific piece of work to be done/executed
taille	F	rent paid to seigneur (levy); (taillé/cut, dimension, forme) size
taile	F	sucker
tanche	F	tench, freshwater fish w. dark, slimy skin, delicious flesh, w.
tape	F	S flat/hand
tare	F	waste, loss, deficiency
targe	F	(hist.) targe, buckler (small round shield worn on fore-
tasse	F	small container w. handles or à l'oreilles; its contents
taule	F	(pop., pej.) bedroom, hotel room; (mil. slang) prison; also
taupe	F	mole, small insect-eating mammal living underground,
taure	F	heifer, young cow (opp. taureau/bull)
teigne	F	small moth w. darkish drab colouring (ex. mite/F); parasitic
teinte	F	colour, hue, tint, shade (complex); appearance peu marquée;
tempe	F	(anat.) temple, side of the head bet. corner of eye and
terre	F	earth, land, shore; world
thèque	F	(bot.) tekka, (zool.) capsule, container
thèse	F	thesis, proposition or theory held to be true/defends by argu't
thune	F	(pop. vx) coin 'pièce' worth 5 francs
tierce	F	diff of pitch of 3 degrees (do-mi) sounded together (harmonic
tige	F	elong. part, eg. trunk of tree/stem, stalk, eg. of rhubarb, sthg
tique	F	(ent.) blood-sucking parasitic insect/arachnid/transmits
tire	F	motor-car; (pop.) tug pul
tmèse	F	(gram.) tmesis, interpolation of word/group of words betw.
toge	F	toga (esp. Roman, draped garment worn by citizens)
toile	F	woven cloth, linen, canvas; textile, fabric
toise	F	(anc. meas.) fathom, lineal measure of 6 Fr. feet; (mod.) appartus
tôle	F	sheet-metal
tombe	F	tomb, grave; headstone (place for burial of corpse)
tomme	F	tomme (fermented pressed cheese from Savoie)
toque	F	woman's small hat or bonnet (Engl. men/women's hat!!!)
torche	F	large flame (baton of resinous wood); electric lamp in form of
torque	F	??? diff. expl: LRPT/rigid collar vs COFD/archaeol.)
touche	F	act of touching, result of act/contact; colouring cloth/canvas;
touffe	F	tuft, bunch, wisp, clump, cluster
tour	F	tower, turret;
tourbe	F	rabble, mob (foule/ramassis de personnes méprisables); peat, bog,
trace	F	trace, imprint or series of imprints, marks left by passage
traîle	F	ferry cable, ferry (Not in LRPT)
trame	F	weft, wool; (TV) frame; (photo.) screen; ens of threads wh.
tranche	F	piece of sthg edible, cut fairly thinly, from larger whole
transe	F	feeling of extreme apprehension/anxiety; dread; great fear;
trappe	F	trapdoor; snare formed from hole covered w. branches etc.
traque	F	(hunt.) driving, beating (urging in some direction/chase etc.
treille	F	vine arbor; vine growing on trellis
trempe	F	plunging, immersion in cold bath of metal, alloy heated
tresse	F	assemb. of 3 long locks of hair crossed and plaited, held
trêve	F	provisional cessation of combat; interruption of fight
triche	F	(fam.) trickery
tripe	F	tripe, guts, belly; dish made w. prepared guts of ruminants
trique	F	cudgel, short thick stick used as weapon (not dev.!)
trogne	F	(fam.) face (grotesque or pleasant)
trolle	F	(hunt.) unleashing hounds for hunt
trombe	F	tropical cyclone of column of water whirling up from water surface
trompe	F	trumpet, horn, hunting-horn; (tech.) aspirator
troupe	F	troupe, band, company, crowd, squad; party of people
trousse	F	truss, bundle; case, for razors, toilet articles, needles, etc.)
truite	F	trout, from Gk trotkes/sharp-toothed

tuile	F	tile, plaque/plate of cooked earth; (fig.) sudden misfortune, bad luck
turbe	F	NID
vache	F	female of bull (taureau); personne méchante qui se venge ou
vague	F	ridge, unequalness of surface of stretch of water due to currents/
valse	F	(mus.) dance in 3 time, where each couple turns while
valve	F	each of 2 parts of a sea-shell of molluscs, crustac., etc.
vamp	F	(US) vamp (femme fatale et irrésistible)
vanne	F	water-gate, sluice-gate, vertical panel to regulate output
vanne	F	(fam.) rude remark or allusion (V vanner/to torment, rail at)
vape	F	sleepiness (dans l'hébété)
vase	F	mud, mire, slime (cf NM: vase, vessel/diff etym.)
veille	F	watching; waking; nightwatch; vigil, eve, day before.
veine	F	vessel w. branches which take blood from capillaries to heart
venté	F	exch. of property for money, céder q'ch. for money;
vêpres	F	vespers, relig. ceremony (during l'après-midi)
verge	F	twig, stick, cane, verge (for striking, flogging)
vergue	F	(naut.) yard, cylindrical long piece of wood/metal spar, tapered
verse	F	torrent (of rain falling abundantly); beating down of crops
verve	F	imagination & fantasy with words; verve, spirit, animation,
veuve	F	(adj.) veuf/veuve - widowhood of either; personne veuve;
veuve	F	African sparrow with black and white plumage; black widow spider
viande	F	(old.) foodstuffs, nourishment; (mod.) meat, flesh
vierge	F	virgin, maid; (astron.) Virgo
vigile	F	vigil, eve of some important festival, e.g. Christmas eve
vigne	F	vine (arbrisseau), any of the various plants that creep, climb;
ville	F	town (from L.villa/country house, ens. usu. consist. of farm,
viole	F	viol
vive	F	weever, venomous spines around gills, dorsal fin (from ONthnFr.
vogue	F	popular style; period of pop. usage or favour
voile	F	area of strong fabric (synthetic material) to hold wind; sail,

#### ALTERNATIVE GENDER ASSIGNMENTS

drole	M/F	(obs.) M: rogue; (mod.) M/Fcoquin/e; gamin/e,
gosse	M/F	small child
hôte	M/F	host (F: hôtesse)
jeune	M/F	young person, youth, adolescent (jeunot: (fam.) young man)
hymne	M/F	song of praise (F); chant of praise
lâche	M/F	LRPT: n. (no gender) person w.out moral backbone;
mort	M/F	(F): cessation of life; dead person (M/F)
paon, -ne	M/F	peacock, peafowl
pingre	M/F	miserly person
proches	M/F	kindred, near relatives; LRPT: parents
prof	M/F	(abbrev.) prof(essor, M or F)
nain, -ne	M/F	dwarf
saint, -e	M/F	saint
snob	M/F	(Eng.) snob, social climber

trot**	1/2	trot, trotting; steady pace faster than walk lifting each
djain		NID



## NOUNS IN CORPUS WITH FINAL PHONES /ɪʊ/

## Masculine nouns

accessit	M	hon. mention; distinction, recompense acc. to those w.out having obt. approp. level
acolyte	M	minor officer who attends priest
aerolit(h)e	M	aerolith, stony meteorite (not from Earth - must be M)/meteorite/rock-like substance
annamite	M	Annamese language
anthracite	M	(rock) anthracite (Gk. rough)
antimite	M	moth-proof
barnabite	M	monk, follower of St. Barnabas
copro-lithe	M	coprolite (stony nodules of rock, from Gk lythos)
démérite	M	(Lit.) fault, demerit, mark given against person for failure, misconduct
endoparasite	M	(biol.) endoparasite (parasite that lives in body of host)
epiphyte	M	plant such as moss that grows on another plant but is not parasitic upon it
ermite	M	hermit, eremite; L. eremitos 'living in desert'
granite	M	rock that is v. hard, granite (crystals of feldspath, quartz & mica) Gk. granos (grain)
hoplite	M	heavily-armed infantryman (Gk hoplon (weapon) + -ites/go
mellite	M	product mellite; medicament prepared with honey
mérite	M	merit, that wh. render someone estimable; ens. of qualities cons. estimable
nitrite	M	ester of nitrate acid (-ite (nitrite))
obit	M	(Cath.Liturg.) memorial service
oolithe	M	NL oolites (egg stones) (geol.) stone (kind of limestone)
ophite	M	(min.) ophite (Gk for snake + -ites
opposite	M	reverse LL positio, ponere (lay down+ob(against)
prakrit	M	group of Indian languages formed from Sanskrit
quartzite	M	quartzite, hard rock, white or grey sandstone
termite	M	(ent.) termite (genus Isoptera (warm tropical region)
theodolite	M	surveying instrument
trachyte	M	trachite, light-coloured finely grained volcanic rock; trachytic crystals
transit	M	transit (loc.); passage L. transir
trilobites	M	Hot in dictionaries (only in Tucker et al 1977)
troglydite	M	troglydite, cave-dweller; inhabitant of cave
vélite	M	soldier in light infantry

## Feminine Nouns

aélite	F	aetites (no further info available)
albite	F	(min.) albite
ammonite	F	ammonite
anhydrite	F	(min) anhydrite
appendicite	F	appendicitis, inflam. of appendix
aragonite	F	aragonite, white or grey mineral found in sedimentary rocks or as deposits from hot springs
bakélite	F	bakelite, Trademark; any one of class of thermosetting
baryte	F	baryta, barium oxide, white mineral Gk barus + ites
bauxite	F	bauxite, mineral found in Les Baux (Gk -ites); siliceous clay-like substance (roche siliceuse)
blepharite	F	inflammation of eyelids (Gk -ites
bonite	F	bonito, tunny (spiny-finned)-like (marine) food fishes in warm
bronchite	F	(med.) bronchitis (Gk -ita (2)
bryophytes	F	plant of div. Bryophyta Gk bruon (moss)+phuton (plant)
calamite	F	min. Palaeont. (Carboniferous) plant
calcite	F	white mineral found in rocks Gk-ites
colite	F	(med.) colitis (Gk. -itis)
cordite	F	explosive material, from celulose nitrate/salt, ester
dendrite	F	dendrite; (min.) crystal that has thread-like branches in rock; (zool.) thread-like ext. of nerve c
durit(e)	F	pipe, tube of treated rubber for connecting bits of motor vehicles;
élite	F	ensemble of the most remarkable people, members of gifted community
encephalite	F	(med.) encephalitis
endométrite	F	(med.) endometritis (?inflam. of uterus membrane??)
entérite	F	(med.) enteritis, inflam. of intestine
entérocélite	F	(med.) enterocolitis



épite	F	(naut.) tree-nail, dowel used for pinning planks or
epsomite	F	Epsom salts, medic. prep'n of hydrated magn.sulphate
espionnite	F	spy-mania, abnormal excitement
hematite	F	(min.) haematite (red, black mineral, source of iron)
hepatite	F	inflamm of liver, hepatitis
lèche-frite	F	(cook.) dripping-pan
limite	F	line separating two adj. terrains/territories; extreme part
magnetite	F	black magnetic mineral, from Magnesia
malachite	F	stone - malachites
mammite	F	(inflamm) mastitis
manganite	F	(min.) manganite, blackish mineral (Gk -ites
marcassite	F	pale yellow mineral (Gk -ites 'mineral')
marguerite	F	flower (L. margarita from Gk mageron/margarites (pearl) -ites
marmite	F	stewpot, saucepan (OF marmite)
mastoidite	F	(inflamm) mastoiditis
meningite	F	(inflamm) meningitis
nephrite	F	(min.) nephrite (var. of jade); (nem.) nephritis
nevrite	F	neuritis (Gk neuron, Sansk. snavan, sinew
oesophagite	F	(pathol.) oesophagitis (Gk -ite)
orbite	F	orbit (L. orbita, orbis (circle)
orchite	F	Gk -itis
osteite	F	(pathol.) osteitis (Gk -itis
osteoarthrite	F	(med.) osteoarthritis (Gk -itis)
otite	F	(med.) otitis Gk. otikos (ear) + itis
poursuite	F	pursuit, chase (chasse, suite)
réussite	F	success (in sthg); game of cards/patience
stalactite	F	stalactite, dripping water forming calc. deposit projecting downwards
stalagmite	F	stalagmite, calcium deposit projecting upwards
thallophytes	F	div. of group Thallophyta, any plant lacking true stems/roots/leaves (algae/fungi, etc.)
thorite	F	orange, black or brownish radioactive mineral in cryst. form
typhlite	F	(med.) typhlitis, inflamm. of caecum (prev. appendicitis)
uretrite	F	inflamm of urethra

#### Single syllable nouns

gîte	M	home, lodging, shelter; (geol.) layer; (naut.) heeling, heel, list; site of wreck
huit	M	number eight (but loses final phone when followed by consonant
site	M	site, situation, lie of the ground, beauty spot; (archael) site
frite	F	pomme de terre frite; avoir la frite/be in good form (se sentir en forme)
fuite	F	flight, running away, escape
mite	F	parasitic of freeliving arachnid
suite	F	retinue, train, attendants following; pursuit; sequel
truite	F	trout, from Gk troctes/sharp-toothed
mythe	F	mythe

## BIRDS

## Masculine Nouns

agami	M	1.chestnut-billed heron 2.grey-winged trumpeter
aigle	M/F	eagle, any of var. birds of prey incl. gen. Harpia, etc. hooked beak
aiglon	M	eaglet (male)
albatros	M	albatross, large oceanic bird, white or grey,
alcyon	M	myth. bird assoc. w. winter solstice, wh. announces calm seas/
ara	M	macaw, Tupi word, large tropical Amer. parrot w. long tail,
attrappe-mouches	M	fly-catcher (small insectivorous songbird), bill fringed w. bristles
autour	M	goshawk, large hawk, diurnal (OF <i>hostur</i> /
autruchon	M	ostrich chick
balbuzard	M	bald buzzard, sea eagle (fish-eating), diurnal bird of prey
barboteur	M	dabbling duck - trawls bottom of water for food plunging head into
bécasseau	M	1. young of bécasse/ woodcock 2. any small shore bird
bihoreau	M	night heron
biset	M	(pigeon-biset) rock-dove, rock-pigeon, common dove from wh. pigeons are
blongios nain	M	little bittern, wading bird, shortish bill/can only feed on surface prey
bouvreuil	M	bullfinch, multicol. passerine, short stout bill (from <i>bouv/bœuf</i> ,
bruant	M	bunting, finch, bulky bird w. short stout bill, yellow-
busard	M	harrier, diurnal b. of prey (gen. <i>Circus</i> ), broad wings, tail
butor	M	bittern, wader, mottled; booming call; long legs, long toes allow it
cacatoès	M	cockatoo, light-col/ parrot, vibrant col. crest/tuft; cracks/eat seeds
canard	M	any male web-footed bird, duck, m. drake; OF <i>caner/cackle</i> (onomat) <i>caner</i> +
canari	Span	canary, small finch, multicol wild, domestic. yellow plumage (Span.
caneton	M	young male duck
cardinal	M	cardinal-bird <i>trapu/thickset</i> , w. bright red plumage, bill cracks
casuar à casque	M	cassowary, running (flightless) bird similar in shape to emu but horiz., taller
chardonneret	M	goldfinch, red & white face, yellow & black wings
charognard	M	vulture, large black bird of prey, w. hooked beak
chevalier	M	sandpiper, long slender downward curving bill, eats prey, mottled plumage
chocard	M	alpine chough, all black (member of crow family)
choucas des tours	M	jackdaw, syn. <i>couette</i> (F)/grey/black, rel to raven, crow; nests in rookery
cigogne	M	young stork
colibri	M	colibri, tiny humming-bird w. brilliant plumage, long beak
colombar	M	green & yellow pigeon found in specific locations w. ruffled feathers
colombin	M	(pigeon-) stockdove, smaller than woodpigeon, grey
colvert	M	(canard-), also col-vert) mallard, common species of wild duck (var. <i>platy</i>
condor	M	condor, bird of prey, diurnal
coq	M	rooster, male of any domestic fowl, cock (le coq du village, etc.)
coquelet	M	young male cock
corbeau	M	raven, 56-60cm, black, long straight bill, omnivorous incl. live
cormoran	M	cormorant, black, blue-green gloss, bronze tinge on wings,
coucou	M	cuckoo, any bird of family <i>Cuculidae</i> w. pointed wings, long tail, makes
courlis	M	curlew, any large shore bird of genus <i>Numenius</i> , mottled, white under
crabier chevelu	M	squacco heron, smallest Europ. member of heron family
craie	M	chough, large, black, downward-curving bill, spectac. aerial ability
cygne	M	swan, any large aquatic bird of genera <i>Cyg.</i> , <i>Cosc.</i> (of famil. w. usu.
dindon	M	turkey-cock
dindonneau	M	young turkey (of <i>dinde</i> )
dodo	M	dodo, flightless bird now extinct
drome ardéole	M	crab plover, black & white, of sandy regions; nocturnal
dronte	M	dodo, any flightless bird
duc	M	horned owl, nocturnal bird of prey, eats large-sized prey, variety
échassier	M	order of var. long-legged wading birds that feed on fish (incl.
eider	M	eider duck, large, F: mottled, M: m. B, W & pink breast, green on
émérillon	M	merlin, multicoloured, hooked beak, small falcon used in falconry
émeu	M	large Australian running bird
émouchet	M	kestrel, b. of prey (falcon fam.), male grey head/tail, dark speckled
engoulevent	M	nightjar, noct. bird of prey w. cricket-like song
épervier	M	sparrow-hawk, small mottled hawk preying on small birds

erlé	M	spotted crane, aka marouette pontuée/many synonyms; mottled shore bird
étourneau	M	starling, smaller than merle, gregarious, dark plumage speckled in
faisan	M	game bird, pheasant, beautifully coloured plumage, long tail
faucon	M	falcon, any diurnal bird of prey, hooked beak
flamant	M	flamingo, wading bird (échassier/palmipède) au plumage rose
fou	M	gannet, heavily built marine bird with long stout bill and white plumage
founingo	M	Madagascar blue pigeon
freux	M	rook, 47cm., black bird (cornicille) w. narrow/straight beak
garrot	M	bufflehead, chubby little diving duck, silh. trapu, B & W plumage
geai	M	jay, pinkish-brown body, blue & black wings, B & W crest
gobe-mouches	M	fly-catcher, small songbird w. small slender bill fringed
goéland	M/F	herring-gull omnivore seagull, white head/body, black or grey back, eats live fish
grèbe	M	grebe, aquatic/lobate toes, dark to lightish grey, white cheek; spectac. breeding
grimpereau	M	tree-creeper, small songbird, brown & white plumage, slender downward
griset	M	young sparrow
grosbec	M	hawfinch, resident year-found in France
guignard	M	dotterel, rare Euras. shore bird, reddish-brown underparts, white bands
guillemot	M	guillemot, B & W diving bird, dimin of Guillaume, diet of fish, long
gypaète	M	lammergeier, large bearded vulture, belonging to hawk family,
harfang des neiges	M	snow owl, diurnal owl, heavily feathered legs, usu. silent
héron	M	heron, any of var. wading birds, long neck/slim body, grey or white
hibou	M	eared owl, bird of prey rel. to chouette but with ears
hobereau le	M	hobby, small falcon
hocco le	M	hocco aka curassow, gallinac. ground-nesting bird of fam. Cracidae
hochecueuc	M	wagtail (hocher/to wag) (LRPT: see bergeronette (F)/wagtail,
ibis	M	ibis, wading bird, long thin downw.-curved blunt bill, sides sharp & hard
jabiru	M	jabiru, large white tropical American stork, wading bird
jars	M	gander, M of domestic goose, der. from OF gard (épine, aiguillon, baguette *)
lagopède	M	oiseau lagopède, ptarmigan, any of several sub/Arctic mountain birds
laneret	M	lanneret, male or tercel of the lanner falcon (born in sets of
lanier	M	lanner, large falcon of Medit. regions (from 'faucon lannier')
limicole	M	shore birds with legs, bills adapted to muddy env.
lori	M	lory, brightly-coloured parrot
loriot	M	oriole, tropical bird w. long pointed bill, yellow & black
macareux	M	puffin, black w. white ventre, short large beak (ATFL/prob.-euse,
manchot	M	penguin of the Antarctic, king penguin, oiseaux spéciaux à l'Antarctique,
maribout d'Afrique	M	marabout stork, brightly coloured
martinet	M	common swift (kind of swallow), eats insects, black w.
mauvais	M	redwing, small thrush w. speckled breast, reddish flanks (mauvais -
merle	M	blackbird, common Europ. thrush, M w. black plumage, F brown
milan	M	kite, any diurnal bird of prey incl. Milvus, Elanus, brown plumage
milouin	M	(fuligule milouin) pochard, diving duck w. grey- & black body
moineau	M	sparrow, any weaverbird or genus rasser, brown from clothing or <i>moine</i> /mon
morillon	M	(fuligule morillon) tufted duck, tiny B & W nocturnal diving duck
mottereau	M	sand-martin, nests in tunnels bored into sand, riverbanks (small
motteux	M	wheat, pale grey, buff on throat, W on tail, songbird
oiseau	M	bird, warm-blooded vertebrate animal; fowl; hawk (from oisel, L.
oiseau-mouche	M	another name for colibri, humming-bird, w. long slender bill,
oisillon	M	young bird (from oisel)
oisin	M	gosling, young goose (oie)
outardeau	M	young bustard
palmipède	M	oiseau palmipède, palmiped, web-footed bird
paon	M	peacock, size of pheasant; peafowl, (rare) F: paonne
paradisier	M	any bird of paradise, bird of New Guinea w. beautiful colouring
passereau	M	sparrow (of order passereau) OF passer/continuous movt)
pélican	M	pelican, waterbird (palmipède feet), long hooked beak w. pouch for
perdreau	M	young partridge (jeune perdrix de l'année)
perdron	M	young partridge
perroquet	M	multicol. climbing bird, v. large curved (recourbé) beak, imit. speech
petit duc	M	Eastern screech owl, nocturnal, w. horn-like ears & steady wing beat
pétrel	M	petrel, oceanic, hooked bill w. hooked bill/tubular nostrils; appears to
piat	M	(pop.) (little) sparrow (l/d with moineau/M) (onomatoplaier/
pic	M	woodpecker, climbing bird that drills w. beak, black w. bright skullcap
pigeon	M	pigeon, common dove of fam. Columbidae (others desc.) slender beak, div. colo
pigeonneau	M	young pigeon

pilet	M	pintail duck, longer svelte appearance, pointed tail, thin grey beak
pingouin	M	penguin, any flightless marine bird incl. Emperor, King,
pinson	M	chaffinch, w. stout conical beak, and rarer 'brambling', sedentary in France
pintadeau	M	young guinea fowl
pipit	M	pipit, titlark, small, brown & streaked (rayé), well camouflaged (also pitpit)
pivert	M	woodpecker, yellow & green, w. red & black head, uses beak to drill into
plongeon	M	loon, diver, long body, swift & skilled in water, straight pointed bill
pluvier	M	plover/shore birds w. corps trapu, chair comestible, short straight bill,
pouillot	M	willow warbler, songbird, small, eats insects, fruit, rel. to rousserolle/reed-warbl
poulet	M	young of poule/coq, older than chicken, 3-6 months,
poussin	M	chick, chicken, newly emerged from egg; (fam.) term of
pygargue	M	bald eagle diurnal sea-eagle, fish-eating, brown w. white head/neck/tail
quiscale	M	des marais/boat-tailed grackle/échassier; q. de Brewer/black bird to 25cm.
râle	M	(d'eau)/water rail, (des genêts)/corncrake, small noct. waders w. nightlong calls
ramereau	M	young ring-dove (rameau (M)/bough
ramier	M	pigeon r./ring-dove, wood-pigeon, black band around neck, large
rapace	M	raptor, any carniv. bird of prey, hooked beak, clawed talons for seizing prey,
rock	M	roc, legendary bird of enormous size and power (therefore M7)
roitelet	M	wren (dimin. of roi, king) passerine/perch., smallest bird in Europe
roselin	M	rosefinch, resident/sedentary in Alsace Lorraine gorgeous colouring,
rossignol	M	nightingale, Europ. songbird, (Megarhynchos), any of var. simil. birds;
rouge-gorge	M	robin, multicol.,
rougequeue	M	redstart, w. black throat, orange-brown tail/breast, grey back
rupicole	M/F	cock-of-the-rock, passerine crested bird, male w. brilliant plumage
sacre	M	saker, large falcon used in falconry (from Arab.)
sacret	M	saleret, young tercel
sansonnnet	M	starling, any small passerine bird gregarious (in flocks), dark plumage
savacou huppé	M	boat-billed heron, noct.
serin	M	Eurasian serin of Provence; canary (partic. caged) (fig., pej) silly fool,
serpenteaire	M	secretary-bird, large African long-necked diurnal bird of prey with
siffleur	M	Eurasian wigeon
souchet	M	Nthn shoveler, colourful duck w. shovel-shaped bill
strix	M	barred owl, tawny owl (also called brown owl, wood owl) reddish grey/brown,
sucrier à ventre jaune	M	bananaquit (11 cm) tiny; brill. yellow chest, black cape., slashes
tadorné	M	shelduck, entirely orange w. lighter orange-coloured head, black
tantale	M	tanaisus, wood ibis/stork w. long downy, curved bill (named after
tarin	M	siskin, passeriform, lively yellow & green, black skullcap and chin,
tétrás lyre	M	black grouse/grand tétras/ W. capercaillie wild gamebird, feathered legs, feet
torcol	M	(tourcoult) wryneck, cryptic, coloured Europ. woodpecker, does not
toucan	M	toucan, trop. Amer. fruit-eating, brilliant plumage & bill
tournepiere	M	rusty turnstone, head & neck B&W, back maroon, bl. wh. omniv. a/c seasons
traquet	M	wheatear, Eur. songbird
trochile	M	warbler (trochilus, arboreal insectivores w. long slender
troglodyte	M	wren, songbird w. slender bill (winter w. runs like mouse; hedge-sparrow, small
troupielle	M	tropical, gregarious orange & black S. Amer. bird (ext. of anc.
vanneau	M	lapwing, long-legged pigeon-sized wading bird w. B&W plumage
vauture	M	vulture, large black bird of prey, vulture, with hooked beak, denuded
volatile	M	orig. meaning 'bird', now any fowl, any farmyard bird

### Feminine nouns

agache	F	magpie, from 'agace/agasse)
aigle	F/M	female eagle
aiglonne	F	caglet (female)
aigrette	F	egret, syn. héron blanc; extraord. fine long plumes effilées on head;
alouette	F	lark, skylark, brown songbird noted for singing, huppé, symbol of R. legions
anserelle	F	pygmy goose, small species of goose
autruche	F	ostrich, flightless bird w. stout 2-toed feet Gk avis/bird + struthio
avocette	F	long-legged shore bird, B&W plumage, upcurved beak for sifting
harge	F	godwit, syn. bout-feume(M)/large spotted shorebird, long sensitive bill
bartavelle	F	perdrix bartavelle/rock partridge (F) of the Midi (Provenc from L.)
bartramie	F	upland sandpiper, long feathers, extraord. vocalisations,
bécasse (des bois)	F	woodcock, gamebird, long straight beak, delicious flesh, forest dwelling

bécassine	F	snipe, marsh & river banks, mottled, small, heavy bodied, long straight bill
bergeronnette	F	wagtail, (from bergère/armchair), lives by close to water (and sheep/
bernache	F	barnacle goose, small wild, black & white head/body, grey wings
bondrée	F	honey-buzzard, white-streaked underparts, bird of prey (grubs, honey)
buse	F	buzzard, diurnal b.o. prey, forme lourde (heavy, weighty), eat rodents
caille	F	quail, plump, secretive, but gregarious (ie. flock) rel. to partridge
caland्रे	F	calandra lark, corpulent, lives in arid/rocky habitat, hovers at great height
cane	F	(female) duck (LRPT: de canard); broad blunt bill, webbed feet,
canepetière	F	little bustard
canette	F	young female duck
cérépise cendrée	F	Cape Barren goose
chevêche	F	little owl, w. speckled plumage, flat head (from L. cavannus/owl)
chouette	F	owl, front-facing disk-like eyes (from OF choe, Frank. kawa + suette
chouette des bois	F	tawny owl (called brown owl, wood owl), round head, brown feathers,
chouette des clochers	F	barn-owl, white heart-shaped face, eats meadow voles, rodents
cigogne	F	stork, large wading bird w. long legs, long pointed red bill 15-19cm.
colombe	F	common ground dove, kind of pigeon, considered as symbol of peace, purity (f
colombine	F	partridge pigeon/quail dove, iridescent multicol. plumage, watermarked
corneille	F	crow, black, smaller than corbeau, spends most of day on ground or
couvée	F	covey, small group of birds
dinde	F	turkey-hen; (fig.) stupid woman
draine	F	mistle-thrush, spotted breast, feeds on berries of mistletoe
échasse	F	stilt, long straight pointed bill, long legs, B & W
effraie	F	(chouette-)screech owl (night owl) light plumage, makes frightening screech
épeiche	F	great spotted wood-pecker (strong chisel-like bill)
erismature	F	ruddy duck, nocturnal diving duck, bristle-like tail feathers elevated
faisane	F	female pheasant, buff brown w. dark spots
fauvette	F	warbler, insect-eating songbird (f. pitchou/Dartford warbler)
foulque	F	coot, marsh bird but acts like duck, black plumage, white bill, frontal
frégate	F	frigate bird, large black aqu. bird
gélinotte	F	hazel grouse, ruffed grouse - brown & grey plumage, huppe, white liseron on m
grèbe	F/M	grebe, dark to lightish grey, white cheek; spectac. breeding plumage
grive	F	thrush (?Catalan griva/tlèches), OF gricue/grec.) strongly spotted
grouse	F	red grouse, Scottish loanword
grue	F	crane, grey/white, long strong legs, gregarious, fly in bandes (orig. 'legs')
harle bièvre	F	goosander, web-footed waterfowl, goose-like duck
harle piette	F	smew, B&W diving bird w. goose-like bill
harpie la	F	harpy-eagle, black/white plumage. (Gk arpe of Orpheus, Harpyia/Harpies)
hirondelle	F	swallow, black and white migratory bird w. forked tail, nests on
hulotte	F	(chouette-) hulotte syn. chat-buant/cahouant(M) round headed owl, nocturnal
jacasse	F	magpie (V jaccasser: chatter like magpie)
jocasse	F	(fam.) missel-thrush (spotted breast, feeds on mistletoe berries)
lanerette	F	female lanner falcon chick
lavandière	F	wagtail (also 'bergeronnette'); also F who washes
linotte	F	linnet syn. linot (M), and '
litorne	F	fieldfare, thrush w. long tail feathers
macreuse	F	scoter, migratory Europ. diving duck, B&W (black w. white patches
marouette ponctuée	F	spotted crane, syn. erlé (M), rail that defends its young by o/h call
mauve/ïs	F	(web-footed) gull, regional (Haute-Bretagne) for mouette
merlette	F	hen blackbird, has spotted breast
mésange	F	titmouse, yellow breast, trilling song, feeds on berries, seeds,
mouette	F	seagull, syn. goéland, rel. of hawk, falcon, eats live fish
océanite	F	1. o. culblanc/fork-tailed petrel 2. o. tempête/European storm petrel
oie	F	goose (F of domestic goose/gander pair), white, web-footed
oufraie	F	osprey, B&W, W patches on dark wings, diurnal fish-hawk, bird of
ourarde	F	great bustard, échassier, long neck, large body, strong claws, speckled plumage
palombe	F	(pigeon ramier) rock-dove, wood-pigeon, kind of dove; also 'squab' (to eat)
paonne	F	peahen (F form of M. paon)
paruline jaune	F	N. Americ. yellow warbler, long tail feathers, can digest waxed berries
perdrix	F	partridge, game-bird, short bill, long legs, multicol.
perruche	F	budgerigar, rosella - small multicol. parrots that form mass (Sp., corr. w. Fr per
pie	F	magpie, B&W, long tail, comical on ground
pigeonne	F	female pigeon
pintade	F	guinea-fowl, guinea-hen, dark plumage w. light blots, stains?
poularde	F	fattened pullet (young hen less than 12 mths old ready for eating

poule	F	hen, female of any domestic bird
poulette	F	young female fowl
rieuse	F	(oie-) rieuse, White Fronted Goose, herbivore, eats seeds
roussette	F	reed-warbler, brown w. white belly, insect eater, frequents roselières/
salangane	F	(Loanw. Philipp.)salangane,makes edible nest, rel. to swift
sarcelle	F	teal, web-footed, smallest freshwater dabbling duck,pivot head-first
spatule	F	spoonbill (from 'spatule' (F)/spatula (flat thing); both fw/sw habitats
sterne	F	tern, largish member of gull family,white w. black 'calotte' (F:skull-cap)
tourterelle	F	turtle-dove, Old World doves w. brown wings, pink chest, watermarking on wing
veuve	F	African sparrow black and white plumage, extr. long streamers
volaille	F	(collective) farmyard fowl
volée	F	flock of birds

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Others may be included as appropriate within the text.

**Buffon**, Georges-Louis Leclerc, Comte de (1707-88).

Extracts from *Histoire naturelle des Oiseaux*, Tomes 1-7

- Extract 1: *L'Autruche* 'The Ostrich' (Tome 1, page 398)
- Extract 2: *La Caille* 'The Quail' (Tome 2, pages 449, 452)
- Extract 3: *La Cigogne* 'The Stork' (Tome 7, pages 253-254, 258)
- Extract 4: *LelDu Corbeau* 'The Raven' (Tome 3, pages 13-15)
- Extract 5: *LalDe la Grue* 'The Crane' (pages 287, 291, 293-294)
- Extract 6: *Les Hirondelles* 'The Swallow Family' (pages 552, 554)
- Part 5 *LelDu Merle* 'the blackbird' (Tome 3, page 330-331)
- Part 5 *De L'Oie* 'the goose' (Tome 9, pages 30, 44, 57)
- Part 6 *Oiseaux qui ne peuvent voler* 'Birds that cannot fly' (Tome 1, pages 394)

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Table des matières  
Tome 1  
Autres tomes

## 398 HISTOIRE NATURELLE

### L'AUTRUCHE (a).

Voy. les planches enluminées, n.<sup>o</sup> 457; et pl. XXIX  
de ce volume.

L'AUTRUCHE est un oiseau très-anciennement connu, puisqu'il en est fait mention dans le plus ancien des Livres; il falloit même qu'il fût très-cornu, car il fournit aux Écrivains sacrés plusieurs comparaisons tirées de ses mœurs & de ses habitudes (b); & plus anciennement encore sa chair étoit, selon toute apparence, une viande commune, au moins parmi le peuple, puisque le Législateur des Juifs la leur interdit comme une nourriture immonde (c); enfin, il en est question dans Hérodote, le plus ancien des Historiens profanes (d), & dans les Écrits des premiers Philosophes

(a) Autruche, en Hébreu, *Jacnah*; en Arabe, *Neamah*; en Grec, *Στρουθίς*; en Latin, *Struthio*; en Espagnol, *Avestruz*; en Italien, *Struzzo*; en Allemand, *Struß* ou *Strauß*; en Anglois, *Ostrich*. — Autruche. Belon, *Hist. nat. des Oiseaux*, page 231. — Mémoires pour servir à l'Histoire des Animaux, partie II, page 113, avec une assez bonne figure. — Albin, tome III, page 13; planche XXXI, avec une figure coloriée.

(b) *Habitabant ibi struthiones*. *Isaïe*, chap. XLII, N. 21. — *Filii populi mei crudelis quasi struthio in deserto*. *Jérém. Thren.* cap. IV, N. 3. — *Luclum quasi struthionum*. *Mich.* cap. I, N. 8.

(c) *Levitic.* cap. XI, N. 16. — *Deuteron.* cap. XIV, N. 15.

(d) *Nota*, Hérodote, si l'on en croit M. de Salerne (*Ornithologie*,



OK

MOTUS



ble des matières  
me 2  
tres tomes

449

## \* LA CAILLE (a).

Planche XVI de ce volume.

**T**HEOPHRASTE trouvoit une si grande ressemblance entre les Perdrix & les Cailles, qu'il donnoit à ces dernières le nom de *Perdrix naines*; & c'est sans doute par une suite de cette méprise, ou par une erreur semblable, que les Portugais ont appelé la perdrix *codornix*, & que les Italiens ont appliqué le nom de *coturnice* à la bartavelle ou perdrix grecque. Il est vrai que les perdrix & les cailles ont beaucoup de rapports entr'elles; les unes & les autres sont des oiseaux pulvérateurs, à ailes & queue courtes & courant fort vite (b), à bec de gallinacés, à plumage gris moucheté de brun & quelquefois tout blanc (c); du reste, se nourrissant, s'accouplant, construisant leur nid, couvant leurs œufs,

☛ Voyez les planches enluminées, n.º 170. — *Nota.* Frisch prétend (planche CXVII) que du temps de Charlemagne on lui donnoit le nom de *Quacara*; quelques-uns lui ont aussi donné celui de *Curculius*, & j'en dirai plus bas la raison: quoi qu'il en soit, ces deux noms ont été omis par M. Brisson.

(a) *Opre*, en Grec; en Latin, *Coturnix*; en Espagnol, *Cuadrón*; en Italien, *Quaglia*; en Allemand, *Wachtel*; en Anglois, *Quail*; en Polonois, *Przepierka*. — *Coturnix*, Gellius, *Avium*, pag. 352... Aldrovande, *Avi.* tom. II, pag. 150. ... Frisch, planche CXVII, avec une figure colorée du mâle & une de la femelle.

(b) *Currit satis velociter unde Curculium vulgo dicimus, Comestor & ali.*

(c) Aristote, lib. de *Coloribus*, cap. VI.

Oiseaux, Tome II.

LII

OK



Table des matières  
Tome 2  
Autres tomes

## 452 HISTOIRE NATURELLE

L'inclination de voyager & de changer de climat dans certaines saisons de l'année, est, comme je l'ai dit ailleurs (f), l'une des affections les plus fortes de l'instinct des cailles.

La cause de ce désir ne peut être qu'une cause très-générale, puisqu'elle agit non-seulement sur toute l'espèce, mais sur les individus même séparés, pour ainsi dire, de leur espèce, & à qui une étroite captivité ne laisse aucune communication avec leurs semblables. On a vu de jeunes cailles élevées dans des cages, presque depuis leur naissance, & qui ne pouvoient ni connaître ni regretter la liberté, éprouver régulièrement deux fois par an pendant quatre années, une inquiétude & des agitations singulières dans les temps ordinaires de la passe; savoir, au mois d'avril & au mois de septembre; cette inquiétude duroit environ trente jours à chaque fois, & recommençoit tous les jours une heure avant le coucher du soleil: on voyoit alors ces cailles prisonnières aller & venir d'un bout de la cage à l'autre, puis s'élancer contre le filet qui lui servoit de couvercle, & souvent avec une telle violence qu'elles retomboient tout étourdies: la nuit se passoit presque entièrement dans ces agitations, & le jour suivant elles paroissent tristes, abattues, fatiguées & endormies. On a remarqué que les cailles qui vivent dans l'état de liberté dorment querelleurs & mutins, qu'ils étoient querelleurs comme des cailles tenues en cage. *Aristophane.*

(f) Tome I de cette Histoire naturelle des Oiseaux, page 12.

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# \* L A C I G O G N E. (a).

ON vient de voir qu'entre les oiseaux terrestres qui peuplent les campagnes, & les oiseaux navigateurs à

\* Voyez les planches enluminées, n.° 866.

(a) En Grec, *ἰσιγόνη*; en Latin, *ciconia*; en Hébreu & en Persan, *chafida*; en Arabe, *zakid*, selon Gefner; *leklek* ou *legleg*, suivant le Docteur Shaw; en Barbaresque, *bel-arjs*; en Chaldéen, *chavarita*, *deintha*, *matuarta*; en Illyrien, *ziap*; en Allemand & en Anglois, *flork*; en Polonois, *boelan-rzani*, *boelan-faidi*; en Flamand, *owveater*; en Italien, *cigogna*, *zigogna*, & le petit *cicognino*; en Espagnol, *ciguenna*; en vieux François, *cigogne* ou *cigoigne*.

*Cigogne*. Selon, *Hist. Nat. des Oiseaux*, page 201. — *Ibis alba* Herodote. Gefner; c'est faute d'avoir discuté une méprise d'Herodote, ou plutôt de ses traducteurs, que Gefner tombe ici dans celle de faire de l'ibis blanc d'Herodote une cigogne blanche. Voyez l'histoire de l'ibis. — *Ciconia*. Aldrovande, *Avi.* tom. III, pag. 291. — Ray, *Synops. avi.* pag. 97. — Jonston, *Avi.* pag. 100 & tab. 50, deux figures peu exactes. — Schwenckfeld, *Avi. Silf.* pag. 234. — *Prosp.* Alpin. *Egypt.* vol. I, pag. 199. — Marsigli, *Danub.* tom. V, pag. 26. — Charleton, *Exercit.* pag. 108, n.° 1. Idem, *Onemart.* pag. 102, n.° 1. — Klein, *Avi.* pag. 125, n.° 1. — Gefner, *Avi.* pag. 262, avec une figure peu ressemblante; la même, *Icon. avi.* pag. 121. — *Ciconia Alba*. Willughby, *Ornithol.* page 210, avec une figure empruntée de Jonston. — Rzaczynski, *Hist. Nat. Polon.* pag. 274. — *Ardea alba remigibus nigris*. Linnæus, *Fauna Suecica*, n.° 136. Idem, *Syst. nat.* ed. X, Gen. 76, Sp. 7. — *Ciconia alba*, *Dam. flork*. Muller, *Zool. Dan.* n.° 174. — Brunnich, *Ornithol. boreal.* n.° 154. — *Der flork*. Fälsch. tom. II, 12.° div. 1. sect. pl. 3. — *Ardea*. Moehring, *Avi. Gen.* 81. — Cigogne ordinaire ou blanche. Albin, *tome II*, page 41, planche 64. — *Ciconia alba*, *oculorum ambitu nudo, nigro; remigibus nigricantibus restribus candidis*. . . *Ciconia alba* Brisson, *Ornithol.* tom. V, page 365.

OK



Table des matières  
Tome 7  
Autres tomes

## 254 HISTOIRE NATURELLE

pieds palmés, qui reposent sur les eaux : on trouve la grande tribu des oiseaux de rivages, dont le pie sans membranes ne pouvant avoir un appui sur les eaux doit encore porter sur la terre, & dont le long bec est sur un long cou, s'étend en avant pour chercher la pâture sous l'élément liquide. Dans les nombreuses familles de ce peuple amphibie des rivages de la mer & des fleuves, celle de la cigogne plus connue, plus célébrée qu'aucune autre, se présente la première ; elle est composée de deux espèces qui ne diffèrent que par la couleur, car du reste il semble que sous la même forme & d'après le même dessin, la Nature ait produit deux fois le même oiseau, l'un blanc & l'autre noir ; cette différence, tout le reste étant semblable, pourroit être comptée pour rien s'il n'y avoit pas entre ces deux mêmes oiseaux, différence d'instinct & diversité de mœurs. La cigogne noire cherche les lieux déserts, elle perche dans les bois, fréquente les marécages écartés, elle niche dans l'épaisseur des forêts. La cigogne blanche choisit au contraire nos habitations pour domicile ; elle s'établit sur les tours, sur les cheminées & les combles des édifices ; amie de l'homme, elle en partage le séjour & même le domaine ; elle pêche dans nos rivières, chasse jusque dans nos jardins, se place au milieu des villes, sans s'effrayer de leur tumulte (b), & par-tout

(b) Témoin ce nid de cigogne posé sur le temple de la Concorde au Capitole, dont parle Juvénal. *Sat. I, vers. 116*, & qu'on voit figuré sur des médailles d'Adrien.

OK



ble des matières  
me 7  
tres tomes

## 258 HISTOIRE NATURELLE

pour cela des caisses carrées aux faîtes des édifices (*h*).

Dans l'attitude du repos, la cigogne se tient sur un pied, le cou replié: la tête en arrière & couchée sur l'épaule; elle guète les mouvemens de quelques reptiles qu'elle fixe d'un oeil perçant; les grenouilles, les lézards, les couleuvres & les petits poissons sont la proie qu'elle va cherchant dans les marais ou sur les bords des eaux & dans les vallées humides.

Elle marche comme la grue, en jetant le pied en avant par grands pas mesurés; lorsqu'elle s'irrite ou s'inquiète, & même quand l'amour l'agite, elle fait claqueter son bec d'un bruit sec & réitéré, que les Anciens avoient rendu par des mots imitatifs, *crepitar*, *glotterat* (*i*), & que Pétrone exprime fort bien en l'appelant un bruit de *crotales* (*h*); elle renverse alors la tête, de manière que la mandibule inférieure se trouve en haut, & que le bec est couché presque parallèlement sur le dos, c'est dans

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(*h*) Lady Montagu, dans ses lettres, n.<sup>o</sup> 32, dit qu'à Constantinople, les cigognes nichent par terre dans les rues: si elle ne s'est pas trompée sur l'espèce de ces oiseaux, il faut que la sauve-garde dont jouit la cigogne en Turquie, l'ait singulièrement enhardie; car dans nos contrées les points de positions qu'elle préfère sont toujours les plus inaccessibles, qui dominent tout ce qui environne, & ne permettent pas de voir dans son nid.

(*i*) *Quæque salutato crepitar concordia nido*. Juvénal, Sat. I. — *Glottelat immenso de turri ciconia rostru*. Aut. Philomel.

(*h*) *Crotalistris*. Épithète donnée déjà dans Publius Syrus, à la cigogne.

OK



Table des matières  
Tome 3  
Autres tomes

## LE CORBEAU (a).

Planche 11 de ce volume\*.

QUOIQUE le nom de Corbeau ait été donné par les Nomenclateurs à plusieurs oiseaux, tels que les corneilles, les choucas, les craves ou coracias, &c. nous en restreindrons ici l'acception, & nous l'attribuerons exclusivement à la seule espèce du grand corbeau, du *corvus* des anciens, qui est assez différent de ces autres oiseaux par sa grosseur (b), les mœurs, ses habitudes naturelles, pour qu'on doive

\* Le dessin de cette planche a été fait d'après un de ces individus, dont le plumage est plutôt brun que noir, & qui ont le bec plus fort & plus convexe que celui représenté dans la planche enluminée n.° 495.

(a) C'est le Corbeau de M. Buffon, tome 11, page 8. En Grec, *Korē*; en Latin, *Corvus*; en Espagnol, *Cuervo*; en Italien, *Corvo*; en Allemand, *Rabe*, *Rave*, *Kol-Rave*; en Anglois, *Raven*; en Suédois, *Korv*; en Polonois, *Kruk*; en Hébreu, *Oreb*; en Arabe, *Gorabib*; en Persan, *Cafak*; en vieux François, *Corbin*; en Guyanais, *Tschorbeau*; les peints se nomment *Corbillus* & *Corbillards*; & le mot *Corbiner* exprimoit autrefois le cri des Corbeaux & des Corneilles, selon Coigrave. Voyez *Salerne*, page 85. En comparant les noms qu'on a donnés à cet oiseau dans les idiomes modernes, on remarquera que ces noms dérivent tous visiblement de ceux qu'il avoit dans les anciennes langues, en se rapprochant plus ou moins de son cri. Il faut se souvenir que les voyageurs donnent souvent, & très-mal à propos, le nom de Corbeau à un oiseau d'Amérique, qui a été rapporté à l'espèce du vautour, tome 1.° de cette *Histoire des Oiseaux*, page 175.

(b) Le corbeau est de la grosseur d'un bon coq; il pèse trente-

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de des matières  
ne 3  
res tomes

## 14 HISTOIRE NATURELLE

lui appliquer une dénomination distinctive, & sur-tout lui conserver son ancien nom.

Cet oiseau a été fameux dans tous les temps; mais sa réputation est encore plus mauvaise qu'elle n'est étendue; peut-être par cela même qu'il a été confondu avec d'autres oiseaux; & qu'on lui a imputé tout ce qu'il y avoit de mauvais dans plusieurs espèces. On l'a toujours regardé comme le dernier des oiseaux de proie, & comme l'un des plus lâches & des plus dégoûtans. Les voiries infectes, les charognes pourries, sont, dit-on, le fonds de sa nourriture; s'il s'affouvit d'une chair vivante, c'est de celles des animaux foibles ou utiles, comme agneaux, levrauts, &c. (c) On prétend même qu'il attaque quelquefois les grands animaux avec avantage, & que suppléant à la force qui lui manque par la ruse & l'agilité, il se cramponne sur le dos des buffles, les ronge tout vifs & en détail après leur avoir crevé les yeux (d); & ce qui rendroit

quatre ou treize-cinq onces, par conséquent, masse pour masse, il équivaloit à trois corneilles & à deux freux.

(c) Aldrovand. *Ornitholog.* tome I, page 702. — *Traité de la Pipée*, où l'on raconte la chasse d'un lièvre entreprise par deux corbeaux qui paroissoient s'entendre, lui creverent les yeux & finirent par le prendre.

(d) Voyez Alian, *Natur. animal.* lib. II, cap. LI, & le *Recueil des Voyages qui ont servi à l'établissement de la Compagnie des Indes*, tome VIII, pages 273 & suiv. C'est peut-être là l'origine de l'antipathie qu'on a dit être entre le bœuf & le corbeau. Voyez Aristot. *Hist. animal.* lib. IX, cap. 3. Au reste, j'ai peine à croire qu'un corbeau attaque un buffle, comme les voyageurs disent l'avoir observé. Il peut se faire que ces oiseaux se posent quelquefois sur les dos des buffles, comme la

\_\_\_\_\_ 0X



Table des matières  
Tome 3  
Autres tomes

## DU CORBEAU.

15

cette férocité plus odieuse, c'est qu'elle seroit en lui l'effet, non de la nécessité, mais d'un appétit de préférence pour la chair & le sang, d'autant qu'il peut vivre de tous les fruits, de toutes les graines, de tous les insectes & même des poissons morts, & qu'aucun autre animal ne mérite mieux la dénomination d'omnivore (e).

Cette violence & cette universalité d'appétit ou plutôt de voracité, tantôt l'a fait proscrire comme un animal nuisible & destructeur, & tantôt lui a valu la protection des loix, comme à un animal utile & bienfaisant, en effet, un hôte de si grosse dépense ne peut qu'être à charge à un peuple pauvre ou trop peu nombreux; au lieu qu'il doit être précieux dans un pays riche & bien peuplé, comme consommant les immondices de toute espèce dont regorge ordinairement un tel pays. C'est par cette raison qu'il étoit autrefois défendu en Angleterre, suivant Belon, de lui faire aucune violence (f).

comelle mantelée se pose sur le dos des ânes & des moutons, & se pique sur le dos des cochons, pour manger les insectes qui courent dans le poil de ces animaux. Il peut se faire encore que par fois les corbeaux enlèvent le cuir des buffles par quelques coups de bec mal mesurés, & même qu'ils leur crèvent les yeux, par une suite de cet instinct qui les porte à s'attacher à tout ce qui est brillant; mais je doute fort qu'ils aient pour lui de les manger tout-vifs & qu'ils puissent en venir à bout.

(e) Voyez Aristote, *Hist. animal.* lib. VIII, cap. 11. Willughby, *Ornitholog.* pages 82 & suiv. J'en ai vu de privés qu'on nourrissoit en grande partie de viande, tantôt crue, tantôt cuite.

(f) *Nature des Oiseaux*, page 279. Belon écrivoit vers l'an 1550: *Sancta avis a nostris habetur, nec facile ab ullo occiditur. FAUV.*

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## \* LA GRUE (a).

DE tous les oiseaux voyageurs, c'est la grue qui entreprend & exécute les courses les plus lointaines & les plus hardies. Originaire du Nord, elle visite les régions

\* Voyez les planches enluminées, n.° 769.

(a) En Grec, *τίτανις*; en Latin, *grus*; en Italien, *gru*, *grua*; en Espagnol, *grulla*, *gruz*; en Allemand, *krane*, *kranich*; en Anglois, *crane*; en Anglo-Saxon, *cran* ou *croen*; en Gallois, *garan*; en Suisse, *kroye*; en Suédois, *trana*; en Danois, *trage* (c'est une chose remarquable que le nom de cet oiseau imité de sa voix, soit à peu-près le même dans la plupart des langues); en Polonois *zoran*; en Illyrien, *gergab*: on ne sait si la grue avoit un nom en Hébreu, du moins on ne peut le démêler dans cette langue obscure; quoique pauvre. Dans Jérémie (*Jerem. VIII*) où Bochart, prend le mot *agur* pour la grue; la Vulgate traduit *agur* par *ciconia*; ailleurs (*Isaï. XXXVIII*), par *hirundo*. Dans ce second passage, le mot *fur* est traduit la grue; mais dans le premier où ce même mot se trouve, il est interprété l'hirondelle.

Grue. Selon, *Hist. nat. des Oiseaux*, page 187, avec une mauvaise figure, répétée *Portraits d'Oiseaux*, page 41, b. — *Grus*. Aldrovande, *Avi. tom. III*, pag. 324, avec une figure peu exacte, page 329, empruntée par Jonston, *Avi. pag. 114*, tab. 54, & répétée. — Willughby, *Ornithol. pag. 200*, tab. 48. — Gessner, *Avi. pag. 528*, avec une figure défectueuse. La même répétée dans *l'Hon. avi. pag. 19*. — Ray, *Synops. pag. 95*, n.° a, 1. — Schwencfeld, *Avi. Siles. pag. 284*. — Charleton, *Exercit. pag. 174*, n.° 1. Idem, *Onomast. pag. 110*, n.° 1. — Sibbald, *Scot. Illustr. part. II*, lib. III, pag. 18. — Raczynski, *Hist. Nat. Polon. pag. 383*. — The crane Brit. Zool. pag. 118. — Marfigl. *Danub. tom. V*, pag. 6. — Prosp. Alp. *Ægypt.*

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Table des matières  
Tome 7  
Autres tomes

## D E L A G R U E. 291

Ces fables anciennes (*f*) sont absurdes, dira-t-on, & j'en conviens ; mais accoutumés à trouver dans ces fables, des vérités cachées, & des faits qu'on n'a pu mieux connoître, nous devons être sobres à porter ce jugement trop facile à la vanité, & trop naturel à l'ignorance ; nous aimons mieux croire que quelques particularités singulières dans l'histoire de ces oiseaux, donnerent lieu à une opinion si répandue dans une antiquité, qu'après avoir si souvent taxée de mensonges, nos nouvelles découvertes nous ont forcé de reconnoître instruite avant nous. On sait que les singes, qui vont en grandes troupes dans la plupart des régions de l'Afrique & de l'Inde, font une guerre continuelle aux oiseaux : ils cherchent à surprendre leur nichée, & ne cessent de leur dresser des embûches ; les grues, à leur arrivée, trouvent ces ennemis, peut-être rassemblés en grand nombre pour attaquer cette nouvelle & riche proie avec plus d'avantage : les grues, assez sûres de leurs propres forces, exercées même entre elles aux combats (*1*), & naturellement assez disposées à la lutte, comme il paroît par les attitudes où elles se jouent, les mouvemens qu'elles affectent, & à l'ordre des batailles, par celui même de leur vol & de leurs départs,

(*f*) Elles précèdent le temps d'Homère, qui compare (*Iliad. III*) les Troyens aux grues combattantes à grand bruit les pygmées.

(*1*) *Grues etiam pugnant inter se tam vehementer, ut dimicantes capiuntur.* Aristot. *Hist. animal.* lib. IX, cap. XII.

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de des matières  
ne 7  
res tomes

## DE LA GRUE. 293

une voix de réclame, pour avertir de la route qu'il tient; elle est répétée par la troupe, où chacune répond, comme pour faire connoître qu'elle suit & garde la ligne.

Le vol de la grue est toujours soutenu quoique marqué par diverses inflexions; ses vols différens ont été observés comme des présages des changemens du Ciel & de la température; sagacité que l'on peut bien accorder à un oiseau qui par la hauteur où il s'élève dans la région de l'air, est en état d'en découvrir ou sentir de plus loin que nous les mouvemens & les altérations (x). Les cris des grues dans le jour, indiquent la pluie: des clameurs plus bruyantes & comme tumultueuses, annoncent la tempête; si le matin ou le soir on les voit s'élever & voler paisiblement en troupe, c'est un indice de sérénité; au contraire si elles pressentent l'orage, elles baissent leur vol & s'abattent sur terre (y). La grue a, comme tous les grands-oiseaux, excepté ceux de proie, quelque peine à prendre son essor. Elle court quelques pas, ouvre les ailes, s'élève peu d'abord, jusqu'à ce qu'étendant son vol, elle déploie une aile puissante & rapide.

A terre, les grues rassemblées établissent une garde pendant la nuit, & la circonspection de ces oiseaux a été consacrée dans les hiéroglyphes comme le symbole de la

(x) *Volant altè, ut procul prospicere possint.* Aristot. lib. IX, cap. x.

(y) *Et si imbres tempestatue viderint, conserunt se in terram & humi quiescunt.* Idem, ibidem.



Table des matières  
Tome 7  
Autres tomes

## 294 HISTOIRE NATURELLE

vigilance: la troupe dort la tête cachée sous l'aile, mais le chef: veille la tête haute & si quelqu'objet le frappe, il en avertit par un cri (z); c'est pour le départ, dit Pline, qu'elles choisissent ce chef (a); mais sans imaginer un pouvoir reçu ou donné, comme dans les sociétés humaines, on ne peut refuser à ces animaux, l'intelligence sociale de se rassembler, de suivre celui qui appelle, qui précède, qui dirige pour faire le départ, le voyage, le retour dans tout cet ordre, qu'un admirable instinct leur fait suivre; aussi Aristote place-t-il la grue à la tête des oiseaux qui s'attroupent & se plaisent rassemblés (b).

Les premiers froids de l'automne, avertissent les grues de la révolution de la saison; elles partent alors pour changer de Ciel. Celles du Danube & de l'Allemagne passent sur l'Italie (c). Dans nos provinces de France elles

(z) *Cum consistunt ceteræ dormiunt, capite subter alam condito, alternis pedibus tessitæ: dux erecto capite prospicit, & quod senserit voce significat.* Aristot. *Hist. animal.* lib. IX, cap. x. Pline dit la même chose, lib. X, cap. xxx.

(a) *Quando proficiscuntur consentiunt... ducem quem sequuntur eligunt. In extrema agmine per vices qui acclament dispositos habent, & qui gregem voce continent.* Plin. lib. X, cap. xxx.

(b) *Gregales aves sunt grus, olor, &c.* *Hist. animal.* lib. VIII, cap. xii; & Fessus donne l'étymologie du mot *congruere*, quasi ut grues convenire.

(c) Willughby dit qu'on en voit assez communément dans les marchés de Rome; & Rzaczynski prétend qu'un petit nombre reste l'hiver en Pologne, à l'enour de certains marais qui ne gèlent pas. Voyez Rzaczynski, *Hist. Nat. Polon.* pag. 282.

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ble des matières  
me 6  
tres tomes

## 554 HISTOIRE NATURELLE

& qu'elles tranchent plus nettement l'une sur l'autre, mais encore parce qu'elles sont changeantes & se multiplient par le jeu des divers reflets que l'on y voit briller & disparaître tour-à-tour à chaque mouvement de l'œil ou de l'objet.

3.<sup>o</sup> Quoique ces deux genres d'oiseaux se nourrissent d'insectes ailés qu'ils attrapent au vol, ils ont cependant chacun leur manière de les attraper, & une manière assez différente; les engoulevents, comme je l'ai dit, vont à leur rencontre en ouvrant leur large gosier, & les phalènes qui donnent dedans s'y trouvent prises à une espèce de glu, de salive visqueuse dont l'intérieur du bec est enduit; au lieu que nos hirondelles & nos martinets n'ouvrent le bec que pour saisir les insectes, & le ferment d'un effort si brusque qu'il en résulte une espèce de craquement. Nous verrons encore d'autres différences à cet égard entre les hirondelles & les martinets, lorsque nous serons l'histoire particulière de chacun de ces oiseaux.

4.<sup>o</sup> Les hirondelles ont les mœurs plus sociales que les engoulevents; elles se réunissent souvent en troupes nombreuses, & paroissent même en certaines circonstances remplir les devoirs de la société & se prêter un secours mutuel, par exemple, lorsqu'il s'agit de construire le nid.

5.<sup>o</sup> La plupart construisent ce nid avec grand soin; & si quelques espèces pondent dans des trous de murailles

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Table des matières  
Tome 3  
Autres tomes

330

## HISTOIRE NATURELLE

## \* LE MERLE (a).

LE mâle adulte dans cette espèce est encore plus noir que le corbeau; il est d'un noir plus décidé, plus pur, moins altéré par des reflets : excepté le bec, le tour des yeux, le talon & la plante du pied qu'il a plus ou moins jauné, il est noir par-tout & dans tous les aspects; aussi les Anglois l'appellent-ils l'oiseau noir par excellence. La femelle au contraire n'a point de noir décidé dans tout son plumage; mais différentes nuances de brun mêlées de roux & de gris, son bec ne jaunit que rarement,

\* Voyez les Planches enluminées, n.º 2.

(a). En Grec, *Κέρκυρα*, *Κίρκος*, *Κίρκος*; en Grec moderne, *Κέρκος*; d'où se sont formés les noms corrompus, *Cassios*, *Cesios*, *Kepos*, &c. En Latin, *Merula*, *Merulus*, *Nigretum*; en Italien, *Merlo*; en Espagnol, *Mirra*; en Portugais, *Melroa*; en bas Allemand, *Merl*; en Flamand, *Merlaer*, *Meirel*; dans certaines provinces de France la femelle s'appelle *Merlette*, *Merlette*, & même *Merluce*; le mâle se nomme *Merle*, *Merlot*, *Mirle* ou *Normeste*; & le jeune, *Merlot* ou *Merleau*. Suivant M. Salerne, page 176, tous ces noms dérivent assez véritablement de *Merula*, lequel suivant les Étymologistes vient lui-même de *Mera*, qui signifie *seule*, *solitaire*, & cette dénomination convient assez au Merle qu'on ne voit jamais voler en troupes : en Allemand, *Amstel*, que Frisch tire aussi de *Merula*; en Hollandais, *Lyfter*; en Suédois, *Trast*, *Kohl-trast*; en Anglois, *Black-oxel*, *Black-bird*; en Galois, *Yr aderyndu*, *Ceillog mwyach*; en Illyrien, *Kos*; en Turc, *Felrek*. & selon d'autres, *Eetrek*. C'est la dixième Gaije de M. Buffon, tome II, page 227.

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de des matières  
ne 3  
res tomes

## DU MERLE

331

elle ne chante pas non plus comme le mâle, & tout cela a donné lieu de la prendre pour un oiseau d'une autre espèce (b).

Les merles ne s'éloignent pas seulement du genre des grives par la couleur du plumage, & par la différence livrée du mâle & de la femelle, mais encore par leur cri que tout le monde connoît, & par quelques-unes de leurs habitudes : ils ne voyagent, ni ne vont en troupes comme les grives, & néanmoins quoique plus sauvages entre eux, ils le sont moins à l'égard de l'homme ; car nous les apprivoisons plus aisément que les grives, & ils ne se tiennent pas si loin des lieux habités : au reste, ils passent communément pour être très-fins, parce qu'ayant la vue perçante ils découvrent les Chasseurs de fort loin, & se laissent approcher difficilement ; mais en les étudiant de plus près, on reconnoît qu'ils sont plus inquiets querusés, plus peureux que défians, puisqu'ils se laissent prendre aux gluaux, aux lacets, & à toutes sortes de pièges, pourvu que la main qui les a tendus, sache se rendre invisible.

Lorsqu'ils sont renfermés avec d'autres oiseaux plus foibles, leur inquiétude naturelle se change en pétulance ; ils poursuivent, ils tourmentent continuellement leurs compagnons d'esclavage, & par cette raison on ne doit pas les admettre dans les volières où l'on veut rassembler & conserver plusieurs espèces de petits oiseaux.

(b) Frisch, planche 29. Je soupçonne que c'est à cette femelle qu'on donne en certains pays le nom de merle-grive.

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30

## HISTOIRE NATURELLE

## \* L'OIE. (a)

DANS chaque genre, les espèces premières ont emporté tous nos closets, & n'ont laissé aux espèces secondes que

\* Voyez les planches enluminées, n.<sup>o</sup> 985, l'Oie sauvage.

(a). En ancien François, *oû*; le mâle, *jars*; & le petit, *oïson*; en Grec, *oû*; & en Grec moderne, *œna*; en Latin, *anser*; en Arabe, *ouge*, *uge*, *avaç*, *kaki*; en Italien, *ora*, *pāpata*; en Catalan, *hoca*; en Allemand, *gans*, *gauser*, *gauserich*, & le jeune, *ganselin*; en Flamand, *gans*, & la femelle, *gors*; en Suisse, *gauff*; en Frison, *gaf*; en Illyrien, *ganfy*, *lus*; en Espagnol, *ganfo*, *pato*, le mâle, *anser*, *anjara* ou *bivar*; & le jeune, *patico*, *hijo de pato*; en Anglois, *gese*, *gese*; en Suédois, *goas*; en Danois, *goas*; en Polonois, *ges*, *gafser*; par les Nègres de la côte d'Or, *apatta*.

*Anser*, Gessner, *Icon. avi.* pag. 73; avec une figure peu exacte. — Frisch, *tab.* 157, figure exacte. — Charleton, *Exercit.* pag. 103, n.<sup>o</sup> XI. *Onomat.* pag. 98, n.<sup>o</sup> XI. — Rzaczynski, *Hist. Nat. Polon.* pag. 300. *Auduar.* pag. 432. — *Anser domesticus*, Gessner, *Avi.* pag. 141. — Aldrovande, *Avi.* tom. III, pag. 99, avec des figures peu exactes, de l'oie, page 102; de l'oison, page 103. — Joulton, *Avi.* pag. 92, figure empruntée d'Aldrovande. — Willughby, *Ornith.* pag. 27; figure peu exacte, *table* 75. — Ray, *Synops. avi.* pag. 136, n.<sup>o</sup> 2, 3; & 191, n.<sup>o</sup> 8. — Schwenckfeld, *Avi. Silf.* pag. 109. — Simon, *Jamaic.* pag. 323, n.<sup>o</sup> 1. — Söhlhald, *Scot. illustr.* part. II, lib. 111, pag. 21. — *Anser domesticus rossicus*, Klein, *Avi.* pag. 129, n.<sup>o</sup> 2. — *Anas rossia semi-cylindrica*, corpore infra cinereo, subtus pallidior, collo friato. *Anser domesticus*, Linnaeus, *Syst. Nat.* ed. X & Gen. 61, Sp. 7, Var. 2. — *Anas rossia semi-cylindrica*, corpore supra cinereo, subtus albido, rectricibus margine albis. Idem, *Favna Suec.* n.<sup>o</sup> 90. — *Anas*, Moench, *Avi.* Cign. 61. — *Anas anser rossia semi-cylindrica*, corpore super cinereo, subtus pallidior, collo friato. Muller, *Zoolog.*



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ble des matières  
me 9  
tres tomes

## 44 HISTOIRE NATURELLE

fort loin à petites journées (*i*). Pline dit que de son temps on les amenoit du fond des Gaules à Rome, & que dans ces longues marches, les plus fatiguées se mettent aux premiers rangs, comme pour être soutenues & poussées par la masse de la troupe (*k*); rassemblées encore de plus près pour passer la nuit, le bruit le plus léger les éveille, & toutes ensemble crient; elles jettent aussi de grands cris lorsqu'on leur présente de la nourriture, au lieu qu'on rend le chien muet en lui offrant cet appât (*l*); ce qui a fait dire à Columelle, que les oies étoient les meilleures & les plus sûres gardiennes de la ferme (*m*), & Végèce n'hésite pas de les donner pour la plus vigilante sentinelle que l'on puisse poser dans une ville assiégée (*n*): Tout le monde fait qu'au Capitole elles avertirent les Romains de l'assaut que tentoient les Gaulois, & que ce fut le salut de Rome; aussi le Censeur fixoit-il chaque année une somme pour l'entretien des

(*i*) On les mène, tout en paissant, quelquefois douze à quinze lieues loin & même davantage. *Salerno, Hist. des Oiseaux*, p. 407.

(*k*) *Mirum a Morinis usque Romam pedibus venire: sessi prosequuntur ad primos, ita ceteri stipatione naturali propellunt eos.* Plin. lib. x, cap. 59.

(*l*) *Ælien. lib. XII, cap. 33.*

(*m*) *Anser rusticis gratus, quod solertiorum curam præstat quam canis, nam clangore prodit insulantem.* R. Rufl. lib. cap. 13. — Ovide décrivant la cabane de Philemon & Baucis, dit: *Unicus anser erat minima custodia villæ.*

(*n*) *De Re milit. lib. IV, cap. 26.*

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Table des matières  
Tome 9  
Autres tomes

## D E L' O I E.

57

combinaisons & une espèce d'intelligence supérieure à celle des autres oiseaux, dont les troupes partent & voyagent confusément & sans ordre. Celui qu'observent les oies, semble leur avoir été tracé par un instinct géométrique; c'est à la fois l'arrangement le plus commode pour que chacun suive & garde son rang, en jouissant en même temps d'un vol libre & ouvert devant soi, & la disposition la plus favorable pour fendre l'air avec plus d'avantage & moins de fatigue pour la troupe entière; car elles se rangent sur deux lignes obliques formant un angle à peu-près comme un V, ou si la bande est petite, elle ne forme qu'une seule ligne, mais ordinairement chaque troupe est de quarante ou cinquante; chacun y garde sa place avec une justesse admirable. Le chef qui est à la pointe de l'angle & fend l'air le premier, va se reposer au dernier rang lorsqu'il est fatigué; & tour-à-tour les autres prennent la première place. Pline s'est plu à décrire ce vol ordonné & presque raisonné (m); « il n'est personne, dit-il, qui ne soit à portée de le considérer, car le passage des oies ne se fait pas de nuit, mais en plein jour. »

On a même remarqué quelques points de partage où les grandes troupes de ces oiseaux se divisent, pour de-là

(m) *Liburnicarum more rostrato impetu feruntur, facilius ita findentes aëra, quam si rectâ fronte impellerent, a tergo sensim dilatante se cunei, porrigitur agmen largitque impellenti præbetur aura. Cella imponunt præcedentibus: fessos duces ad terga recipiant.* Plin. lib. x, cap. 23.

Oiseaux, Tome IX.

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de des matières  
ne 1  
tres tomes

## 394 HISTOIRE NATURELLE

### OISEAUX QUI NE PEUVENT VOLER.

**D**ES Oiseaux les plus légers & qui percent les nues, nous passons aux plus pesans qui ne peuvent quitter la terre; le pas est brusque, mais la comparaison est la voie de toutes nos connoissances, & le contraste étant ce qu'il y a de plus frappant dans la comparaison, nous ne saisissons jamais mieux que par l'opposition, les points principaux de la nature des êtres que nous considérons. De même, ce n'est que par un coup d'œil ferme sur les extrêmes que nous pouvons juger les milieux. La Nature déployée dans toute son étendue, nous présente un immense tableau, dans lequel tous les ordres des êtres sont chacun représentés par une chaîne qui soutient une suite continue d'objets assez voisins, assez semblables pour que leurs différences soient difficiles à saisir; cette chaîne n'est pas un simple fil qui ne s'étend qu'en longueur, c'est une large trame ou plutôt un faisceau, qui, d'intervalle à intervalle, jette des branches de côté pour se réunir avec les faisceaux d'un autre ordre; & c'est sur-tout aux deux extrémités que ces faisceaux se plient, se ramifient pour en atteindre d'autres. Nous avons vu dans l'ordre des quadrupèdes, l'une des extrémités de la chaîne, s'élever vers l'ordre des oiseaux par les

## Geese: Additional French nouns

Beyond terms used within the text, other French nouns also denote 'goose':

- *bernache* (F) which denotes 'barnacle goose' or 'Brent goose',
- *cérépse cendrée* (F) which applies uniquely to 'Cape Barren goose',
- *canaroie semipalmée* (F) 'magpie goose',
- *anserelle* (F) which applies to several 'pygmy-geese' and
- *ouette* (F) which applies to geese such as 'Egyptian goose', 'Andean goose'.

All are feminine.

*Canaroie semipalmée* (F) 'magpie goose' suggest a bird half-way between the 'duck' and 'swan' but whose habits are unlike either of those birds. Its webbed feet allow it to swim and forage in aquatic habitats, but it typically grazes on solid ground and is far less dependent on access to water than other 'waterfowl', which allows it to extend its habitat endlessly. It is endemic across northern Australia and the southern part of New Guinea. It is very sociable, and assembles in enormous flocks where water exists. It is sedentary whenever possible, and when availability of food makes this possible. It is also sufficiently aerial not only to take flight when under threat, but to undertake extensive migrations. Both sexes have powerful cries and are very noisy – in flight and on the ground.

*Ouette des Andes*, also called *bernache des Andes*, feeds exclusively on mellow grass and lives in two habitats in Chile – the high cordillera during summer, and valley during winter. Its behaviour alters between these two habitats – the meekness and confidence of the high cordillera contrasting with caution and fear in the valley.

## FISH

## Masculine nouns

aiguillat	M	spur-dog, spiny dog-fish, spotted Europ. shark, torpedo-shaped.
alevin	M	young fish destined to populate large rivers, etc.
anchois	M	anchovy, small slender edib. sw fish, 9 cm.
ange (de mer)	M	angelshark, lg p. fins; aka martrame, S. squatina (relig)angel, F
anoli de mer	M	brushtooth lizardfish, long 50 cms, cigar-shaped, sl.compressed
apogon	M	cardinal fish, red, 6 spines (aka roi des rougets) Apogon imberbus
balaou atlantique	M	Atlantic saury/gar, elong. compressed body, dark above, silver belly, 3 cm.saw
baliste (commun)	M	grey triggerfish; tall, round (compressed); solitary; ext. camoufl. colouration
banc	M	collective noun 'school'/shoal' of fish, mass of matter in horizontal layer
bar (commun)	M	Europ. sea bass, thickset, striped, aka loup, 8-10 d. spines, 103 cm/12 kg
barbeau commun	M	barbel, delicious, f/w; 4 barbules; elongated with
barbier	M	swallow-tail sea-perch, elong., sea-bass fam., brilliant colours,
barbillon	M	young barbel
barbus	M	barbel, elong., 2 mouth barbels; serrated d.spine; mottle B. barbus
barbu méridional	M	aka dugau, differs from barbeau, w.out d. spine
barracuda	M	barracuda, large marine fish w. elongated body ('brochet de mer',
beluga	M	esturgeon beluga/'grand esturgeon' Huso huso; barbels reaching
blageon	M	varicose, slender fw Eur. fish, 10-20 cm, dark silver back, light
brochet	M	pike, fw (broche/f/spike), 137 cm, long narrow muzzle, crypt.
brochet de mer	M	European hake (see 'bécune'), 140cm, faint horiz. bands across
cabillaud	M	Atlantic cod (morue commune), long chin barbel, darker vertic.
cabot	M	tompot blennie/bullhead, 18cm, fw Eur. flatfish, lg p. fins, mottled camoufl. col.,
callionyme élégant	M	stinkfish, gen. Callionymus, s/w, elongated/cyl., spiny, taiffin has
capelan	M	poor cod, capelin Trisopterus minutus, chin barbel well devel'd;
carassin (doré)	M	crucian carp (aka cyprin doré) Carassius carassius, tall, compr.
carrelet	M	plaice, large quadrangular-shaped flat (also 'pie commune')
chabot de mer	M	long-spined bullhead, tiny (10cm), s/w, bony plates, long spine
charbonnier	M	black seabream (aka 'dorade grise, griset, canthare' disting. by col., also edib.
chinchard	M	Atlantic horse mackerel, long thin silvery body, col. w. crypt.
chirurgien	M	surgeonfish, Acanthurus mata; 50cm long; 9 d.spines, single sharp
coelacanth	M	(19th C., L.base) primitive marine boney fish w. large tail
coffre	M	coffer-fish from its body carapace, extraord. colouring
colin	M	coalfish/pollack/saithe (aka lieu noire), elong. slight barbel/mouth
comète coussu	M	false scad, elongated, false eye, 60 cm, Caranx rhonchus, d. erect.
comète saumon	M	rainbow runner (L. Elagatis bipinnulatus) long narrow body,
congre	M	conger eel, cyl. 3m, noct., mucus, no scaled, dark grey/blue to light to
coq	M	cardinal fish aka apogon/castagnole, red/pink col., 15 cm, huge eye larger
corb commun	M	brown meagre/ombre, Sciaena umbra, inhabits shallow coastal waters
corégone	M	fw.herring (aka lavaret), elong. silvery w. c/shading, d/a. spines
coryphène (commun)	M	common dolphinfish, migrat. ocean fish, beaut. col. incl. c/sh
crapaud	M	Lusitania toadfish, Halobatrachus didactylus 2-3 erectile d.spines
cyprin	M	fw.goldfish, tiny (5-7 cm), red, rounded, 3-4 d.spines
(dorade) marbré	M	striped seabream, 50cm, narrow horiz. dark gold stripes
daurin	M	aka mulet doré
diodon	M	spotfin burrfish, rounded belly, short immov. spines head/upper
dragonnet lyre	M	dragonet(doucet), flat head, slender tapering body, bright crypt.
églefain/aiglefin	M	haddock, long chin barb, lg mouth, silv col./dark lateral line, lge
éperlant	M	smelt, long silvery body, small marine (of salmon fam.)
espadon	M	swordfish; (obs.) two-handed sword (weapon) (aug. of spada/sword
excoet aux ailes noirs	M	blackwing flyfish (aka. p. volant)
fanfre	M	pilot fish, slender sub/trop.; series of wide horiz.bands/stripes
flet	M	flounder, flat dissym. lozenge; L.H. rough-skinned. cam. dark splodges Platichthys I
flétan	M	halibut, lge slimy flatfish, rhomboid shape, delic. white flesh
fretin	M	fry, young fish
gardon	M	roach, small 20-30cm Eur. fw., silvery (white band along body)
germon	M	albacore (tuna) v. long, schools, silver w. dark back, faint irid. blue stripe
goujon	M	gudgeon, small 20cm slender Eur. fw, barbel each side of mouth
griset	M	black seabream aka dorade grise/charbonnier, silvery, oval, tall,
grondin rouge	M	E. Atlantic red gurnard, sw, bony, 9-10 d.spines, red w.camoufl.
gymnote rayé	M	S. Amer. banded knifefish, resembl. eel, electrified;

haddock le	M	(Eng. loanw.) Finnan haddock (aka calaver) long 100 cm torpedo-shaped
hareng	M	(Frank.) Atl. herring; soft-finned, silvery, 45 cm spindle-shaped
hippocampe	M	sea-horse, marine teleost fish w. prehensile tail, swimming in
jarret	M	piearel, small sw spindle-sh., 11 d.spines, brown centr.rectang.'eye'
joël	M	joel, common sand smelt <i>Atherina presbyter</i> , spindle shaped, <i>Atherina boyeri</i>
labre nettoyeur	M	cleaner wrasse, syn. labre merle, larve
lançon	M	sand-eel, lance, 35cm small silvery eel-like spiny-finned burrowing
lavaret	M	common whitefish, d. & a.spines; (lac de Bourget) elong, silvery w.
lieu jaune	M	(Anc. norrois) pollock/pollack, cod fam., 130 cm torpedo-shaped, dark
loup de l'Atlantique	M	wolfish, catfish,
maigre (commun)	M	meagre, 230cm.sw/pearly silver col., elong, 10-11 d. spines
maquereau commun	M	Atlantic mackerel, spiny-finned food fish, torpedo
marbré	M	striped seabream, 50cm, narrow horiz.dark gold stripes
marlin	M	Medit. spearfish, v. long u. jaw (beak), v. long slender, 240cm
melva	M	(aka auxide)f.tuna <i>Auxis t. thazard</i> , robust, elongate, rounded body w.
merlan	M	whiting, dark back/silver sides, occ.chin barb; (pop.) hairdresser, barber
merle	M	brown wrasse, changes sex from female to male
mérout (noir)	M	dusky grouper/seaperch, thickset, remark blotched col camoufl.
mérout de Méditerranée	M	dusky grouper, spines, crypt. camoufl. col.; compr. head; oval body
muge	M	mullet, aka mullet, reddish, fuselé, long barbels beneath chin
mulet (doré)	M	(OF mul) aka muge, sw delic. white flesh, mullet (L. <i>mullus/rouget</i> )
nonnat	M	transparent goby, tiny (7cm), slender, sw, 3-4 d. spines
omble chevalier	M	charr, 4-5 d. spines, 3-4 a. spines, spindle shaped, aka omble
omble de fontaine	M	brook-trout; 3-4 d. & a. spines; spindle-shaped
pagau	M	1. striped sea-bream 2. pandora (red Eur. sea-bream), deeply compressed body
pagot rose	M	blackspot seabream, aka dorade rose, gros yeux; red, pinkish oval;
(pêis) saint-pierre	M	Atl. John dory, rly round, flat, silver w. lg dark mid-lat. spot
perlon	M	aka grondin hirondelle <i>Trigla hirundo</i> , gumard, bony plates
perroquet	M	parrotfish, 50cm col., round aka scare; parrot beak, 7 d. spines
pilote	M	pilot fish, aka fanfre, slender, series of wide horiz.bands/stripes
piranha	M	small f/w. voracious carnivore fish of S.American rivers
poisson	M	fish, acqu. verteb. animal w. fins/lungs; (astron.) Pisces
poisson-chat	M	N.Afric. catfish, 170 cm, flat/tubular, long whisker-like barbels
porc-épic	M	black-blotched porcupinefish, spines on head/upper body,
rason	M	cleaver wrasse, when threatened dives headfirst into sandy bottom
rémora	M	remora, 86 cm, flattened elong shape, dark colour, fin transf. into
rémora commun	M	live sharksucker, elong. (arrow-shaped), white lat. stripes against
requin	M	shark, lge fish w. big tail, powerful, voracious appetite
requin-tapis	M	carpetshark, nocturnal, buries itself in sand and waits for prey to pass
rotengle	M	rudd, oval flattened body, cypr.(red), golden col, br. red fins, d/a. spines
rouget	M	red mullet (aka surmulet), sw fish red-col. <i>Mullus surmuletus</i> ****
rouget-barbet	M	var. of mullet, striped red mullet, syn. of surmulet
rouvet	M	oilfish, <i>Ruvettus pretiosus</i> , slender spindle shape, bony plates rather than velvety
sabre	M	silver scabbardfish, scaleless 2m., 2nd a.spine plate-like
sandre	M\F	zander, lge (1 m) fw, corps allongé, cyfndrique, sides w. bands; small schools/solit
sanglier	M	boarfish, flat round, impress.d.spines, cam.col. vert.stripes/orange-pink spldges
sar commun	M	<i>Diplodus vulgaris</i> , common 2-banded seabream, 2 wide vert.
sar/sargue	M	white bream, 9 faint vert. stripes on flanks, caud. eye, 11-12
sauclet	M	Medit. sand smelt, long silvery body w. stripe, euryhaline/tolerant of s.w.
saumon	M	salmon, lge s/w migrat. fish, delic. pink flesh (L. <i>salmo</i> -fish of the sea)
saurel	M	Atlantic horse mackerel, aka 'chinchard' <i>Trachurus trachurus</i>
scare	M	parrotfish (aka scare des anciens/de Grèce, perroquet vieillard) 50cm
serran tambour	M	brown comber, <i>Serranus hepatus</i> , 9 erectile d. spines, wide d.brown
silure	M	long 2 m. fw cat-fish, 2 barbels on upper jaw, 4 on lower; d. & p.
siouclet	M	Mediterr. sand smelt (aka joël) <i>A. hepsetus</i> 20 cm., small elong.
sirlin	M	chubb, tiny 15 cm silvery c'sh torpedo-shaped, 3 d., 3 a. spines,
sprat	M	(Eng.) sprat, small slender silvery col. marine foodfish rel to
squale	M	dogfish, kind of shark with spiny pectoral fins, no anal fin
sublet	M	long-snouted wrasse, elong., 12-14 d.spines, 10 cm sw, adaptive. col.
surmulet	M	striped red mullet, torpedo, 2 barbels from either side mouth, d. spines
tacaud commun	M	pouting; rhomboid, deep body, long chin barbel, cam.(disr./c'sh)
tambour	M	redbanded sea-bream, extraord.spines/gold-red colour, bands
targeur	M	common topknot, can change colour to sea floor, remains motionless to avoid pred
tassergal	M	bluefish, pred. killer, elong. 60-120cm, bluish/greenish col.
thon rouge	M	Nthn bluefish tuna, sw, large tunny-fish, spiny-finned
trigle	M	gurnard, gurnet, long, sw; heavily armoured (ridges/spines) head

turbot	M	turbot, lg 5-80 cm rhomboid, flat, delicious flesh, scaleless
turbotin	M	small turbot, saltwater
vairon	M	Euras. minnow, 11cm elong. fw (vair/squirrel fur col., d. & a.
volant	M	blackwing flyfish (aka. exocet aux ailes) morph. Adj/Subst.

# Feminine nouns

abadèche	F	goldblotch grouper, 140cm, stout body, col'ful reef fish lat. camouf.
ablette	F	bleak, fw slender, 15cm silvery; scales make false pearls; double dark band across li
allache	F	round sardinella aka sardinelle 8cm blue & gold striped down back
alose	F	shad, sw, herring-like Eur. foodfish, radiating stripes across body
anguille	F	European fw. eel, nocturnal, rounded long shape, slimy; c/sh dark back, white belly
athérine	F	silverside/sandsmelt, elong. forms enormous schools
auxide	F	melva aka frigate tuna; elong. rounded body, back bluish, dark wavy lies
badèche	F	groper, brilliant gold col, series of gold lines running from mouth
barbue	F	brill. sw. flatfish rel. to turbot, thinner, more slender; can change
baudroie	F	anglerfish, 2 m. round head, flat vent/dor. Lophius piscatorius,
baveuse	F	rusty blenny, tapering scaleless body, c/sh, slimy (bave (F) 'saliva',
bécasse de mer	F	longspine snipefish, red/pinkish deep tounded body, mouth at end
belone	F	garfish, aka orphie (B. belone belone) up to 80cm, silvery, long fine
blade	F	saddled sea-bream, silver, dark spot where tail/body join ('oblade'), nocturnal
blennie	F	blenny, slimy, tapering scaleless body, c/sh, parsemée de petites taches sombres
bogue	F	bogue, porgy, elong. fusiform, bright longitudinal gold/yellow stripes Boops boops
bonite	F	bonito, tunny (spiny-finned)-like (marine) edible fish in warm
brème	F	bream, freshwater, laterally compressed, flat body
capucette	F	Atl. silverside M. menidia, 14 cm slender, thin, round, silver line
cardine	F	megrim (cardine franche), s/w, oval flatfish, turbot fam., translucent
carpe	F	large fw, stocky (variable), high, deep belly, somewhat compressed,
castagnole	F	cardinalfish aka coq, apogon, brightly col., 8cm, high, oval,
castagnole rouge	F	damsel fish aka demoiselle, round, red, small 15 cm, C. chromis
cavillone	F	large-scaled gurnard aka trigle rude, conical body, lg head, c'sh
cithare	F	spotted flounder marked by spots along fin, sea-floor eater 10 cm
clupéonelle	F	Black Sea sprat, 10 cm. f/w clupea/L. river; tolerate s/w, c'sh;
(vieille) coquette	F	cuckoo wrasse, (vieux coquette) sw, slim-line, brightly col.,
demoiselle	F	demoiselle/damselfish, small tropical percoid fish, blue, little, dressed like a (stere
daurade	F	snapper; seabream (aka pagre commun); tall round deep compr. body
daurade grise	F	black seabream aka griset/charbonnier, oval, tall, gold/yellow longit. lines
daurade marbre	F	striped seabream, 50cm, narrow horiz. dark gold stripes over rounded
daurade rose	F	red seabream, reddish brown col., large black spot beh. lateral line,
daurade royale	F	dorado, gilt-head seabream, oval compr. form, gold cresc. bet
épinoche	F	three-spined stickleback, greenish brown cam. to brackish habitat
feuille	F	Atlantic spotted flounder, (aka cithare), oval/roundish flatfish
flotte	F	Dipturus batis 'blue skate'
girelle	F	rainbow wrasse, long slim, orange or red coloured stripe along flanks
grémille	F	ruffe, Eur. f/w; slender; darker splotches/light belly, camouf.
lamproie	F	lamprey, most primitive, mouth/form of sucker, tongue cov.
limande	F	lemon sole, edible, oval flat smooth-skinned Europ. salt-water fishm do not feed ir
lingue	F	ling, elong. cylindr. body, long fins, (M. molva) (etym 'long')
loche	F	loach minnow, esp loche marbrée, Balkan loach, small fw, carp-
loche franche	F	stone loach, fw., elong., nocturnal
lotte	F	(Gaul.) burbot, edib freshw. w. thick slimy skin, cov. w. scales
mole	F	ocean sunfish, w. long pointed dorsal & anal fins, fringe-like tail fin
morue	F	cod, large speckled sw cold water marine fish, 3 rounded dorsal fins;
murène	F	moray eel, tightly compr. laterally, no scales, lateral line, col. var.
orphie	F	garfish, aka belone (B. belone belone), back/upper sides bright
palomète	F	plain bonito, sw/elong/c'sh/Orcynopsis unicolor.
palomète	F	derbio, sw/oval/spines/cam (pect. eyes) Trachinotus ovatus.
perche	F	perch, (spiny-finned) f/w, delic. flesh, black bands on sides
plie commune	F	European plaice aka carrelet, flat, crypt. col., nocturnal, smooth w. small scales
raie	F	ray, skate, stingray, flat, pect fins contin w. head/rhomboid,
rascasse	F	scorpionfish (w. spines), tongue-shaped, elong. head cov. in spines
sardine	F	sardine (large), pilchard (small), body sub-cylindr., rounded belly,
sériole	F	amberjack, voracious predator, travel in lge schools, massive body
sole	F	sole, flat, tongue-shaped fish (L. solea/sandal), chair estimé, lge & diffuse dark spc
tanche	F	tench, f/w, dark, slimy, barbels r'd mouth, golden reflections; also painted 'wrasse'
targie naine	F	topknot (Norweg.) with superlative col., fringed fins that grip

truite	F	Salvelinus fontinalis brook trout
truite arc en ciel	F	rainbow trout, 90cm fusiform (N.Amer., intr. 19thC) simil. to
truite fario	F	brown trout aka t. commun, fw elong 60cm+, c/sh & cryptic col.,
vandoise	F	dace, tiny (9cm)Eur. fw fish, slender bluish-grey body, darts about
vieille commune	F	Ballan wrasse aka perroquet de mer/labre vieille, oval, female, then male
vive	F	weever, small, sw., lat. flattened, amazing camouf., corps allongé, venomous spine

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**Fish having an 'elongated' form**

<i>aiguillat</i>	M	'spiny dog-fish' (shark)	torpedo-shaped
<i>anchois</i>	M	'anchovy'	long, slender
<i>anoli de mer</i>	M	'brushtooth lizardfish	cigar-shaped
<i>beluga</i>	M	'beluga sturgeon'	torpedo-shaped
<i>brochet</i>	M	'pike'	long narrow
<i>brochet de mer</i>	M	'European hake'	long slender body
<i>capelan</i>	M	'poor cod'	elongated shape
<i>cyprin</i>	M	'goldfish'	elongated shape
<i>colin</i>	M	'coalfish'	elongated shape
<i>crapaud</i>	M	'Lusitania toadfish'	elongated shape
<i>dragonet</i>	M	'dragonet'	elongated shape
<i>éperlan</i>	M	'smelt'	long slender form
<i>espadon</i>	M	'broadbill', swordfish'	elongated shape
<i>flétan</i>	M	'halibut'	elongated flatfish
<i>germon</i>	M	'albacore (tunny)	torpedo-shaped
<i>goujon</i>	M	'gudgeon'	slender-shaped fish
<i>hareng</i>	M	'herring'	slender spindle shape
<i>jarret</i>	M	'picarel'	spindle-shaped body
<i>lançon</i>	M	'sand-eel, sand-lance'	very narrow body shape
<i>lavaret</i>	M	'herring'	torpedo-shaped body
<i>lieu noir</i>	M	'pollack'	torpedo-shaped body
<i>maquereau</i>	M	'Atlantic mackerel	spindle-shaped
<i>marlin</i>	M	'Mediterranean spearfish'	spindle-shaped
<i>merlan</i>	M	'whiting'	elongated, slender
<i>mulet</i>	M	'mullet'	long narrow body
<i>nonnat</i>	M	'transparent goby'	slender shaped body
<i>requin</i>	M	'shark'	torpedo-shaped, tapering
<i>rouget</i>	M	'red mullet'	long narrow body
<i>rouget-barbet</i>	M	'striped red mullet	long narrow body
<i>rouvet</i>	M	'oilfish'	long spindle-shaped
<i>saumon</i>	M	'Atlantic salmon'	long spindle-shaped
<i>serran tambour</i>	M	'brown comber'	torpedo-shaped
<i>siouclet</i>	M	'sand smelt'	elongated narrow shape
<i>surmelet</i>	M	'striped red mullet'	long narrow body
<i>thon</i>	M	'tuna, tunny'	spindle-shaped body
<i>vairon</i>	M	'minnow'	small slender (freshwater)
<i>volant</i>	M	'blackwing flyfish'	cigar-shaped body

Some of the 50 fish in the corpus with a 'long' body.

## OTHER LIVING THINGS

Masculine Nouns

agneau	M	male lamb (dim. of agnus)
agnelet	M	lambkin, small lamb
alligator	M	alligator (Engl. from Span. lagarto 'lizard') cov. in bony plates
amphibic	M	amphibian, animal whose skin is covered w. glands
anaconda	M	(L/w Sinhal.) anaconda, lge constricting non-ven. snake
âne	M	ass/donkey, mammal of horse fam., sure-footed, longer ears
angora	MVF	angora, any kind of animal w. long silky coat (goat, rabbit, cat)
animal	M	living being wh. (in general) can move (opp. vegetable),
aoutat	M	larva of harvest-bug which can lodge itself under the skin
argynne	M	fritillary (butterfly) diurnal
attelage	M	team of bêtes (horses, etc.) attached/harnessed together
aurochs	M	cattle; also, recently extinct member of European cattle tribe
babiroussa	M	(L/w, Malay) babiroussa, Malaysian wild boar
baboin	M	baboon, Afr. terrestrial primate, lives in groups
balineau	M	baby whale
banc	M	shoal of fish
barbe	M	barb (breed of horse of Nth African origin)
barbioussa	M	Malaysian wild boar 'babiroussa'
bardot	M	hinny (sterile offspring of male h./fem. donkey)
barzoi	M	(L/w) Russian dog, borzoi, long hair (levrier/greyhound or harrier)
baudet	M	donkey, dom. animal rel. to horse (Frankish word)
bélier	M	ram, male sheep
bétail	M	cattle, ens. of animals bred for agricult. production;
bièvre	M	(obs.) beaver, large amphib., large flat tail (L. from Gk
biquet	M	kid, (male) young of chèvre (goat) (cf. biquette)
bison	M	bison, member of the cattle family of bovids
blaireau	M	badger (blair (M) pointed muzzle), OF blier, from Gaul.
boa	M	(zool.) boa constrictor; feather boa
bœuf	M	domestic ruminant bovine (male, castrated, opp. vache)
bombyx	M	butterfly, esp. of mulberry tree butterfly (caterpillar prod. silkworm)
borins	M	cattle, bovines
bouc	M	male goat, billy goat
bourdon	M	pilgrim's staff; bumble-bee (heavy-bodied); (mus.) drone
bousier	M	dung-beetle (scarab.)
bouvillon	M	steer, bullock
bovidés	M	(pl., zool.) horned ruminants, Bovidae, bovines; domestic
bradype	M	(zool.) bradypod (Gk bradus/slow) - not in LRPT, COD
braque	M	hound (back-formation from brachez/hunting dogs)
brocard	M	(LRPT: one-yr-old male) roe-deer F. broque/wood,
broutard	M	grass-fed calf
bryozoaires	M	Bryozoa, major taxonomic division of plants/animals
bubale	M	hartebeest, large African antelope with lyre-shaped horns
buffle	M	buffalo (L. bufalus, alteration of bubalus,
cabot	M	(fam.) dog (poss. from L. caput 'large head'
cabri	M	kid, young goat (anc. Provenç.)
cachalot	M	sperm whale (has teeth, like dolphins etc., not plates), from Sp./Portug.
cafard	M	cockroach, black-beetle (animal which flees from light)
caïman	M	caïman, Amer. crocodile (Spanish from Carib. Ig)
caméfidés	M	camel family
campagnol des champs	M	vole, nocturnal fieldmouse, small, stocky body, short tail
cancrelat	M	cockroach, black-beetle
caniche	M	poodle
canidés	M	dog family
caracal	M	caracal; lynx-like feline mammal of N. Africa, long legs,
caret	M	lge carniv. Carib turtle/hawksbill/flattened shell; (loanw. Carib. Indian)
castor	M	beaver, large amphib., beaver-fur (brown), w. lge flat tail
cavicornes	M	(pl.) Cavicornia (hollow-horned beasts, eg. sheep, goats cf. solid
cerf	M	stag, deer, red deer, hart; adult male of this species w. long

cestodes	M	general term for any flatworm (pl) cestodea, ribbon-shaped
chacal	M	jackal, canine mammal res. dog, long legs, pointed ears/muzzle
chamelon	M	offspring of male and female camel
chamois	M	horned grazing animal living in mountains
charançon	M	coleopter weevil nuisible (eats rice) (poss. Gaulish orig.)
chat	M	cat ( <i>L. catus, gattus</i> )
chaton	M	kitten
chauve-souris	M	bat, nocturnal mouse-like winged mammal
cheptel	M	livestock, coll. term for exploited animals/those w/in a certain region
cheval	M	horse, horse-flesh; riding ( <i>L. caballus</i> )
chevreau	M	kid, young goat
chevreuil	M	smallish deer, roebuck (reddish-brown coat, white chest)
chien	M	dog
chimpanzé	M	chimpanzee
chiot	M	puppy, young dog
citron	M	butterfly (lemon-colouring, <i>Gonepteryx rhamni</i> )
clabaud	M	hound with long ears which give tongue frequently
clébard	M	(fam.) dog (from Arab. <i>klab</i> , pl. of dog)
cloporte	M	woodlouse, der. from <i>clore</i> + <i>porte</i> terr. crustacean
cobaye	M	(loanw.) guinea-pig (lit., fig.) (Braz. from Tupi)
cobra	M	(Portug.) cobra, venomous serpent/snake
cochon	M	pig, w. thick bristle-cov. skin
colimaçon	M	snail
coquillage	M	shellfish, any of edible marine molluscs with shell
corail	M	marine animal, coral; coral colour
cousin	M	gnat, fragile (fam. <i>Culex</i> , mosquitoes, midges, gnats)
couvain	M	nest of insect eggs; brood, hatch (of bees)
coyote	M	coyote (loanw.) canine
crapaud	M	common (European toad) <i>Bufo bufo</i> (Batrachian family)
crocodile	M	crocodile, enormous reptile with strong jaws
crocodilien	M	reptile, reptile family (inc. crocodiles, etc.)
dada	M	(child's lg) horse; (fig., fam.) hobby-horse, pet subject
daguet	M	young deer with first growth of antler (do females grow antlers?)
daim	M	fallow deer; suede leather
dauphin	M	dolphin
dinothérium	M	(paleont.) <i>Deinotherium</i> , extinct beast of gen. D...
dogue	M	mastiff (or similar breed of guard dog) w. large head, strong
drill	M	drill, old world Monkey (from W.African lg)
dromadaire	M	dromedary, one-humped camel, ruminant
dugong	M	dugong, whalelike marine mammal
échidné	M	echidna, spiny ant-eater
écureuil	M	squirrel
élan	M	large deer of the N.America, big head ('moose' in Amer. Eng.)
éléphant	M	enormous herbiv. mammal, massive body, peau rugueuse
épaulard	M	grampus, slate-grey dolphin; also syn for killer whale, toothed
éphémère	M	mayfly
escarbot	M	scarab beetles, dung-beetle
escargot	M	snail
essaim	M	swarm, group of bees or insects in flight or set
eyra	M	eyra, reddish-brown variety of jaguarondi (feline mammal)
fauchoux	M	daddy long-legs (dialect 'faucheur')
félin	M	cat, superordinate term
frelon	M	hornet, large social wasp that can inflict severe sting
furet	M	ferret, lg domesticated albino var. of polecat bred for
gamète	M	(biol.) gamete
gecko	M	gecko, climbing lizard
genet	M	jennet (small Sp. riding horse); female donkey/ass (jenny)
gibbon	M	gibbon
gibier	M	wild animals w. edible flesh, taken while hunted
girafon, eau	M	baby giraffe
goret	M	young pig
gorille	M	gorilla (from Gk. <i>Gorilla</i> , Afr. tribe renowned for hirsute
goupil	M	(obs.) fox
grand rorqual	M	blue whale
grillon	M	cricket, black or yellow insect that jumps, chirps r

guépard	M	cheetah, cat related to panther, fur spotted with black
hamadryas	M	hamadryad, Abyssinian baboon
hamster	M	hamster (from German)
hanneton	M	may-bug, cockchafer (Frank.)
harpail	M	herd of young hinds (female) and deer (male)
hérisson	M	hedgehog small nocturnal insect-eating mammal, body cov. in piquants
hippopotame	M	hippopotamus, hooved mammal, sparsely cov. w. hair,
iguane	M	(Loanw. Sp. from Amer. Carib 'Arawak') iguana, elong., rough
impala	M	impala, small member of antelope family (Zulu)
infusoire	M	(see amoebc) protozoa (cilié, qui vit dans les liquides)
insecte	M	insect, small articul. animal w. 6 legs, mostly winged
isard	M	izard, chamois, goat-antelope of the Pyrenees of Alps
isatis	M	isatis, blue fox, arctic fohairy
jaguar	M	(L/w, Tupi) jaguar
kangarou	M	kangaroo (Aust. loanword)
king-charles	M	King Charles spaniel
koala	M	koala (Aust.loanword)
lamantin	M	sea-cow, manatee
lampyre	M	glow-worm, noct. beetle whos larvae bear luminesc. organs
lapin	M	rabbit (cf. lapine/F)
lemming	M	lemming, volelike rodent; (by ext.) a member of a large group
lémurien	M	class name lemur, tropical noct. primate close to 'monkey'
léopard	M	leopard
lépidoptère	M	lepidopteran (incl. butterflies, moths)
lepisme	M	silverfish, small wingless insectw long antennae and tail appendages
lerot	M	garden doormouse, hibernating, resembles doormouse (loir)
leu	M	wolf (obs.), nocturnal
levraut	M	leveret, young lièvre
levrier	M	greyhound, harrier
lézard	M	small reptile with long pointed tail, lizard (covered in scales
lézardet	M	young lizard
lièvre	M	hare (M), gnawing mammal, cousin of rabbit
limaçon	M	snail
lion	M	lion, lioness (female : lionne; cub: lionceau)
loir	M	dormouse, grey skin bushy tail, hibernates in winter
loris	M	loris, tropical nocturnal primate, prosimian incl. lemur, tarsier
loup	M	wolf, nocturnal predator
lucane	M	stag-beetle, lamell. beetle family (L. lucanus 'scarab beetle')
lynx	M	lynx, feline
macaque	M	macaque(monkey) (fam.) COFD ugly old man, LRPT"person"
maki	M	(zool.) lemur
man	M	larva of grub
marcassin	M	young wild boar
maringoin	M	(Loanw.) mosquito, dipterous insect of family Culcidae
marsovin	M	porpoise, smaller than dolphin
mastiff	M	old breed of large powerful short-haired dog (OF, from
mâtin	M	mastiff; large watch-dog; (fig.) ugly brute
mégaptère	M	humpback whale, black & white tail, white belly
méhari	M	dromedary, racing camel (Arabic)
méloé	M	may-beetle
mille-pattes	M	centipede - has exoskeleton (hard structure covering body)
mimi	M	(child's lg.) pussy cat
mollusc	M	mollusc, invertebrate creature with soft body
molosse	M	huge dog; mastiff (chien de Molossie, en Epire - LRPT)
morse	M	walrus, tough thick skin, upper teeth are tusks, coarse whiskers;
moucheron	M	midge, insect which bites (flying insect/morph.
moustique	M	dipteran (sucking/piercing mouth parts); mosquito
mouton	M	sheep, wether; mutton; (fig.) lamb
raulet	M	mule (male) (cf. mule (F) 'female mule'
mulot	M	fieldmouse, small nocturnal rodent, OF, orig. Germ, p-ê. Frankish
muntjac	M	zool. Asian deer gen. Muntiacus
muscardin	M	small dormouse, short tail der. 'mus', lives in hazel-nut
mustang	M	mustang, semi-wild Amer. horse (Sp. from L. mixta/wild
naja	M	(L/w. Hindi, from Ceylon) naja, a cobra (venomous)
narval	M	narwhal, Arctic whale w. long spiral horn, toothed

nasique	M	(zool.) proboscis monkey
nilgaut	M	(zool.) nilghau (large Indian antelope)
noctilueque	M	(Adj.Subst). gen.Noctiluca (nightlight-prod) firefly, noct.
ocelot	M	(zool.) ocelot (& fur, roux tacheté de brun
okapi	M	okapi,reddish-brown coat/white stripes on legs, rel.to gifaffe
opossum	M	(L/W, Algonquin) opossum (Aust/NZ 'possum'), sarigue w.
orang-outan(g)	M	orang-utan
orignac	M	elk, Canad. elk (moose)
ornithorynque	M	platypus (ornitho/bird + rhyn/bill + que/of?)
otarie	M	sea-lion, any of var. large-eared seals (deriv. Gk otarion,otos/oreille
ouistiti	M	(zool.) marmoset, small S.American monkey w. long hairy tail
ours	M	bear (male)
oursin	M	sea-urchin, sea-hedgehog, echinoderm, globular body
ourson	M	cub, young bear
ovibos	M	(zool.) ovibovine, musk-ox
ovule	M	(zool.) immature ovum; (bot.) small body in seed-bearing plants
panda	M	panda, bear w. black and white pattern (Nepalese)
pangolin	M	scaly ant-eater
papillon	M	butterfly; (mech.) wing-nut, butterfly valve
perce-oreille	M	earwig, insect w. elongated body, small leathery forewings
petit orqual	M	minke whale
petit-gris	M	Siberian squirrel
phasme	M	stick insect, long delicate body,legs; camouflage with habitat
phoque	M	seal(L. from Gk), carniv. marine mammal, flippers
pithecanthrope	M	pithecanthropid, fossilised primate mammal, ape-like pre-
porc	M	pig; pork (male) opp. truie (F), sow)
porcelet	M	piglet
porc-épic	M	porcupine, noct. insect-eating mammal, cov. with spikes
pou	M	louse, beetle
poulain	M	foal (M/F) to age of 30 months
pourceau	M	(anc., liter.) swine, hog (pig of some kind)
primate	M	primate (mammale à dentition complète/main prehensile)
puceron	M	aphid, tiny insects living on plants
puma	M	(Quihairyua) puma, feline mammal w. greyish-brown fur, long tail
putois	M	polecat, dark brown must. mammal rel. to/larger than weasel
ragondin	M	mammal of S America
rat	M	rat; (fig.) miser (F: rate)
ratel	M	ratel, honey-badger, mustel. mammal w. massive body (Afrikaans)
renard	M	male fox
reptile	M	reptile, vertebrate animal with scaly outer covering
rhinocéros	M	rhinoceros, thick skin, massive body
roquet	M	pug-dog; mongrel, cur
rorqual	M	rorqual,fin(back) whale, of Baleine family, has long grooves
rorqual boréale	M	sei whale
sagouin	M	squirrel-monkey (small, tree-dwelling)
saïga	M	(Russ.) small European antelope
sanglier	M	wild pig, boar (F: laie - examine marcassin, solitaire
sapajou	M	sapajou, S. Amer. monkey
scarabée	M	beetle, insect w. forewing modified into biting parts
scinque	M	skink, lizard (L. scincus/lizard), smooth scales, elong. body
scorpion	M	scorpion, small arachnid (4 pairs of legs) w. venomous tail
serpent	M	reptile w. v. long cylindrical body devoid of apparent limbs;
simien	1	primate of under-order include. monkeys
singe	M	monkey, ape (F:guenon); (mech.) windlass, boise; (fig.) imitator.
soucis	M	butterfly (marigold colouring)
springbok	M	springbok, common antelope of S. Africa (Germ. sauter)
tamandua	M	tamandua, ant-eater
taon	M	horse-fly, gadfly, large dipterous fly, stings, annoys cattle
tapir	M	tapir, large hooved mammal w. long tapering snout (Tupi)
tarpan	M	tarpan, wild horse
tarsier	M	tarsier, Asian (Indon.) nocturnal primate
taureau	M	bull, male of cow capable of reprod. (from L., Gk tauros)
ténia	M	taenia, elong. body, worm inf. intestines of mammals,
termite	M	termite, ant-like insect, lives in colonies, eats wood from
têtard	M	tadpole, embry.form of frog/toad;devels limbs from limbless form

tigre	M	tiger (male), pair w. tigresse
tigron	M	feline, hybrid of lioness and tiger
toutou	M	doggy (child's lg)
tripang	M	trepan, sea-cucumber
triton	M	newt/ef, semi-aqu. amph w. long slender body, short feeble legs
trombidion	M	harvest bug
troupeau	M	group of domestic animals raised together, eg. cows, sheep, etc.
tupinambis	M	lizard
ai (syn. unau)	M	sloth, arboreal mammal, hangs upside down by arms
varan	M	saurian reptile, varan, large lizard (from Arab. waral)
veau	M	calf, both male and female
ver	M	worm, small animal cov. w. mucus (insect, larvae) w. out feet
verrat	M	breeding boar
vison	M	mink, rel. to putois, loutre, related to weasel family M. vison
vulcain	M	red admiral (butterfly)
wombat	M	wombat (Aust.)
zèbre	M	zebra (Sp. from Portuguese)

### Feminine Nouns

abeille	F	bee, insect living in colonies, prod. honey & wax; sting
agnelle	F	female lamb
altise	F	flea-beetle, common beetle capable of jumping, destruct.
amibe	F	amoeba, protozoan (invertebrate, freshw. & saltw.), live as
angora	F	angora, kind of animal w. long silky coat (goat, rabbit, cat) (Turkish)
antilope	F	antelope, bovid fam., ruminants; graceful, long-legged, horned
araignée	F	spider (muni de crochets (hook/fang) a venin) prod. silk
baleine	F	whale, bl/white, aquat. mammal, mouth w. flaps cornées
baleine à bosse	F	humpback, lg whalebone whale, black & white tail,
baleine bleue,	F	blue whale
bande	F	pack of wolves, pod of whales (same animals in group)
belette	F	weasel, carniv. musteline, small, couleur 'fauve'
bestiole	F	tiny animal, usu. insect
bête	F	any animate (animal) except man; person dominated
bête à bon Dieu	F	ladybird beetle, flying beetle
biche	F	hind, female deer, doe; (fam.) darting
bique	F	(fam.) female goat
biquette	F	kid (female), young female goat
blatte	F	cockroach, black noct. insect with flat body & biting mouth
brébis	F	female adult sheep, ewe; faithful member of flock
bruche	F	bruchus, kind of grasshopper wh. larva eat plants, plant
brute	F	brute; any animal except man (bête); not man;
bufflonne,-esse	F	female buffalo
cantharide	F	cantharis, beetle (dried to make medication - stimulant,
caouane	F	logger-head, enorm. turtle (Canb l/w. cahouane, caouanne),
cavale	F	mare, thoroughbred mare;
cétoine	F	rose-chafar, scarab. beetle w. greenish-golden body, metall.
chamelle	F	she-camel
chatte	F	female cat (M: chat)
chenille	F	caterpillar (larva of butterfly); track (of vehicle);
chèvre	F	adult female goat (opp. bouc); fromage de chevre
chienne	F	bitch (female dog)
chrysalide	F	chrysalis, pupa of moth or butterfly in process of its devel.
cigale	F	cicada, tubular form
coche	F	notch, cut, nick; (obs.) sow
couvé	F	covey of partridges; brood of young birds
créature	F	living entity, created through birth from nothing
daine/dine	F	female reindeer or red deer, doe (mare aam)
douve	F	fluke, flatworm, esp. parasite living in liver, affecting
éristale	F	hover-fly, dipter. fly, mimics bees & wasps
faune	F	fauna (descr. animal life of region); satyr; (pej.) people frequ. place who
fouine	F	stone-marten (fouiner/nose about) small carniv. mammal,
fourni	F	ant, tiny insect, shiny, 3 pairs of legs, eg. fire ant, and
gazelle	F	gazelle, horned mammal of Afr/Asia w. long pates fines, et

gerbille	F	gerbil (burrowing rodent of Africa, w. soft pale fur), noct.
gerboise	F	jerboa, small burrowing noct. rodent, shortened fore-legs,
girafe	F	giraffe (It. zarafa) Feminine gender in orig. maintained in
grenouille	F	frog, amphibian w. long hind legs spec. for hopping;
guenon	F	monkey (M/F) Cercopithecus, long-tailed monkey 2. F of
guêpe	F	wasp, female carries venomous sting
harde	F	herd of wild animals (deer, etc.) living together
harpaille	F	herd of young hinds (female) and deer (male)
hase	F	doe-bare, wild doe-rabbit
hermine	F	stoat, w. winter coat (ermine) highly valued (weasel family)
holothurie	F	holothurian, sea-cucumber, any member of fam.
hyène	F	hyena
jubarte	F	humpback whale, black & white tail, white belly
jument	F	mare, female of horse (see pouliche)
laie	F	wild sow; (forest.) service-path
lapine	F	doe (female rabbit) (masc. lapin)
larve	F	larva, immature free-living form of metamorph. animals; grub;
lente	F	nit, egg or larva of louse (pou, wingless bloodsucking
levrette	F	female of levrier, greyhound bitch
libellule	F	dragonfly, round head, elongated body
limace	F	slug, terrest. gasteropod w/out shell; nocturnal (fig.) snail,
lionne	F	female lion
loche	F	slug, grey limace
loutre	F	otter; otter-fur, freshwater noct. carniv., considered vermin
louve	F	she-wolf
luciole	F	firefly, adults develop wings and become luminous which attracts prey
mante-réligieuse	F	praying mantis, triangular head, strong hind legs
marmotte	F	marmot, stocky mammal. rodent w. thick bushy fur, hibern.
martre	F	marten, small, carniv. pointed muzzle, rel. to fouine, zibeline
meute	F	pack of hounds; band of humans in furious pursuit (eg.
mite	F	weevil (eats cheese, plants, plant prod.); moth, small white
mouche	F	fly; winged dipt. insect, numerous species: pierce skin to suck
mouche bleue	F	blue bottle fly
moufette	F	US mustel., skunk, fur black w. white bands, fourrure estimée
mule	F	mule, hybrid of M. donkey and F horse, or vice versa
musaraigne	F	shrew, small mouse-like insect-eating mammal, venomous
népe	F	water-scorpion, breathes thru long spine-like tube
noctuelle	F	little owl-, owl-moth, nocturnal
orque	F	killer whale, black & white splodges
ourse	F	female bear
panthère	F	panther, large carniv. Afr./Asian mammal with hide
phalène	F	phalaena, moth, large dusk or nocturnal butterfly
planaire	F	planarian (aquatic flatworm)
pouliche	F	filly, female horse under 4 years of age
puce	F	flea, small wingless blood-sucking insect that jumps,
punaise	F	bug (punaise de lit/bedbug), oval and flat shape
rainette	F	trees-frog, small frog
rate	F	female rat (M: rat)
renarde	F	she-fox
roussette	F	flying fox, large fruit bat
salamandre	F	salamander, small (10-15 cm), noct., yellow tache, skin
sangsue	F	leech, worm
sarigue	F	sarigue, small S. American opossum, long tail, elong.
sauterelle	F	grasshopper, locust (green or yellowish colour), move in
souris	F	mouse (small long-tailed rodent mammal); young girl/
tarentule	F	large venomous spider, name from Taranto, It. town famous
taupe	F	mole, small burrowing insect-eating mammal
taure	F	heifer, young cow (opp. taureau/bull)
teigne	F	small moth w. darkish drab colouring (ex. mite/F); parasitic
tigresse	F	female tiger, tigresse
tique	F	tick (blood-sucker which pierces human skin and infects
tortue	F	tortoise, 4-footed reptile w. body encl. in rounded shell
trématode	F	trematode, kind of flatworm
troupe	F	pride of lions
truie	F	(zool.) sow

tsé-tsé	F	tse-tse fly
vache	F	female of bull (taureau); personne méchante qui se venge ou
veuve	F	black widow spider, nocturnal; African sparrow w. B&W
vipère	F	viper, adder, has hollow fangs to deliver venom to stun prey
volaille	F	poultry, domestic. farmyard birds raised for food, eggs
volée	F	flock of birds
zibeline	F	sable, Siberian carniv. mamm., treas. for fine fur

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## WOODY PLANTS

abutilon	M	abutilon, aka erable d'ap., Jap. lantern, 5 petal white, yellow or red flower
acacia	M	gen. <i>Acacia</i> , mimosac. tree or shrub, wattle tree, spikes of
acajou	M	mahogany, native to W.I., Bahamas etc. decid. in dry/drought
acajou africain	M	kyaya, African mahogany, pyramidal crown, rounded habit
ailante	M	<i>Ailanthus altissima</i> , tree-of-heaven, aka copal, Chin. sumac. tall
alaterne	M	buckthorn (arbuste) <i>Rhamnus alaternus</i> , evergr. dense canopy
alba	M	<i>Abies pectinata</i> , straight cylindrical trunk, only species native to W. Europe
amandier	M	almond tree, rosac. pink flowers, green fruit/almond
araucaria	M	monkey-puzzle tree, S. Amer. conif. 30m branches shaped like candelabra
arbusier	M	<i>arbutus</i> , bears 'arbose' (F) flowers/leaves/berries at same time
arbre	M	tree (generic)
arbre au poivre	M	hardy rubber tree, <i>Eucommia ulmoides</i> , 20m, N., W. China,
arbre de Judée	M	Judas tree, redbud, umbrella-shaped, tall, round form
arbre perroquet	M	syn. of parrotia
aulne	M	Europ. alder, 25m, 2-3 main trunks, decid/pyram. crown, narrow
baguenaudier	M	bladder-nut tree, bladder-like seed pods
balsa	M	(Span.) balsa, trop. America, tall (30m.) pyramidal
bananier	M	tropical tree-like plant of which banana is the fruit
bélimbé	M	<i>Morinda citrifolia</i> Indian mulberry, everg. tr/shr
bergamotier	M	bergamot, small Asian spiny rutac./arom leaf citrus sour
bigaradier	M	bitter orange tree
bonnet d'évêque	M	spinoie-tree gen. <i>Euonymus</i> , syn. <i>jusan</i>
bougainvillier	M	syn. bougainvillee, bougainvillea, everg. tropic.,
bouleau	M	birch OFboul 30m, B. pendula 100', slender, catkins, thin peeling bark,
brugnolier	M	nectarine tree, producing brugnol (var. of peach)
buis	M	common boxwood, arbre/arbuste evergr., 5m, irreg. ovate to
cacaoyer	M	cacao, small tropic. everg. tree, yellowish flowers,
cade	M	juniper syn. <i>génévrier</i> , ère oval-shaped tree native to Medit.
camélia	M	camelia, after Kamel, botanist
campêche	M	campeachy, Mex. tropic. bushy hardwood, 15m, thorny gnarled
camphrier	M	camphor-tree <i>Cinnamomum camphora</i> H 30m, D 3m,
cannelier	M	cinnamon tree, tropic. laurac., arom. bark
caroubier	M	carob everg. Medit. H/W 20-40' round, dense canopy, sweet fruit,
catalpa (commun)	M	catalpa, New Latin kutuhlpa - winged head (of flower) 15x10m.
cèdre	M	cedar, 40-60'x30-50', massive trunk, aromatic, cylindr., branchless up to 25m, horiz.
cédrele	M	aka acajou de Chine, <i>Cedrela sinensis</i> , tall, spindly, fab. colour'n,
cérissier	M	cherry-tree
charme	M	northern gen. <i>Carpinus betulus</i> 15-20m-30' catkins,
châtaignier	M	European chestnut, sweet chestnut, huge tree, perenn., fagac./
chêne	M	oak Q. pedunculata 20m, rounded broad crown, spreading branches, catkins
chevreuille	M	honeysuckle, flowering shr. w. yellow perfum. flowers
ciste	M	rockrose, erect branches, evergr. fol., rounded silh., stems sticky,
citronnier	M	lemon tree, everg, warm tropic., pale green glossy leaf,
citrus	M	any of gen. <i>Citrus</i> , rounded crown, arom. leaf, smooth fruit
cognassier	M	quince-tree
copalme d'amerique	M	liquidambar/sweet gum decid. 80x60ft, oval form, rounded
cornouiller	M	dogwood aka corbier (cornouille/dogwood berry) <i>Cornus alba</i> , small
coudrier	M	hazel, syn. noisetier (Gaul./collo) shrub w. oval serr. leaf, prod.
cypres	M	cypress, everg. conif. dk gr. scale-like leaves, tall, spreadin
cypres de Goa	M	cypress, everg. conif. dk gr. scale-like leaves in whorls
cypres de Provence	M	cypress, <i>C. sempervirens</i>
cytise	M	laburnum, gen. 2 Euro specie 8m' decid., oval habit, rounded
daphné	M	daphne, arbrisseau, aka bois gentil, arbuste (.05-1.8m)
ébénier	M	ebony trop/sub-trop hard dark wood
épicéa	M	Norway spruce <i>Picea abies</i> 160+ft pyramidal/conical form,
érable	M	maple, decid., spectac. autumn fol., typic. rounded, cold/temp.
eucalyptus	M	eucalyptus, rounded crown
eucommia	M	hardy rubber tree, <i>Eucommia ulmoides</i> , 20m, N., W. China,
févier	M	horned acacia, evergr., yellow flowers,
frêne	M	ash, H24 (F. excels. 40m) wider than tall, dense rounded crown glossy
fusain	M	spindle-tree gen. <i>Euonymus</i> , decid Europ. shrub, upright, irreg.
gainier	M	12m redbud/Judas tree <i>Cercis siliquastrum</i> short trunk, no crown, rounded silh.
galba	M	<i>Calophyllum calaba</i> , Alexandrian laurel, calaba, galba, trop.

gardiénia	M	gardenia, evergr., tree
genévrier	M	juniper, small conif w. blue-green needles, yellow blossom,
génévrière	M	juniper syn cade, genévrier oval-shaped tree native to Medit.
grosellier	M	clove-tree, tropic. myrtac. (oil in leaf), dried unopened
hêtre	M	beech, hardwood, 50'x50', magnif. foliage, oval leaves
hibiscus	M	hibiscus, tropical, typic. evergr., rounded form
hortensia	M	3m. hydrangea, decid., shade & moisture; colour dep. on soil;
houblon	M	hop' (a rhizome), stems annual, tips stand upright
houx	M	holly Ilex aquifolium to 9m, oval, berry in winter
if	M	yew, gen Taxus, rounded form/crown, flattened needle-like leaf,
jaquier	M	breadfruit tree, tropic. morac. w. edible round seedless fruit
jasmín	M	jasmine, any or arbutus <i>Jasminum</i> acacia/evergr, upright or scrambling stems
khaya	M	Khaya senegalensis, W. African tree,
laurier	M	laurel, small 15-30'x20' Medit. evergreen, glossy aromatic leaves,
libocédre	M	Lebocedrus decurrens H20-45, rounded columnar scale-like leaves
lierre	M	ivy, evergreen shrub w. spreading/climbing/trailing tendencies
lilas	M	lilac H3m(8-15')W6-12' fragrant clumps of white/purple
liquidambar	M	liquidambar, sweetgum (L.
magnolia	M	magnolia, 25-45/9m large tulip-shaped flowers, glossy leaves
marronnier d'Amérique	M	yellow buckeye Aesculus flava American horsechestnut
marronnier (d'Inde)	M	horse-chestnut, round dense crown, white or pink flowers,
mélèze	M	larch 35m. deciduous needle-like leaves, conical crown
mélia	M	Melia, genus of family Meliaceae (trop/sub-trop trees)
micocoulier	M	nettle tree, -20m. Celtis australis, thin trunk, splitting before foliage
mimosa	M	tree/shrub to 9m., evergr., ball-like yellow flower clusters
mouillefer	M	false holly (Osmanthus aquifolium/heterophylla) rounded crown,
mûrier	M	mulberry tree (fruit 'mûre/mulberry)
myrte	M	myrtle, 5-15ft x 4-20', evergr, rounded, edib. berry
nerprun (commun)	M	European buckthorn/common buckthorn (Rhamnus cathartica)
noisetier	M	syn coudrier filbert, hazel 3m Corylus avellana, fruit/noisette 6'x3'
noyer	M	walnut tree Juglans regia H/Wspreading to 70', open round
nyssa sylvestre	M	tupelo (Creek/SthnUS) black gum, N. sylvatica, 30-50ft (20m.
oranger	M	orange tree
orme	M	Eng. elm U. glabra/wich-elm, H 30m x 25m. round form; attractive foliage
orne	M	flowering ash Fraxinus ornus/frêne à fleurs 40-50'x25-35'
ostreier (de Virginie)	M	ostreier, ironwood, hop hornbeam, 12m., pyr. crown in youth, broad crown w. irreg.
palétuvier	M	mangrove, tropic. evergreen, stilt-like aerial roots, forming
palmier	M	palm-tree, tree-like plant, evergr. & decid.
parrotia	M	Persian parrotia, aka bois de fer, multi-trunked, round, dense to ground
pavie	M	peach (clingstone), 6-10ft, open/rounded crown, spreading canopy
peuplier	M	poplar, tall, slender form, narrow crown, small triangular leaves, catkin (salicac.)
pin (commun)	M	pine, tall 70m x 9m, conical, in age more rounded crown,
pin noir	M	Austrian pine
pin pignon	M	pin parasol (also means triangular part of wall, gable)
platane	M	planetree, broadleaf, 30m., ball-shaped heads of fruit/leaves
poirier	M	pear-tree decid, 25' tall, 25' spread, oval to round form
pois doux	M	ice-cream bean tree, guaba, Amazon rainforests, broad spreading
pommier	M	apple-tree, rosac., pink/white fragr. flowers
prunier	M	plum tree
rhododendron	M	rhododendron (mostly) evergr, showy flower clusters, dehisc. fruit
robinier	M	locust, robinia, false acacia, 20-25m, N. Amer. legum.,
romarin	M	rosemary, arbuste, aromatic, evergr. leaves used in culin.
rosier	M	genus Rosa, shrub or climbing plant with thorny stems,
rouvre	M	English oak, 18 m, round-headed, spreading, temperate/
sapin	M	fir, e/gr. pyramidal Abies pectinata, 50mx11m, single needle-
sapin (des Vosges)	M	silver fir Abies pectinata, 3cm needles notched, not sharp,
sapotier	M	sapodilla-tree, sapote/sapodilla edib. brown plum,
sassafras	M	(Sp.) arom., decid., young/pyram. form; mature/irreg.
saule	M	willow (Frank.), 20m open crown, graceful flexible branches, flowers in catkins
savonnier	M	sapberry tree, decid, round crown, dense foliage, drupes
seringat	M	mock orange (Philadelphus),
sorbier	M	mountain ash, small, 10-15m, multi-branch trunk, red-orange fruit (sorbe)
sureau	M	elder, elderberry, multi-stemmed, trunk often hollow, clusters
sycomore	M	sycamore, European maple, round silh., 5-lobed leaves,
tamaris/-x	M	tamarisk, Euro 4mx 6 m., multi-stemmed, slender arching
teck	M	teak Tectona grandis E. Indies 30m. open crown, fruit 4 chambered

thuya	M	thuja, lge conif sim.to cypress, Amer., E. Asia
thym	M	thyme, small multi-stemmed, evergr.
tilleul	M	Eur.linden tree, 40m big, heart-shaped leaves, fragrant flws
tremble	M	aspen <i>Populus tremula</i> 20mx20m, oval form becoming loose,
trène	M	privet, oleac. shrub 25-35'x25', round; wh. fragr. flowers
tsga	M	hemlock spruce aka pruche, cl to 'savin', pyramidal
vergne	M	alder (syn.), Eur. tree growing in damp soil, betulac., toothed
virgilier	M	yellowwood, round silh. spindly, split trunk at base
zanthoxylum	M	prickly ash, multi-stemmed, prickly branches, 4 x 4m., flowering
airelle	F	any of berry shrubs <i>Vaccinium</i> , airelle rouge, noire, bleue etc.
akebie	F	chocolate vine, evergr. to decid., cl. shrub of E.Asia, choc./
aubépine	F	hawthorn (arbuste), decid. shrub 15-20'tall x18' white flowers
azalée	F	azalea, gen. <i>Rhododendron</i> , decid. cf evergr rhododendron, decid.
bignone	F	bignonia, decid. tropic. climber, leaves to 30cm. long, stems w aer. roots
bougainvillée	F	bougainvillea, cl. shrub w. hard hooked thorns, evergr.
bourdaie	F	buckthorn (arbuste) <i>Rhamnus frangula</i> , evergr. dense canopy
bruyère	F	heath/heather <i>Erica</i> , evergr. ground cover, needle-like leaves
busserole	F	bearberry <i>Arctostaphylos uva-ursi</i> Prostrate, creeping shrubs, evergr.
callune	F	(true) Scotch heather <i>Calluna vulgaris</i> ( <i>Erica</i> /heath) under 1m.
canneberge	F	Eur. cranberry <i>V. oxycoccus</i> , 2 à 15 cm., 2000m., br. red berry
clématite	F	clematis, arbustic grim pant, toxic
deutzia	F	deutzia, aka deutzia (M), flowering shrub w. long canes, clusters of flowers
églantine	F	sweetbriar, flower/plant/prickly wild rose, dog(R.canina) (OF, 14th cent. aiglent)
épine	F	any tree or shrub notable for its thorns, partic. rose, hawthorn,
épine-vinette	F	barberry, any of gen. <i>Berberis</i> , spiny Asian beribidac. shrubs
épinette	F	white spruce <i>Picea glauca</i> , fir, N.Amer.savin/fir narrow, conical; needles
erythrine	F	coral tree, decid.
étoile de Bethléem	F	potato-vine
garance	F	madder (wild/common) gen. of 60 species, evergr. leaves in whorls
glycine	F	(bot.) wistaria, wisteria, arbre grim pant (descr. as 'tree' in LRPT)
granadille	F	granadilla, <i>Passiflora granadilla</i> , passionfruit vine w.
hydrangée/ia	F	hydrangea, decid., multi-stemmed broad-spread. form to rounded crown
ipomée	F	morning glory, any of trop./sub-trop creeping/climbing
ketmie	F	decid. <i>Hibiscus</i> syn. <i>Althéa</i> , low-growing shr. to 3m., decid.
lavande	F	lavender, arom., herbac. perenn. found in clumps, outward curving stems
liane	F	liana, woody climbing plant of tropical forests
myrtille	F	whortleberry bilberry <i>Vaccinium myrtillus</i> under 1m., evergr. shrub
orélie de Guyane	F	orelia, vine
pruche (du Canada)	F	hemlock spruce, tsga de C (savin de Prusse) cl to 'savin', conif, needles
ronce	F	brambleberry, any of rosac. gen. <i>Rubus</i> , eg. blackberry, prickly
rose	F	syn. rosier, thorny shrub or climbing plant of gen. <i>Rosa</i> , prickly stems
salsepareille	F	sarsaparilla, evergreen climbing woody shrub w. heart-shaped leaves
spirée	F	spiraea, decid., open form
vigne	F	vine (arbrisseau), any of various creeping/climbing plants
vigne vierge	F	Virginia creeper, decid. self-clinging creeper
viorne commune	F	wayfaring tree, <i>Viburnum lantana</i> , small white flowers,

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## FRUITS

## Masculine nouns

abricot	M	apricot
anacarde	M	cashew, syn. cajou, fruit partly encl. nut, edible
ananas	M	pineapple
api	M	apple, trunc. from pomme d'api
arille	M	aril, appendage on certain seeds, eg. yew, nutmeg, often
avocat	M	avocado
bleuet	M	blueberry, blue-black, cov. in 'bloom' (fine white grains)
beurré	M	beurre bosc pear
brugnon	M	variety of peach with smooth skin, nectarine
cajou	M	cashew, syn. anacarde, hard part at tip, inedible until roasted
cantaloup	M	cantaloup, rockmelon
cassis	M	blackcurrant, round, black, shiny
cédrat	M	citron, fruit of <i>cédratier</i> /citron tree (small Asian rutaceous tree)
citron	M	lemon, fruit of lemon tree ( <i>citronnier</i> ); (fam.) head
coing	M	quince
concombre	M	cucumber, herbaceous creeping plant wh. fruit consumed as veg.
cornichon	M	cornichon, tiny concombre cut before maturity
damson	M	damson plum
durion	M	durion, oval, w. hard spiny rind
fruit	M	fruit, general noun apply to part that follows flowering
fruit de la passion	M	passionfruit, leathery skin encl. sweet pulp
gland	M	acorn, fruit of an oak tree; tassel, ornamental trimming in form
grain	M	grape; grain, edible fruit of graminaceous (grass) plants w. seed-like fruit
grapefruit	M	grapefruit (syn. pomélo), round, yellow, bitter/sweet
gratte-cul	M	rose-hip, round berry-like fruit of <i>églantine</i> , rose, filled w. hair
kaki	M	Japanese persimmon kaki
kumquat	M	kumquat (alternative word-final pron.)
limon	M	lime; (techn.) shaft, thill
litchi	M	litchi, Chinese fruit
longane	M\F	longan, longum, simil. to smaller than litchi, only one seed
luffa	M	dishcloth gourd, hard
mangostan	M	mangosteen, fruit w. sweet juicy pulp and thick hard skin
marron	M	chestnut, large edible (wh. cooked) fruit; (fam.) knock,
melon	M	melon; also (slang) bowler hat
melon d'eau	M	watermelon
mûron	M	fruit of <i>mûrier</i> (used in pharmacy); fruit of blackberry bush
pamplemousse	M	grapefruit, large, round fruit w. yellow rind and juicy, somewhat acid pulp
pignon	M	<i>pignon</i> (from <i>p.</i> (from <i>eng.</i> ) <i>épine graine</i> of pine cone from <i>pin pignon</i> )
pomélo	M	pomello (Engl. from Latin), often called pamplemousse
potiron	M	pumpkin, aka citrouille, cource, classed as legume or fruit
pruneau	M	prune, dried plum
raisin	M	grape, grapes
ramboutan	M	rambutan, edib. fruit of trop. Asia,
tamarin	M	fruit of tamarind tree, tamarind (used as laxative)

## Feminine nouns

airelle	F	whortleberry, bilberry, soft, dark, edible
alberge	F	clingstone peach or apricot
alise	F	sorb, service apple (fruit of tree 'alisier/alizier')
amande	F	almond; kernel (of other fruit)
arachide	F	grain of peanut, fruit of groundnut plant, seed grows underground
arbose	F	(bot.) arbutus berry
aubergine	F	aubergine (Adj. inv. for colour)
baie	F	laurel berry, from <i>laurier</i> , in ext. any 'berry'
banane	F	banana
bergamote	F	bergamot, citrus tree w. sour fruit; essence of rind of fruit
beurré	F	beurré (pear)
bigarade	F	bigarade, Seville orange (bitter)
cacahouète	F	peanut, fruit of groundnut plant, seed grows underground
calebasse	F	calabash, gourd (from <i>calabassier</i> )
calville	F	Calville apple
camarine	F	crowberry, low-growing shrub w. black berry fruit
canada	F	variety of apple, Canadian rennet
canneberge	F	cranberry
carambole	F	starfruit, carambola, in form of yellow star w. five branches
caroube	F	fruit of 'carobier', carob-bean, locust-bean
cercelle	F	haw, round oval fruit (of whitethorn); holly-berry

châtaigne	F	(edible) chestnut, fruit of chestnut tree, floury mass enveloped
colocuite	F	(bot) colocynth, climbing plant w. bitter round fruit;
compote	F	fruit cut into quarters or crushed, cooked in sugar syrup
cornouille	F	dogwood berry
courge	F	pumpkin, cooking/culinary plant cultivated for their fruits, eg.
courgette	F	courgettes, zucchini
datte	F	(bot.) date, fruit of date palm (dattier)
drupe	F	fruit with skin over flesh over seeds (bot. term)
faine	F	beech-nut, hard, edible
figue	F	fig
fraise	F	strawberry (fruits fem.); (tech.) milling-tool (?toos fem.)
framboise	F	raspberry (fruits fem.)
golden	F	Golden Delicious apple; loanword (CE - shd be M)
gourde	F	var. of marrow, gourd, for using as container, cup, etc.;
gousse	F	shell of leg. plants, splits in two when ripe
goyave	F	guava, Sp./Portug. from S.Amer.?Peruv.
granny-smith	F	granny-smith apple
griotte	F	(bot.) morello cherry; kind of marble with red and brown
roseille	F	red current
guigne	F	heart-cherry; (fam.) bad luck (chance F/malchance F)
lime	F	(bot.) lime, lime-tree (citrus); (techn.) file;
mangue	F	mango, fruit of trop. Asian tree; Port. from Malay manga, from
mérise	F	wild cherry
montmorency	F	Montmorency, var. of cherry (ie. c��rise (F)/cherry Mont.
m��re	F	mulberry; blackberry, soft, drupelets
muscade	F	nutmeg (seed of fruit of exotic tree - muscadier), used as
myrtille	F	edible blackberry produced by mountain shrub; bilberry, whortle-
nectarine	F	(Eng.) nectarine (var. of peach with smooth glossy skin)
��fle	F	medlar, fruit of medlar tree res. crabapple but not edible
noiset��te	F	hazel-nut, fruit of noisetier
noix	F	walnut, in ext. any nut (hard shell surr. kernel)
olive	F	olive
orange	F	orange
pacane	F	pecan, syn. p��can, sim. to 'walnut' but smooth shelled
papaye	F	edible fruit, papaya, size of large melon, w. orangey-red flesh
past��que	F	watermelon, plante rampante, from Arabic
p��che	F	fruit of peach tree, w. v. hard nut, and delicious flesh; act/manner
pistache	F	pistachio nut, edible green kernel of small hard-shelled
poire	F	pear
pomme	F	apple; pippin; apple-shaped fruit; pome (bot. name)
quenette	F	Spanish lime, nut simil. to chestnut
quetsche	F	(TLR i/d as tsh in sh column) kind of large oblong plum
ronce-framboise	F	loganberry, gen. Rubus, berry in form of blackberry but rasp.-coloured
sanguine	F	red maematite, bloodstone, red chalk; kind of pear; blood orange
sanguinelle	F	cornel (cherry), dogwood (w. black berries), corameous plants
sorbe	F	sorb-apple, fruit from sorbier
starking	F	(Engl.) red apple (name after Amer. originator)
sympborine	F	snowberry

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## Fruits - German nouns

## Masculine nouns

<i>der Apfel</i>	M	'apple'	crisp flesh, smooth skin
<i>der Kürbis</i>	M	'pumpkin'	hard flesh, warty skin
<i>der Pfirsich</i>	M	'peach'	soft flesh, furry skin

## Feminine consonant-final nouns

<i>die Ananas</i>	F	'pineapple'	soft flesh
<i>die Dattel</i>	F	'date'	soft flesh
<i>die Frucht</i>	F	'fruit'	living matter
<i>die Grapefruit</i>	F	'grapefruit'	soft flesh

## Feminine vowel-final nouns

<i>die Aprikose</i>	F	'apricot'	soft flesh, furred skin
<i>die Backpflaume</i>	F	'prune'	soft flesh
<i>die Banane</i>	F	'banana'	soft flesh
<i>die Beere</i>	F	'berry, grape'	soft flesh
<i>die Birne</i>	F	'pear'	soft flesh
<i>die Erdbeere</i>	F	'strawberry'	soft flesh
<i>die Gurke</i>	F	'cucumber'	soft flesh
<i>die Kirsche</i>	F	'cherry'	soft flesh
<i>die Kiwi</i>	F	'kiwifruit'	soft flesh
<i>die Mandarine</i>	F	'mandarine'	soft flesh
<i>die Mango</i>	F	'mango'	soft flesh
<i>die Melone</i>	F	'melon'	soft flesh
<i>die Orange</i>	F	'orange'	soft flesh
<i>die Pflaume</i>	F	'plum'	soft flesh
<i>die Tomate</i>	F	'tomato'	soft flesh
<i>die Traube</i>	F	'grape'	soft flesh
<i>die Wassermelone</i>	F	'watermelon'	soft flesh
<i>die Zitrone</i>	F	'lemon'	soft flesh

## Neuter noun

<i>das Obst</i>	N	'fruit'	produce
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## COLLECTIVE TERMS - HUMAN BEINGS

## Masculine terms

artisanat	M	craft/cottage industry, <i>métier</i> (profession/trade); group/ens. of artisans
attroupement	M	riot, rassemblement tumultueux, fortuit 'gathering formed by chance, in public thorough
chœur	M	chorus/body of dancers/singers; choir, group of singers whose different voices follow
clan	M	clan, ensemble of families grouped around a common chieftain; (mod.) small group of
ensemble	M	group of several people together as a whole
gang	M	gang, organised band of criminals w. different skills to 'do a job'
gens	M/F	all people/persons, any/everwhere, in indet. number;
groupe	M	number of/several people gathered together having something in common
homme	M	(coll.) 'mankind', tous les deux sexes
jupon	M	skirts, females as a collective (LRPT, 1994:639 les femmes, les filles
lignage	M	ascendance; all the descendants of a common ancestor; linear affiliations
monde	M	a lot or people, in a certain place (from <i>monde</i> (M) 'world'
orchestre	M	orchestra, group of musicians playing variety of instruments together in performance
peloton	M	peloton, compact group or competitors bunched together (ammin. or <i>pelote</i> (r) ball
peuple	M	'people', all the various individuals who form a nation
populo	M	people; large no. of people
public	M	'public', 'people at large', the general mass of the population;
ramassis	M	(pej.) gathering of people of little value
tas	M	(pej.) grande nombre de gens 'huge number of people' as objects that can be piled up

## Feminine terms

assemblée	F	assembly, people regularly gathering together from different areas for common purpose
avant-garde	F	part of army which marches in front of troops;
bande	F	band, group of people assoc. for purpose
basoche	F	(pej.) legal fraternity'; also, 'basoche, a body of clerks attached to courts of justice
bousculade	F	surging crowd, crush of people caused by moving towards a single point
brigade	F	brigade, troop, company, squad
cabale	F	cabal, secret group of several people 'plotting together'
canaille	F	rabble, mob, the masses; scoundrel, villain, rascal
caravane	F	caravan, party, convoy, conducted tour, group of travellers
caste	F	caste; fixed hereditary social class of people in Hindu society
clique	F	clique, (mil.) band of drums and bugles; (fam., pej.) 'riffraff', group of people of little
cohorte	F	cohort; troop, band of warriors; une des dix centuries (of
cohue	F	(pej.) 'mob', assemblée nombreuse et tumultueuse; hustling, jostling crush of people
colonie	F	colony, body of people separated from homeland but maintaining ties with it
compagnie	F	company, presence nearby; permanent theatrical group/troop
coterie	F	'faction', 'coterie', small exclusive group of friends, w. common interest
descendance	F	offspring, all the immediate descendants of someone
diaspora	F	Diaspora, population throughout the world of Jewish people who fled their country
dynastie	F	dynasty, succession of important or significant people in family line, eg. Bach dynasty
église	F	'church', community of Christians forming an organised social body
élite	F	ensemble of the most remarkable people, members of gifted community
équipe	F	team, gang, group of people about to accomplish a
escouade	F	gang, group of several men OF escadron, cadre
ethnie	F	human group w. related characteristics; ethnicity, ethnic group
famille	F	family, group of people; relatives, parentage, kin, race, clan;
floupée	F	large number' of ... (commuters, people swallowed up in a fog, etc.
foule	F	crowd, multitude of people gathered in one place; 'the masses'
fripouille	F	rabble, riff-raff; (fam. swindler, blackguard, bad lot
gens	F/M	all people/persons, any/everwhere, in indet. number;
gent	F	race; tribe, people, nation (espéc: species, kind, sort, ie. human???)
grappe	F	coll of people in constricted space ('packed in like sardines') (ext. from 'bunch of grapes
horde	F	horde, rabble
humanité	F	humanity, unkind, humans in general
jurande	F	(hist.) burden of jury service; (obs.) wardenship of a guild
lignée	F	line, race; offspring, descendants (L. linea/line from linus/text.thread)

ligue	F	league; confederation; association/union of persons, nations, etc.
marmaille	F	group of jeunes enfants crying, agitated; (pej., condesc.) 'noisy brats'
multitude	F	enormous crowd of people gathered together
parenté	F	relatives descended from one another, or having a common ancestor; family tie
pègre	F	criminal class' (formed by thieves, swindlers, pimps, etc.)
peuplade	F	antiqu.) group of people sent to populate a new region; (mod.) 'weakest/least impt. in pr
piétaille	F	(jest) infantry, those on foot, pedestrians;
plèbe	F	(Rom. ant.) plebs, 2nd order of Rom. people; (pej.) lower orders
populace	F	'(pej.) low people, 'rabble'
population	F	(Eng. loanword) population, all the people inhabiting a country, city or other spec. plac
postérité	F	'future descendants', generations to come
procession	F	religious procession taking place while singing, praying
progéniture	F	progeny, descendants
quadrille	F	group of riders in tournament; (bullfight.) team of toreros working
queue	F	file of people awaiting their turn
race	F	family consid. in its continuity; race, categ. of people
retrouvailles	F	family reunion, instance of persons (séparées) coming together
réunion	F	reunion', 'gathering' by a certain number of people in same place for same reason
secte	F	sect, org'd group of people w. same doctrine, common
smala	F	(Arabic) 'tribe', 'family', la famille et les équipages d'un Arab chef 'family and retinue
société	F	gathering of people between whom exist lasting and organised rapport; habitual compe
suite	F	retinue, train, attendants following; pursuit; sequel
tourbe	F	rabble, mob (foule/ramassis de personnes méprisables); peat, bog,
tribu	F	(anc.) tribe, people sharing ethnicity, territory;
troupe	F	troup, band, company, crowd, squad; party of people
valetaille	F	menials, flunkies





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