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Verbal morphosyntax and three-participant events in Sudest,
an Oceanic language of Papua New Guinea

Harriet Elisabeth Margaret Sheppard
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Abstract

This thesis presents a description of Sudest verbal morphosyntax, with a focus on the expression of three-participant events. Sudest is an Oceanic language belonging to the Papuan Tip cluster. It is spoken by approximately 3,800 people on the islands of Vanatina and Yeina in Milne Bay Province, Papua New Guinea. It is one of the more conservative Papuan Tip languages, preserving the Proto-Oceanic SVO constituent order, rather than the innovative SOV order shared by the majority of other Papuan Tip languages. Sudest is predominantly head-marking, and shows nominative-accusative alignment. The description and analysis presented in this thesis is based on several months of fieldwork on Vanatina Island and draws predominantly on the analysis of text data.

The thesis is presented in three parts. Chapters 1 to 3 present an introduction to the core topics of the thesis. Chapter 1 introduces the language and its speakers and discusses the data on which the description and analysis are based. Chapter 2 presents a review of literature related to three-participant events (3PEs) and introduces the framework used to investigate such events in the current work. Chapter 3 is a grammatical sketch that introduces areas of the grammar most relevant to the study of verbal morphosyntax and 3PEs.

The second part of the thesis provides a detailed description of verbal morphosyntax: an area where Sudest, like many Oceanic languages, displays great complexity. Chapter 4 analyses the verb complex, which includes nearly two dozen pre- and postverbal slots. Preverbal morphemes include three associated motion prefixes that indicate prior, concurrent, and subsequent motion, a phenomenon which is not commonly described for Oceanic languages. Chapter 5 is concerned with two ‘classificatory’ paradigms found in the Sudest verb complex: manner-of-causation prefixes and classificatory verbs. The manner-of-causation prefixes specify the manner in which an action is carried out (e.g. ‘by hand’, ‘by spearing’). Such morphemes are a widespread feature among the Papuan Tip languages, and are sometimes known as ‘classificatory’ prefixes in the literature. The second type of morphemes are a set of classificatory verbs meaning ‘get’, which are selected based on properties of the O argument referent (e.g. consistency, composition, and number). Classificatory verbs of this type are, to date, not attested in any other Oceanic languages; they appear to be unique to Sudest. Chapter 6 analyses multi-verb constructions, many of which can be analysed as nuclear-layer serialisation. There are a variety of types, including directional, cause-effect, sequential, adverbial, and aspectual constructions. The classificatory ‘get’ verbs also play a prominent role in multi-verb constructions, particularly ones that encode handling and caused-motion events.

The third part of the thesis investigates in detail the expression of 3PEs, which, following Margetts & Austin (2007: 397), are defined as ‘dynamic states of affairs that crucially involve three entities in their conceptualization’. The investigation of 3PEs in chapter 7 takes the semantic event types as

a starting point and examines which means are used – morphological, syntactic, and/or pragmatic – to encode a third event participant in the Sudest data. Chapter 8 reviews these findings and considers the frequency of the different strategies in the corpus data. Additionally, it investigates possible correlations between the semantic event types and their formal encoding by different strategies. Chapter 8 also compares the Sudest expressions of 3PEs to cross-linguistic tendencies and considers issues with the 3PE framework on the basis of the Sudest findings.

Declaration

This thesis is an original work of my research and contains no material which has been accepted for the award of any other degree or diploma at any university or equivalent institution and that, to the best of my knowledge and belief, this thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

Signature:

Print Name: Harriet Sheppard

Date: 28-07-2020

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Abbreviations

In main text and tables

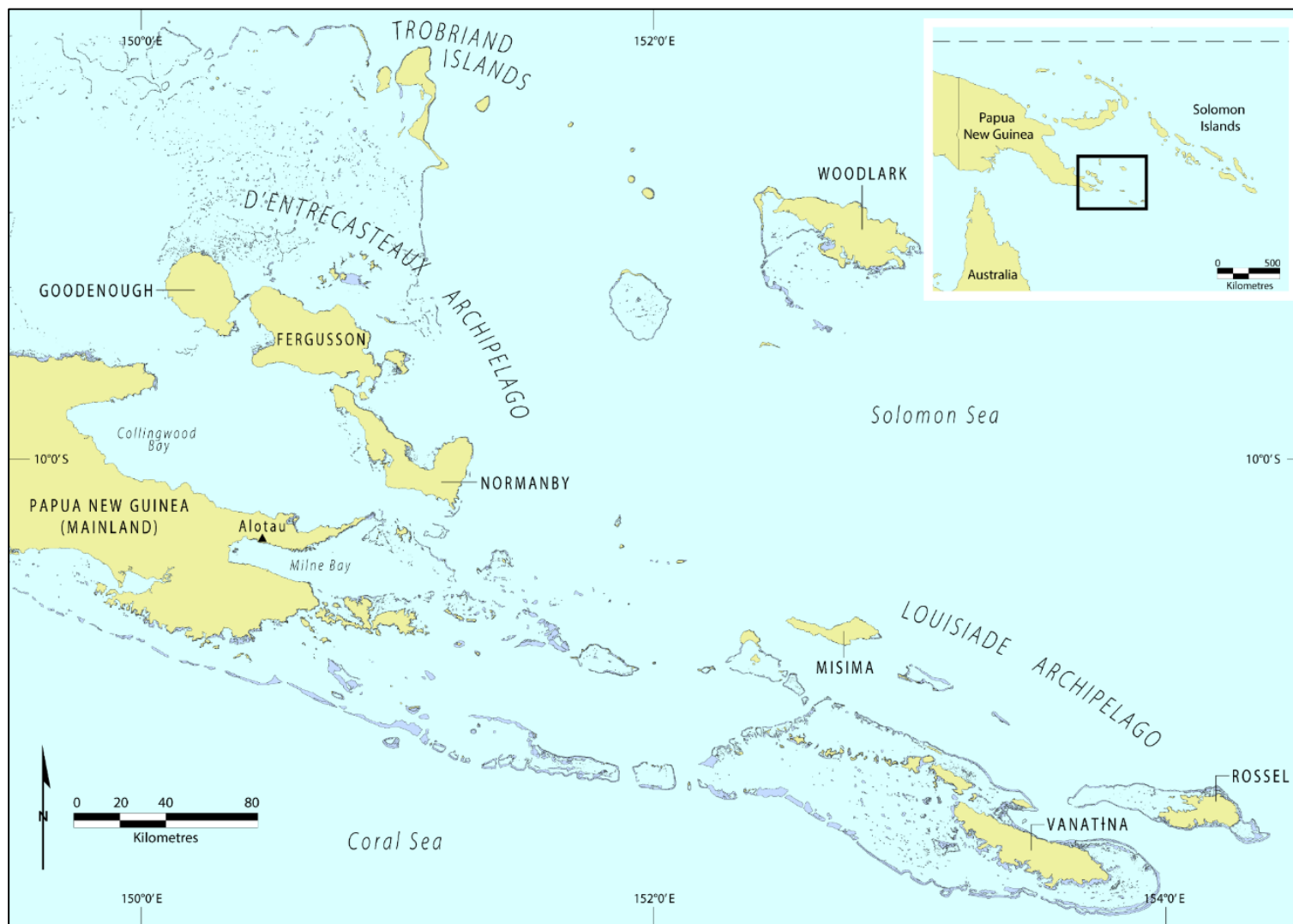
A&A	Anderson and Anderson (1991)
A&R	Anderson and Ross (2002)
M&A	Margetts and Austin (2007)
3PE	three-participant event
CLFV	classificatory verb
MC	Main clause
NP	Noun phrase
POc	Proto-Oceanic
PP	Prepositional/postpositional phrase
SAP	Speech-act participant
s.b.	somebody
s.o.	someone
s.th.	something
s.wh.	somewhere
VC	verb complex
w.	with
WOc	Western Oceanic

In interlinearised examples

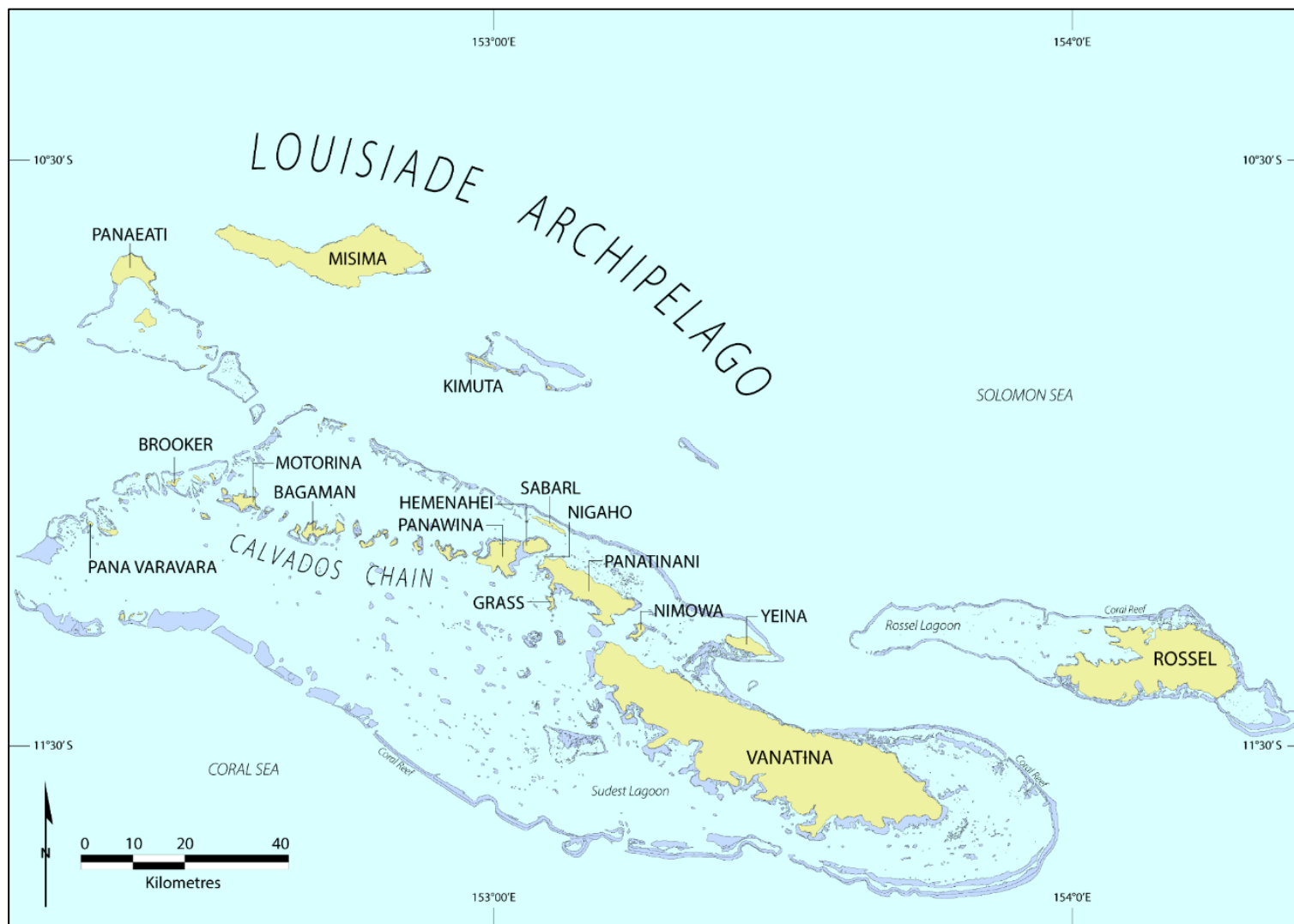
-	morpheme boundary
*	ungrammatical form
.	morpheme break shown in English but not Sudest
?	marginal/uncertain form (when appearing before an example)
=	clitic boundary
1	first person
2	second person
3	third person
ACT	active voice
ADDR	addressee
ADJ	adjective
ADM	admonitive
AG	agentive
AM	associated motion
ANA	anaphoric
AND	andative
APPL	applicative
ART	article
BEN	benefactive
BOAT	vessel classificatory verb

CAUS	causative
CLF	classifier
CNJ	conjunction
CNTR	container-and-contents classificatory verb
COMP	complementizer
COMPL	completive
DAT	dative
DEHORT	dehortative
DEM	demonstrative
DET	determiner
DETR	detransitiviser
DIST	distal
DITR	ditransitive
DU	dual
EMPH	emphatic
ERG	ergative
EXCL	exclusive
EXCLAM	exclamation
F	feminine
FIRE	fire classificatory verb
FLEX	flexible entity classificatory verb
FOC	focus
FUT	future
GEN	general
GET	classificatory verb
GNRL	general classificatory verb
HAB	habitual
HORT	hortative
HYP	hypothetical
IMM	immediate
IMP	imperative
INCL	inclusive
INJ	interjection
INS	instrumental
INT	intentional
INTS	intensifier
INTEN	intentionally
INTR	intransitive
INTRJ	interjection
IRR	irrealis
IU	intonation unit
LOC	locative
NEC	necessitive
NEG	negation, negative
NH	non-human
NUM	numeral

OBJ	object
OBL	obligation
PERF	past perfect
PERS	personal
PFV	perfective
PL	plural
POSS	possessive
POT	potential
PP	prepositional/postpositional phrase
PREP	preposition
PRF	perfective
PROG	progressive
PROH	prohibitive
PROX	proximate/proximal
PST	past
PURP	purpose
Q	question particle/marker
R	realis
PUT	verb stems ‘put’
RECP	reciprocal
RED	reduplication
REM	remote
REMOTE	remoteness
REP	repetitive
REV	reversive
RIGD	rigid entity classificatory verb
RL	realis
SG	singular
SM	subject marker
SP	specificity
SPKR	speaker
SUBJ	subject
TAM	tense aspect mood
THC	thematic consonant
TIM	timitive
TOP	topic
TR	transitive
UNINTENT	unintentionally
VEN	venitive



Map 1 Milne Bay Province, Papua New Guinea



Map 2 Louisiade Archipelago, Papua New Guinea



Map 3 Vanatina and Yeina, Papua New Guinea

1 Introduction

1.1 Introduction and aims of thesis

The Sudest language is spoken in the southeast of Milne Bay Province, Papua New Guinea (PNG) on the islands of Vanatina and Yeina in the Louisiade Archipelago (see Map 1 to Map 3). The language, like the majority of the nearly 60¹ languages spoken in the province, is an Oceanic language belonging to the Papuan Tip cluster, a first level subgroup of Western Oceanic (Lynch et al. 2002; Ross et al. 2016). Sudest has approximately 3,800 speakers (National Statistical Office of Papua New Guinea, 2014).²

The name ‘Sudest’ (or Sud-Est) was assigned to the island of Vanatina by the French explorer de Bougainville in 1768 (Macgillivray 1852) and subsequently used in the linguistic literature to designate the main language spoken on the island (e.g. Armstrong 1922; Ray 1937; Ross 1988; M. Anderson & Ross 2002; Ross et al. 2016). The island is also sometimes referred to as ‘Tagula’, the name for the island in Misima, the language of Misima Island located some 80 kilometres to the north of Vanatina.³ In the Sudest language, the island is called Vanatina from *vana* ‘land’ and *tina(e)* ‘his/her mother’ meaning ‘motherland’.⁴ Inhabitants of the island refer to themselves as *Vanatina une*, literally ‘fruits of the motherland’, and the language as *vanga Vanatina* ‘language of the motherland’. In the last 40 years, the autodenomination *Vanatinai* has increasingly been used by the wider world to refer to the island.⁵ Throughout the current work, I call the island Vanatina but I refer to the language as Sudest. Admittedly, this is an inelegant situation, but, given that it was not possible to have a wide consultation process with speakers from across the two islands regarding nomenclature, I continue to use the name already established in the linguistic literature. Naming

¹ <https://pnglanguages.sil.org/resources/provinces/province/Milne%20Bay>

² The islands of Vanatina and Yeina are located within the Yeleyemba Rural Local Level government (LLG). The two islands are divided into six wards. The approximate number of speakers is calculated based on the number of inhabitants of wards 5-9 and ward 16 in the Yaleyemba LLG in the 2011 census data (National Statistical Office of Papua New Guinea, 2014). The ward of Western Point (ward 4) is excluded from speaker estimates as the inhabitants of Western Point (Boboghagha) primarily speak a variety of Nimowa. A relatively small number of speakers away from Vanatina and Yeina – no more than a few hundred – and this number is included in the current estimate. I consider the current speaker estimate to supersede the figure of 2,000 speakers listed in the current edition of *Ethnologue* (Eberhard et al. 2020) as their figure comes from 1988 and is clearly outdated.

³ There was also a government outpost on the north-west tip of the island with this name and Lepowsky (1993: 309 fn. 24) reports that a village with the name Ragule existed thereabouts in precolonial times and may be the origin of the Misima name.

⁴ *Vanatina* can also refer to ‘the mainland’ or a large island in opposition with the term *raurau* ‘island’.

⁵ The spelling ‘Vanatinai’ originates from the ethnographic work of Lepowsky (e.g. 1982; 1993) and differs from that used throughout this thesis which adopts the more widespread orthography developed by SIL.

practices may change at such a time as when wider consultation with communities around the islands is possible (cf. Nafsan (Thieberger 2014) and Vatlongos (Ridge 2018)).

This thesis is a description of the morphosyntax of verbal clauses in Sudest, with particular focus on the expression of three-participant events (3PEs) and the ways they are encoded in the language. The study is the most detailed description of the language to date or, indeed, of any of the Oceanic languages spoken in the Louisiade Archipelago. Within the Papuan Tip languages, Sudest and the other VO languages of eastern Milne Bay Province are of particular interest to typological and historical linguistics, given their relative conservatism in regards to the morphosyntactic innovations undergone by the majority of Papuan Tip languages.

The thesis focusses on the area of verbal morphosyntax for two reasons. First, it is frequently one of the areas of greatest complexity in Oceanic languages (Lynch et al. 2002: 45). Second, a detailed knowledge of verbal morphosyntax is needed in order to investigate the encoding of 3PEs. For Sudest, it is certainly true that the verb complex is the locus of most of the language's morphosyntactic complexity; much of the verb complex is highly agglutinative, with just over 20 possible pre- and postverbal slots. Some aspects of the Sudest verb complex are relatively typical of Oceanic languages and some are characteristic of the Papuan Tip cluster, while others are uncommon and may be specific to Sudest.

The second and related focus of the thesis is an investigation of 3PEs in Sudest. Three-participant events, as the name suggests, are events that 'crucially involve three entities in their conceptualization' (Margetts and Austin 2007: 397). Importantly, Margetts and Austin's (2007) definition is a semantic one; the number of arguments present in clauses encoding 3PEs do not necessarily reflect the number of participants that are expressed by it. Three-participant events include not just events of transfer from one human participant to another (e.g. *give s.o. s.th.*, *teach s.o. s.th.*), but also events of inverse transfer (e.g. *get s.th. from s.o.*, *steal s.th. from s.o.*), events of spatial transfer to and from a location (e.g. *put s.th. s.wh.*, *get s.th. from s.wh.*), and verbs of physical input by (non-)body part instruments (e.g. *hit s.o./s.th. with s.th.*, *cut s.o./s.th. with s.th.*, *kick s.o./s.th.*, *punch s.o./s.th.*) among others (Margetts & Austin 2007). Three-participant events are encoded in a diverse variety of ways both cross-linguistically and within single languages (see, e.g., Narasimhan, Eisenbeiß, and Brown 2007; van Lier 2012). This suggests that 3PEs may pose a challenge to human cognition and linguistic abilities. At the same time, however, they have been argued to be central event types that have played an intrinsic role in the emergence of human societies (e.g. giving events, events of impact involving tools) (Margetts & Austin 2007). Despite such intra- and extra-linguistic considerations, until the turn of the century, much of the research into 3PEs has focussed only on verbs that take three syntactic arguments and the so-called 'dative' alternation (e.g. *I sent Sam a present* vs. *I sent a present to Sam*) (see, e.g., Mukherjee 2005: 3-63

for a review of ditransitive research for English) and/or *giving* verbs which are often divergent from the expression of other 3PEs (e.g. Haspelmath 2001; Newman 1996, 1997). The current thesis forms part of a larger project funded by the Documentation of Endangered Program of the Volkswagen Foundation investigating the expression of 3PEs in a number of languages spoken around the Pacific Rim, which includes a number of Austronesian and Papuan languages as well as languages from both North and South America.⁶ To explore the expression of 3PEs in Sudest, the current study takes as a starting point the 12 semantic types of 3PEs distinguished by Margetts and Austin (2007) and the morphosyntactic encoding strategies they identify. The analysis looks at 1) the range of encoding strategies used to express 3PEs in Sudest, 2) the relative frequencies of each of the strategies in the Sudest corpus, and 3) if there are any correlations between semantic event types and encoding strategies. By applying the framework set out by Margetts and Austin (2007), the Sudest corpus may be more easily compared with other languages and used for further comparative investigation into various topics concerning 3PEs, such as cross-linguistic patterns and relative frequencies of the encoding strategies constructions.

The remainder of this chapter is structured as follows. Section 1.2 presents information about the sociolinguistic situation. Information about the geographic, social, and cultural background is discussed in §1.3. Section 1.4 outlines the linguistic classification of Sudest and language maintenance and literacy rates, and then reviews previous linguistic research on the language. Section 1.5 summarises information related to data collection, methodology, and the Sudest corpus. Finally, §1.6 discusses the structure of the thesis.

1.2 Sociolinguistic situation

The Sudest language (ISO 639-3: tgo) consists of a series of dialects that runs the length of the island of Vanatina, from the northeast to the southwest tip of the island, and form a mutually intelligible dialect continuum (see §1.3.2 for discussion of settlement patterns and how they relate to the current dialect situation). Lepowsky (1993: 49, fn. 24) distinguishes four major dialect areas, while Eberhard et al. (2020) distinguish five. Moving from the western end of the island to the eastern tip, Lepowsky (1991: 49, fn. 24) outlines the following dialect group areas: the first is spoken along the southwest coast up to and including the region around Jelewaga and on the northwest coast from Embambalia up to Nainhill. The second dialect group is spoken in the area surrounding the Veora River; this includes Madawa on the south coast and Taranggiya on the north coast. The third dialect group includes the area surrounding Pamela and Pantava on the south coast and the north central coast from Njenja all the way up to Araetha. The fourth dialect is spoken from

⁶ <http://dobes.mpi.nl/research-projects/cross-linguistic-patterns-in-the-encoding-of-three-participant-events/>

Njuru on the south coast and Rambuso on the north coast all the way to the south-eastern tip of the island at Seghe. Eberhard et al. (2020) distinguish a separate dialect spoken on the eastern tip of the island, which is distinct from the dialect group spoken in Rambuso, Rehuwo and Njuru. The variety of Sudest spoken on Yeina is not mentioned by either Lepowsky (1991) or Eberhard et al. (2020) but appears to constitute an additional dialect group. Data collected for the corpus from Yeina speakers as well as field notes and speaker observations suggest that the Yeina variety is most closely related to the dialect spoken along the central coast of the island in and around Pamela and Vuwo, but includes a large number of lexical borrowings from Nimowa. Inhabitants of Western Point (also known as Boboghagha) on the western tip of Vanatina speak a variety of Nimowa (also Nimoa or Rifao, ISO 639-3: nmw) as their first language.⁷ Nimowa is the language most closely related to Sudest, and the only other language of the Nimoa-Sudest family. Apart from Western Point, Nimowa is also spoken on a number of islands in the Calvados Chain from Nimowa just to the north of Vanatina, all the way to Panawina in the northwest (see Map 2).

The description of the language presented in this thesis focusses on the central dialect of Sudest, more specifically the variety spoken on the north coast from Njenja in the west up to the village of Araetha in the east. The variety is referred to as *vanga Pamela* ‘language of Pamela’ by speakers and is referred to as both the ‘central dialect’ and ‘Pamela dialect’ throughout the current work.⁸ In addition to the Pamela dialect data, a small number of texts in the corpus come from speakers of other dialects, specifically the Veora dialect spoken in Taranggiya and the Yeina dialect. The dialects for each speaker and text in the corpus are listed in §1.5.3.

The current study included little scope to investigate the variation between the Sudest dialects. Some general observations can, however, be made here. One of the most immediately salient differences between the dialects is the phoneme inventory; the central and eastern dialects use a dental fricative [ð] where the western Jelewaga and Veora river dialects use an alveolar fricative [z], meaning that *thotho* ‘home’ is realised as [ðoðo] in the east and as [zozo] in the west. The west, central and eastern regions can traditionally also be distinguished by their use of the respective negative particles *maaruwo*, *nandere*, and *ningiye* and the related predicative negation forms (§3.83). There appears to be a sizeable number of vocabulary items that have non-cognate forms, e.g. ‘moon’ is *manjala* in the Pamela dialect and *woghena* in the more westerly dialects. As noted above, the Yeina dialect seems to use more borrowings from Nimowa than other varieties. These

⁷ I use the spelling of ‘Nimowa’ rather than ‘Nimoa’ when referring to the island of Nimowa and the language spoken in the Calvados chain. ‘Nimowa’ is the spelling used both by Nimowa speakers and throughout the Louisiade Archipelago for the place name and language. I use the spelling ‘Nimoa’ only to refer to the Nimoa-Sudest language family.

⁸ This is also the variety documented by M. Anderson and T. Anderson (1991) and M. Anderson and Ross (2002). Data for their work was collected in Pamela on the south coast of the island.

preliminary observations of the variation between the Sudest speaking communities indicate that geographic differences between the dialects are a rich topic for future investigation.

1.3 Geographic, social, and cultural background

The area of modern-day Milne Bay Province – the eastern tip of mainland PNG and surrounding islands – is sometimes known as ‘the Massim’ in scholarly literature. The term came into use in the late nineteenth century anthropological literature and is most likely a colonial derivation from the name of Misima Island (Young 1983: 4). The peoples of the region share a number of salient cultural practices including matrilineal descent, feast giving, elaborate mortuary exchanges, inter-island exchange networks, and ‘big man’ society, although not all groups in the region share all or any of the practices (Young 1983: 5). The majority of the languages spoken in the region are also Oceanic languages that belong to the Papuan Tip subgroup of Western Oceanic, with the exception of the Papuan isolate Yéli Dnye (also Yele) spoken on neighbouring Rossel Island which lies to the east of Vanatina (Eberhard et al. 2020).

The Massim region first gained attention from the wider world with the publication of Malinowski’s (1922; 1929; 1935) seminal ethnographies on aspects of life in the Trobriand Islands. Over the ensuing century, the region has hosted numerous anthropologists, many of whom have paid particular attention to the Kula exchange network (see e.g. Leach & Leach 1983 and the references therein). The anthropologist Lepowsky conducted fieldwork on Vanatina in the late 1970s, primarily on the south coast at Jelewaga; she is still remembered by islanders today. The reader should refer to her work for detailed accounts of Vanatina customs, cultural practices, trade, and health with a focus on gender (1979; 1982; 1983; 1985; 1987; 1989; 1990a; 1990b; 1990c; 1991; 1993; 2001).

The remainder of this section outlines some aspects of the geographic, cultural, and social background of the Sudest speech community.

1.3.1 Natural environment

The Louisiade Archipelago lies in the far southeast of Milne Bay Province and separates the Coral Sea from the Solomon Sea. The archipelago is a continuation of the Owen Stanley Range and consists of ten larger volcanic islands – the peaks of the submerged mountain range – and 90 smaller, coral islands (Lepowsky 1993: 43). Vanatina is the largest of the volcanic islands (followed by Misima and Rossel Islands in size) and lies nearly 300 kilometres from the PNG mainland. The island is approximately 80 kilometres long and between 12 and 24 kilometres wide, with a mountain

chain running the length of the island. The highest point on the island is Mt Riyo (also Riu), rising 805 metres above sea level. There is little flat land on the island, with the mountains dropping steeply to the coast, where mangrove swamps separate the land from the sea. Yeina lies approximately ten kilometres off the north of Vanatina. It is just over nine kilometres long and approximately 2.3 kilometres across at its widest. Small hills stretch the length of the island, not exceeding 80 metres above sea level. Both Vanatina and Yeina are located in a lagoon inside a protective reef. The reef and lagoon system stretches all the way from Ware Island (also Wari) in the west, some 60 kilometres from the PNG mainland, and ends just to the east of Vanatina, separating the neighbouring Rossel Island from the rest of the archipelago by a deep-sea passage known to have strong currents.

1.3.2 Prehistory, early contact and settlement patterns

Archaeological knowledge of the Louisiade Archipelago is so far limited. Recent work from Shaw (2014; 2016a) and Shaw and Dickinson (2017) detail the results from excavations carried out on the neighbouring Rossel Island and Nimowa.⁹ The excavations there have led Shaw (2016b) to posit a Late Pleistocene colonisation of Rossel Island from some point between 14-10,000 BP (~12,050-8,050 BE) based on waisted stone tool assemblages.¹⁰ Rossel Island was separated from Vanatina by sea even in the Late Pleistocene, when sea levels were far lower (Shaw 2017: 11). Thus, it is relatively safe to assume that human occupation on Vanatina and Yeina dates back to this period as well, although the inhabitants during that period would obviously not have been Austronesian-speaking peoples. Currently, pottery found on Nimowa dating to 1350-1290 BP (~600-660 CE) is the earliest physical evidence of an Austronesian presence in the archipelago (Shaw 2016a; Shaw & Dickinson 2017). A shallow channel measuring under 3km separates Nimowa from Vanatina, so, again, it can be inferred that there would have been an Austronesian presence on the larger island from at least this period.

In the late precolonial period, the majority of people on Vanatina lived in inland villages and hamlets on the top of mountain ridges (Lepowsky 1993: 51-2). Villages located in the mountains were closer to the more fertile interior of the island. The elevated location also afforded better protection and warning from attacks by raiding parties from other islands (Lepowsky 1993). Oral histories of this period report an increase in raiding parties. Lepowsky (1993) posits that they were

⁹ The only other excavation carried out in the archipelago was undertaken by Geoff Irwin in the late 1980s on Misima and Motorina Islands, with results yet to be published (Shaw 2016a).

¹⁰ The inhabitants of Rossel Island are culturally, linguistically and genetically unique in Milne Bay (Liep 2009; Shaw 2014; J. Henderson 1975; Levinson 2000, 2006; Oven et al. 2014). The language spoken on the island, Yéli Dnye, is an isolate and was presumably spoken in the region before the arrival of Austronesian speakers (Levinson 2000; 2006).

the result of increased pressure for resources on the arid, coral islands in the Calvados Chain during drought.

The people of Vanatina have had sporadic sightings and contact with Europeans since the 17th century. The earliest recorded sighting comes from the Spaniard Luis Vaez de Torres in 1606 (Parsonson 1967: 136), but the first recorded interaction between the people of Vanatina and Europeans was over two centuries later in 1849, when the HMS *Rattlesnake* surveyed the region and found a way through the protective barrier reef (Macgillivray 1852). In a practice of forced, indentured labour known as ‘blackbirding’, Australian ships lured, coerced and kidnapped approximately 60,000 men, women, and children of the southwestern Pacific onto ships and then put them to work in the Queensland sugar cane fields (Banivanua-Mar 2007). The practice lasted approximately 40 years, starting in 1863. Between 1883 and 1885, Australian boats turned to the islands of modern-day PNG, including the Louisiade Archipelago, for forced labour (Corris 1968). When the Queensland government closed off these islands to ‘recruiters’ in 1885, 71 men were returned to Vanatina, along with 13 packets of trade goods given in compensation for men who had died before they could return (Lepowsky 1993: 63). Like Pacific Islanders forced into labour on the sugar plantations, they came back speaking a pidgin that they called *vanga lumu* or ‘European’s language’ (Lepowsky 1993: 63).¹¹ A variety of *vanga lumu* was also used between European bêche-de-mer fishermen and pearlers and islanders in the 1870s and early 1880s (Lepowsky 1993: 63). Lepowsky (1993: 63, fn. 39) reports that some elderly descendants still spoke *vanga lumu* during her time on Vanatina in the late 1970s. *Vanga lumu* is likely the source for a variety of everyday words used today in Sudest, for example *oliman* ‘old man’ instead of *amalisari*, *posi* ‘suppose’ or ‘if’ instead of *thonggo* ‘if’ and introduced items like *kwaliko* ‘clothing’ and *bilikan* ‘(metal) pot’.

In 1888, the discovery of gold on the neighbouring island of Panatinani (also Joannet) was reported (British New Guinea Annual Report 1890: 22). This led to an influx of miners to Vanatina – mainly from Queensland – for a short time, there were between 700 and 800 miners on the island, although by 1891 there were only 38 miners left following the discovery of gold on Misima (British New Guinea Annual Report 1890: 21; Lepowsky 1993: 65).

Major upheavals came to the archipelago during World War II. After Japanese forces took control of Rabaul in January 1942, all white civilians and government personnel were evacuated from the Louisiade Archipelago (Lepowsky 1989: 210). When the Australian New Guinea Administrative Unit (ANGAU) arrived in the Archipelago at the end of 1942, a Misima man along with his followers killed the commanding officer and his officers on Motorina Island (Lepowsky 1989: 214). The man was prophesying the return of ancestral spirits along with ships full of European cargo if

¹¹ Today *vanga lumu* is used to refer to the English language.

all white and mixed-race people were killed. In addition to the ANGAU officials, a Filipino trader and his Vanatina crew were also killed as a result of the prophesy (Lepowsky 1989: 211-9). Following the killings, ANGAU ordered the population of the archipelago to move to designated coastal sites that would be easier to ‘control’ (Lepowsky 1989: 216).

The ANGAU edict has never been officially lifted, and the population of Vanatina today still live in the designated coastal villages and hamlets. The forced migration to the coast has directly shaped the geographic distribution of Sudest’s dialects, as people from a single village or neighbouring villages moved to both the north and south coasts either side of the mountains. This means that individuals from Pamela and Vuwo speak a nearly identical variety of Sudest despite being located a day’s walk from each other over the mountain range, while people from Vuwo speak a different dialect than people in Taranggiya, a two hour walk away along a flat, coastal path. Contact between the south and north central coast remains frequent and people often make the mountain crossing to visit friends and relatives.

1.3.3 Economy, trade and ceremonial exchange

The majority of Vanatina practice self-sustaining agriculture using slash and burn techniques. The crops cultivated today consist of both traditional and introduced species and include yam, taro, sweet potato, cassava, banana, betel nut, coconut, pineapple, aibeka and other leafy greens, breadfruit, mango, papaya, various citrus varieties and more. Sago is also a primary staple; there are sago swamps throughout the island. Many people own chickens and pigs, but these are usually reserved for special occasions and exchange purposes. Fish and other aquatic animals from local reefs, mangrove swamps and freshwater waterways are the islanders’ main source of protein, occasionally supplemented with wild pigs. To earn a cash income, some people produce shell-disk necklaces (*bagi*) or pan for gold.

Vanatina is one of the most fertile islands in the archipelago as well as the largest. In addition, it is underpopulated in comparison with the other islands. ‘Surplus’ produce from the gardens and the bush, particularly sago and betel nut, continue to have an important role in trade and exchange practices with neighbouring islands. Since before the colonial era, Vanatina have traded with Misima for large wooden dishes, with Utian (Brooker) Island for clay cooking pots, with Sabarl Island for slaked lime for chewing betel nut, and with Panaeati for sailing canoes (*sailau*) (Lepowsky 1983).

Memorial feasts play a central role in Vanatina custom. There are at least three feasts, the last of which may be held up to 20 years after the death of the individual being commemorated (see

Lepowsky 1983, 1993 for detailed descriptions).¹² Such feasts involve kinspeople, affines and others with exchange obligations who must provide produce for the event itself and additionally supply produce and ceremonial valuables to exchange between kinspeople, affines and a pre-organised heir – typically a patrilineal cross-cousin (Lepowsky 1993). In order to discharge one's memorial feast exchange obligations, Vanatina frequently go on intra- and inter-island exchange expeditions to collect or persuade exchange partners to part with ceremonial valuables (Lepowsky 1993). Exchange of valuables in the southern Louisiades does not follow the clear patterns attested in the Kula exchange region to the north (cf. Malinowski 1922; Leach & Leach 1983). Individuals build up networks of exchange partners who may or may not be related to them and an exchange may involve an immediate payment (e.g. a pig for some shell-disk necklaces), or it may involve the visiting exchange partner promising to repay a debt for an item in the future (Lepowsky 1993). The main exchange items are shell-disk necklaces, shell valuables, greenstone axe heads, ceremonial lime spatulas, clay pots, wooden dishes, pandanus sleeping mats, pigs, yams and sago. Someone who accumulates more ceremonial valuables than the minimum to perform their mortuary feast obligations may be given the title of *giya* 'giver' or 'big (wo)man',¹³ a title that both men and women can acquire (Lepowsky 1993).

Lepowsky (1983; 1991; 1993) reports that trade and exchange patterns have changed over time. Prior to the arrival of Europeans in the archipelago, trade and exchange was frequently interrupted by raids on Vanatina by people – sometimes even trade partners – from the less fertile Calvados Chain (Lepowsky 1983). Overall, oral tradition suggests that the volume of trade and exchange was far lower in the 19th century than the 20th century, likely due to raids and more limited access to watercraft, but that exchange and trade networks were just as extensive (Lepowsky 1983). Recent insight into the archaeological record provided by Shaw (2016a; 2016b) also supports an extensive Louisiade trade network.

1.3.4 Kinship

The people of Vanatina and Yeina belong to twelve exogamous matrilineal clans. Each has a series of totems that include a bird, a snake, a fish or other marine animal, a tree, and a type of bush vine; in some cases, a clan has multiple bird or fish tokens (Lepowsky 1983: 468). The set of totem birds

¹² In the text funeral_feasting_081015_01, three memorial feasts are listed. They occur in the following order: *njiviya* (lit. 'by hand-split' or 'split by hand'), which refers to the act of breaking a sago log; *ghalonggalongga* (lit. 'his/her walk(ing)'), at which time a widowed spouse may leave their house/village again; and *mbwanggwimwangwi* (no known translation), at which time all taboos are lifted and a widowed spouse may remarry. Lepowsky (1991) describes four memorial feasts with a fifth optional feast. Lepowsky (1983: 497) also reports that in earlier times, the 'traditional' elaborate memorial feasts were not held, and they are partially a by-product of inter-island pacification that occurred in the earlier colonial period.

¹³ *Giya* 'giver' comes from the verb *giya* 'give'.

is similar throughout the clans of Milne Bay province, despite differences in the exact clan names and language backgrounds of the different islands. The clan birds are used to help determine clanmates from outside of Vanatina and thereby also identify potential exchange partners and hospitality obligations (Lepowsky 1983).

Inheritance rights over forest and reef areas as well as ceremonial valuables, pigs and, household goods come from one's mother and mother's brother(s) and both women and men inherit rights (Lepowsky 1993). Permission to build or use land (e.g. for gardening or to build a house) outside of one's own ancestral lands may be negotiated with local matrilineages or sub-clans (Lepowsky 1993). After marriage, a couple often alternates residence between both spouses' natal villages, but over time, will often settle more permanently in one location (Lepowsky 1993: 105- 6).

There is a general naming avoidance between in-laws. Instead, people use familiar terms of address for specific in-laws or address in-laws as 'X's wife', 'Y's mother' or more generically as *amala=na* 'man=ADDR.PROX' meaning 'that man there' or *eli-sari* 'woman-HON' meaning 'old woman' for older generations. If an in-law's name is a common word, that word should also be avoided. For example, the male head of an extended family I met was named after a type of banana. When an in-law wished to refer to the specific kind of banana, they typically replaced the name of the banana with the word for a different variety of banana.

1.3.5 Belief systems

Traditional beliefs continue to be practiced concurrent with Christian beliefs on the island (see Lepowsky 1989; 1990a; 1990b; 1991; 1993). Vanatina belief systems recognise a wide range of supernatural beings. These include creator spirits, ancestor spirits and spirits of specific locations (Lepowsky 1993: 127-42). Ancestor spirits dwell on the summit of the island's tallest peak, Mt Riyo. Within the province, the people of Vanatina have traditionally been known as formidable sorcerers and witches (Lepowsky 1991). Indeed, the language has words for both sorcerer (*rimbire*) and witch (*wadawada*) but also distinguishes those that do not know any magic (*numombwalambwala*). Today, people continue to practice and pass on spells, especially those related to healing, agriculture, and trade, although magic use is not always benign and illness and death are sometimes also attributed to magical interference.¹⁴

The post WWII years brought Methodist (United Church) and Catholic missionaries to the southern Louisiades starting in 1947 (Lepowsky 1993). Villages and hamlets today have an affiliation to one

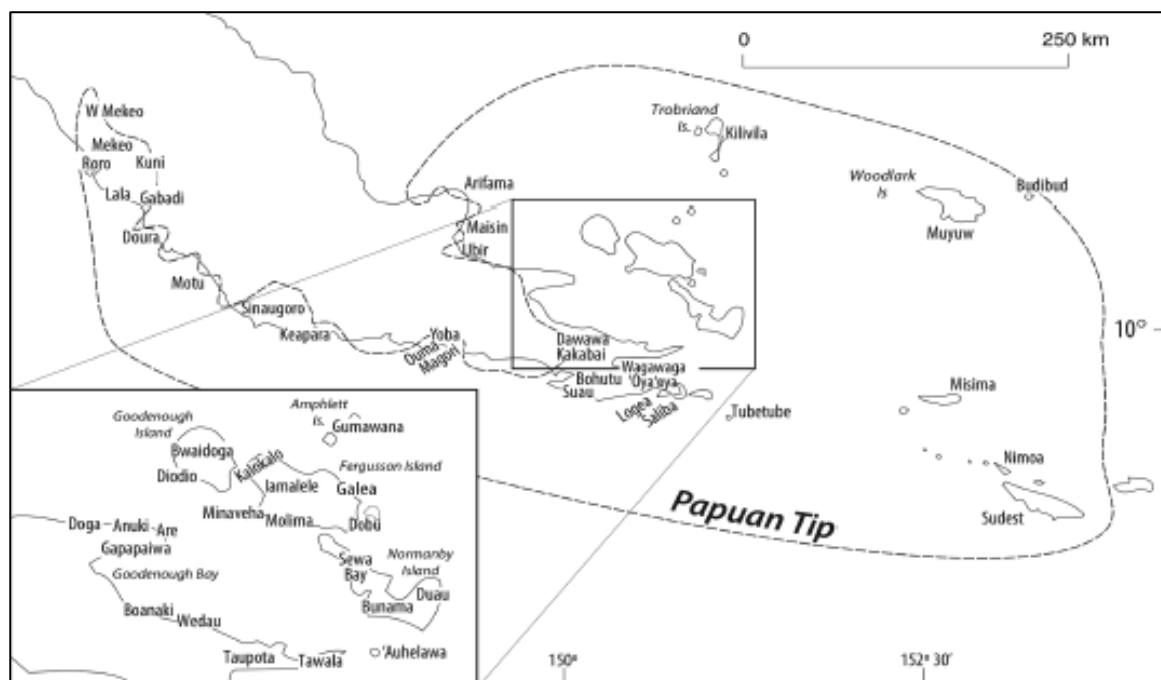
¹⁴ Lawrence (2015) argues that the knowledge capital of traditional practices, including the widespread use of sorcery and witchcraft, correlate highly with gender egalitarianism, which, in turn, is at least partially responsible for the low levels of gender-based violence in the province compared with the rest of the country.

of the two largest denominations, although other churches like the Seventh Day Adventists also have a smaller presence on the island. On the central north coast, Rambuso and Taranggiya are majority Methodist, while Araetha through to Njenja are Catholic, although people of one denomination often visit the closest service regardless of affiliation. Catholic and Methodist services are conducted predominantly in Sudest with some English. Most hymns are in Misima or Nimowa.

1.4 The Sudest language

1.4.1 Linguistic classification and typological profile

Sudest belongs to the Oceanic subgroup of the Austronesian language family. It is classified as Western Oceanic and belongs to the Nimoa-Sudest family of the Papuan Tip cluster (Lynch et al. 2002; Ross et al. 2016). The link between the various Papuan Tip languages has been recognised by linguists for a long time going back to Capell (1943). Map 1.1 (Ross et al. 2016: 631) shows the Papuan Tip speaking region, which stretches from the south-central coast of mainland PNG all the way around the eastern tip and out into the islands of Milne Bay Province. Sudest is spoken in the southeast extreme of the Papuan Tip speaking region.



Map 1.1 *Papuan Tip-speaking region*

Scholars, particularly since the 1970s, have proposed a number of subgroupings within the Papuan Tip cluster (e.g. Pawley 1975; Ross 1979; 1988; Lynch et al. 2002; Ross et al. 2011; 2016). Ross (1988) groups the Papuan Tip languages into two higher order linkages: Nuclear Papuan Tip and

Peripheral Papuan Tip. The latter comprised the Central Papuan languages and the Kilivila-Misima linkage that contained Nimoa-Sudest family as a subgroup. Lynch et al. (2002: 104) argue that the Peripheral Papuan Tip languages showed significant internal diversity, suggesting an earlier split from Proto-Papuan Tip than the other languages in the group. They suggest that the shared features of Peripheral Papuan Tip were independent innovations – some of which also occurred in other Oceanic languages – and consequently identify four rather than two higher order subgroups of Papuan Tip: the Nuclear Papuan Tip linkage, Kilivila-Misima linkage, Nimoa-Sudest family, and the Central Papuan family (Lynch et al. 2002: 104). More recently, Ross et al. (2011; 2016) call into question the integrity of the Nuclear Papuan Tip linkage, instead recognising the Suaucic linkage and Northern Mainland-D’Entrecasteaux linkage as higher order subgroups. The most recent changes proposed by Ross et al. (2011; 2016) do not, however, change the status of the Nimoa-Sudest family, which stands apart among the other Papuan Tip languages, with Chowning (1989: 126) labelling the Nimoa-Sudest family ‘phonologically highly aberrant’ when compared with the other Papuan Tip languages.

The majority of Papuan Tip languages have undergone the cross-linguistically unusual shift away from VO constituent order to OV order and a related move from prepositions to postpositions. Both of these changes are attributed to early contact with Papuan languages (Lynch 1981: 110-1; Ross 1988: 193; Lynch et al. 2002: 15). Unlike the majority of the Papuan Tip languages, Sudest, along with Nimowa and the languages of the Kilivila-Misima linkage excluding Misima, retain the canonic Oceanic VO constituent order (Lynch et al. 2002: 104). Sudest shows a partial shift in the placement of adpositions, with a mix of prepositions and postpositions and an ambiposition that can precede or follow its complement. It also displays the order of possessor-possessum typical of OV languages, a feature that often spreads to non-OV languages spoken in areas adjacent to OV languages (Dryer 2013).

As well as OV constituent order and postpositions, Lynch et al. (2002: 104) state that Papuan Tip languages are ‘almost defined’ by an additional three morphosyntactic innovations: loss of common articles, addition of pronominal possessive suffixes to adjectives in both attributive and predicative functions, and extension of the possessive pronominal suffixes to object pronominal function within the verb. Like all other languages in the cluster, Sudest does not have a reflex of the Proto Oceanic (POc) common articles (**a*, **na*, **ta*). It also shows a fossilised 3SG possessive suffix -*ya* on three adjectives/stative verbs *laghiye* ‘(be) big’, *nasiye* ‘(be) small’, and *thovuye* ‘(be) good’. Sudest does, however, retain a separate bound possessive pronominal system and bound object system.

Sudest is a nominative-accusative language in the formal marking – both syntactic and morphological – of core arguments. The single argument of an intransitive verb (S) and the more agent-like argument of a transitive verb (A) pattern in the same way and contrast with the non-

agent-like argument of a transitive verb (O). The verb complex is arguably the most complex area of Sudest and is highly agglutinative for an Oceanic language, with just under two dozen pre- and post-verbal slots (see chapter 4). Complex agglutination is an innovative feature again associated with the OV Papuan Tip languages (Bradshaw 1982: 12).

Sudest has Oceanic-typical valence-changing and valence-rearranging morphology (§4.2.8, §4.3.1), posture-based prefixes (one of which can have a quasi-aspectual function) (§4.2.5), and discontinuous negation (§3.8.3.1). Multi-verb constructions, many of which could be classified as nuclear-layer serial verb constructions, are also common (see chapter 6). Like many other Papuan Tip languages, Sudest also has verbal prefixes that specify the manner in which an action is carried out (§5.1). It is relatively common for Oceanic languages with some form of serialisation to have a type of construction with a motion verb followed by some sort of action verb, labelled ‘sequential’ or ‘associated motion’ serial verb constructions in the literature (Lynch et al. 2002: 47; Cleary-Kemp 2015: 134). In Sudest, these motion verbs have grammaticalised into prefixes that make a three-way distinction of prior, subsequent and concurrent motion in relation to the event expressed by the verb, and are comparable to associated motion morphemes first noted in some Australian languages (e.g. Koch 1984; Wilkins 1991) (§4.2.4). Sudest, to the best of my knowledge, also appears to be the only Oceanic, or indeed Austronesian language, attested to have verbal classifiers in the form of a suppletive set of classificatory verbs – of the kind labelled Type-A classificatory verbs in Aikhenvald’s (2000) typology (§5.2). The Sudest classificatory verbs (CLFVs) make a seven-way distinction based on properties of the object referent of the verb (e.g. rigidity/flexibility, emptiness/fullness, composition, and number).

1.4.2 Language maintenance, education, and literacy

Sudest is acquired by all children on Vanatina and Yeina from birth, with the exception of children from Western Point, who acquire a variety of Nimowa as a first language. Sudest is used in the majority of everyday contexts apart from education and literacy-based activities (discussed in detail below). Sudest speakers are exposed to Nimowa from early childhood and the majority, if not all, teens and adults are either actively or passively proficient or fluent in the language as an L2. Along the north central coast of Vanatina, many people also have an active or passive knowledge of Misima. English is the lingua franca of Milne Bay Province and is typically first learnt in formal settings in primary school, starting from around the age of seven. Nearly all adults have some level of English proficiency, with the most fluent speakers being those that completed the highest levels of education and/or have spent time on the mainland. Knowledge of Tok Pisin is limited generally to individuals who have lived or travelled outside of the Province. While Sudest speakers are

multilingual in the neighbouring Oceanic languages, Nimowa and Misima speakers, although also multilingual, typically have limited knowledge or passive understanding of Sudest. They often state that Sudest is far too hard to learn. This may be due to Sudest's distinctive phonology in comparison with its Papuan Tip speaking neighbours, and unfamiliar features like the classificatory verbs. It is uncommon for Vanatina to speak Yéli Dnye, the Papuan isolate spoken on neighbouring Rossel Island.

There are around half a dozen elementary schools on Vanatina and four primary schools; the primary schools are located at Griffin Point, Rambuso, Rehuwo and Madawa. All children on the north central coast attend elementary and primary school. Depending on where children live, some primary school students board for the week or term at school. Access to a high school education (grade 9+) is very competitive and is highly valued by Vanatina communities. Typically, less than 20 students continue on to high school each year from all of Vanatina.¹⁵ Children must leave the island to attend high school; children from Catholic families usually attend Hagita High School, located just outside of Alotau, the provincial capital, and Methodist children go to Misima High School. For the last few years, the newly-opened Hope Academy, based at the Mission of the Sacred Heart, Nimowa, has also been offering grade nine to 12 secondary schooling and diploma courses for a wider range of students from around the archipelago.¹⁶ A small number of students also continue from primary school to vocational colleges on Misima and Sideia Islands.

According to Ethnologue (Eberhard et al. 2020), literacy rates for Sudest speakers are between 50 and 70 percent in their L1 and between 75 and 90 percent in L2s (English, Nimowa, and/or Misima). Anecdotal and observational data gathered during fieldwork on the north central coast support these percentages for L2 English literacy. Most speakers literate in English also appear to have at least reading abilities in Nimowa and Misima (likely through exposure to religious and other texts produced by missionaries in these languages), but it is unclear whether this extends to writing abilities. L1 literacy levels, however, are likely below 50 percent; literacy education in Sudest is not part of the school curriculum at any level.¹⁷ While Sudest literacy is not taught in the school

¹⁵ The 2010-2030 strategic plan of the PNG government aims to introduce universal secondary education up to grade 10, but there is no timeline given as to when this will be achieved by (Department of National Planning and Monitoring 2010).

¹⁶ Hope Academy exclusively offers web-based education for students via distance education and was founded by Fr. Tony Young. The majority of students live and study on Nimowa, but learning centres have been set up on Vanatina, Rossel Island and a number of islands in the Calvados Chain. An Alotau campus was also opened in 2015.

¹⁷ The PNG education system is currently in the process of restructuring. Until 2013, elementary schools used vernacular languages as the language of instruction, from 2013, however, the PNG government stated they would defund all elementary education in vernacular languages and reintroduce English as the language of instruction in the first three years of education (PNG Department of National Planning and Monitoring 2010: 55). As of June 2019, there are also plans to move the early years of education back into primary schools and to phase out elementary schools across the country by 2021, according to statements made in the PNG national parliament by the current and previous education ministers (Patjole 2018; Govt not changing outcome-based education system: Minister 2019).

system, there are two developments that may lead to increased Sudest literacy rates, namely the publication of the New Testament and increased access to mobile phones and text messaging. Access to books is limited on Vanatina and Yeina and the most commonly owned book is the Bible. Previously, most households only owned written religious material in English, Misima, or Nimowa, but this has changed since the publication of the New Testament in 2015 by the Summer Institute of Linguistics (SIL). A mobile telephone tower was installed at Tagula station on Vanatina in 2014. While mobile phone ownership is far from ubiquitous – let alone access to phone credit and electricity for charging – those who do own a phone do appear to be using Sudest when communicating with other Sudest speakers via text message and messaging apps.

1.4.3 Previous linguistic research

There has been limited descriptive linguistic work published on the Papuan Tip cluster to date.¹⁸ Of the Kilivila-Misima linkage and the Nimoa-Sudest family, all of which retain VO clause order, the best described language is Kilivila, with two published grammars from Senft (1986) and Lawton (1993). Senft has also published extensively on specific aspects of Kilivila (e.g. 1987; 1996; 1999; 2000; 2001; 2004; 2008; 2009; 2011; 2012; 2017a; 2017b). Long-term language-related work of Misima and Sudest has been carried out by Christian missionaries with the aim of translating the Bible. Some of this work includes linguistic descriptions. However, little of this work is published. Unpublished descriptions of aspects of Misima and Muyuw, both languages of the Kilivila-Misima linkage, have been produced in the course of work conducted by SIL.¹⁹ For work on Misima see Callister and Callister (1985), W. Callister (1985a; 1985b; 1985c; 1987; 1993), and S. Callister (2005). For work on Muyuw see Daphne Lithgow (1970a; 1970b; 1970c), David Lithgow (1969a; 1969b; 1973), and Lithgow and Lithgow (1973a; 1973b; 1973c; 1974). Linguistic information on Nimowa is even more limited. Both Capell et al. (1970) and Henderson and Henderson (1974) include Nimowa wordlists, while Ezard (1978) includes an appendix with ‘classificatory prefixes in Nimowa’. Henderson and Henderson (1974: 50) note that there is a Nimowa dictionary of nearly 300 pages produced by Fr. D. K. Twomey in the 1950s, however, to date, I have been unable to locate a copy.

The earliest written record of the Sudest language is a short word list in a report by Armstrong (1922). There are three field notebooks by Capell (1928a; 1928b; 1930s) with vocabularies and

¹⁸ See Lynch et al. (2002: 881-2) for a full list of published grammatical descriptions of Papuan Tip languages and Schlossberg (2012: 173-6) for an updated list of both published and unpublished Papuan Tip grammatical descriptions.

¹⁹ <http://www.sil.org/pacific/png/>

grammatical notes on the Rambuso dialect of Sudest, which are archived with PARADISEC.²⁰ Ray (1937), Henderson and Henderson (1974) and David Lithgow (1976) all include fragmentary information on the language, and Ezard (1978) again contains a list of some ‘classificatory prefixes’ (cf. chap. 5) in Sudest along with the Nimowa data already mentioned. Anderson and Anderson have carried out fieldwork under the auspices of SIL in Pamela village, primarily in the 1980s and early 1990s. They have produced a number of manuscripts including a Sudest reader (M. Anderson 1987), a Sudest-English lexicon (M. Anderson 1990?), a grammar sketch (Anderson & Anderson 1991), and a phonology sketch (Anderson & Anderson 1992). There is also a short publication on object-classifying morphemes (M. Anderson 1992) and a published grammatical sketch by M. Anderson and Ross (2002). A Sudest version of the New Testament was published and distributed throughout the island in 2015 and is based on the Central dialect spoken in Pamela. Multiple sources mention a Sudest dictionary, again produced by Fr. D. K. Twomey but, like the Nimowa dictionary, a copy could not be located.

1.5 Data collection, methodology, and the corpus

In this section, I outline details related to data collection and methodology of the current work. Details pertaining to the field site, consultants, and field work are given in §1.5.1 and a discussion of the workflow is given in §1.5.2. Section 1.5.3 addresses archiving and issues around verifiability and reusability of the language data and §1.5.4 discusses basic linguistic theory, the informal framework on which the current analysis is based. Finally, §1.5.5 outlines the make-up of the corpus.

1.5.1 Field site, consultants, and field work

The language data for this thesis comes from a corpus of texts, elicitation data and field notes collected on Vanatina unless otherwise indicated. The corpus was recorded during three field trips between 2014 and 2016, totalling approximately six months.²¹ Some elicitation data were also subsequently collected via telephone in 2017 and 2018.

During my trips to Vanatina, I stayed with the extended Kieran family in the hamlet of Uyeuye,²² a five-minute walk from the larger village of Vuwo. Uyeuye has around 20 residents, while Vuwo has approximately 100. I was introduced to the community by Fr Tony Young, who has lived and worked in the Louisiade Archipelago on and off for the past sixty years. In 2014, he was the priest

²⁰ Pacific and Regional Archive for Digital Sources in Endangered Cultures (<http://www.paradisec.org.au>)

²¹ Because the first nine months of the year consist of a cyclone season followed by a rainy season, there is only a three-month window in which field trips are feasible.

²² Meaning ‘rainy place’ or ‘very rainy’.

for the local diocese based on Nimowa, which includes much of the Calvados Chain and Vanatina. He helped me to connect with the community of the central north coast of Vanatina, who were interested to work with a linguist documenting and describing the Sudest language.

Many people contributed recordings to the corpus and answered the many questions I had about the Sudest language and Vanatina. I worked with a number of language experts regularly over the three fieldtrips. My first Sudest teacher and language expert was Abel Sam.²³ He was in his 50s when I met him. He was born and grew up in Araetha, but had been living at the Mission of the Sacred Heart on Nimowa for nearly a decade. He took part in Sudest writing and transcription training with SIL in the 1990s. Abel worked as my primary language expert during the first field season, transcribing and translating texts with me. He worked as a language expert for the project intermittently during the 2015 and 2016 field season.²⁴ During the 2015 and 2016 fieldtrips, Noelyne Livina and Colette Stevens worked with me as primary language experts in transcribing and translating texts. Noelyne Livina was also born in Araetha and was in her early 60s at the time of data collection. She currently lives in Njenja. Noelyne attended nursing school after finishing grade 10, and worked as a nurse in Alotau for a number of years during her 20s before moving back to Vanatina. Colette Stevens was born in Mba and currently lives in Uyeuye. She attended Sideia Vocational College after completing primary school, and worked there for a number of years after completing her training. During my final field season Virgil Kevin also started working with me, transcribing and translating texts. He was born in 1984, also in Mba. His mother is a secondary school teacher and he moved around Milne Bay Province while growing up and completed grade 12. He now lives on Nimowa. Abel, Noelyne and Colette all spoke/speak Sudest as their first language and were/are also fluent in Nimowa and Milne Bay English, with varying levels of passive and spoken Misima and some Tok Pisin. Virgil is bilingual in Sudest and PNG English with English as his dominant language. Throughout all three field seasons, many other members of the community contributed to the project as language experts, participating in stimuli and elicitation tasks and also sometimes transcription and translation sessions. Anne Edwards, Kieran Kebari, Josephine Banian, Livina Luke, Jaclyn Sam, Marie Camilos, Meira Kebari, Miriam Michael, Sylvester Kieran, and Tajin Roberts were all particularly active and helpful in these endeavours.

All texts and elicitation in the current corpus were recorded in Uyeuye and Vuwo. During the 2015 and 2016 field seasons, recording sessions were run every Sunday in the local community house in Vuwo after church services. This gave interested speakers between Araetha and Njenja, and sometimes further afield, a more convenient opportunity to record after attending church services.

²³ Vanatina have both Christian and Sudest given names and generally use their Christian names for official purposes. Typically, people take a patronymic last name, using their father's Christian name although some women take their husband's patronymic or Christian name as a family name.

²⁴ Abel Sam passed away during late 2018 before the completion of this thesis.

None of the houses have glass windows or any type of insulation in Uyeuye and Vuwo, so while attempts were made to minimise external noises during recordings, the realities of everyday life in a village means that this is not always possible.

1.5.2 Workflow and software

Workflow during each field season varied due to access to power sources and the availability of language experts. It was a requirement for this project to create a searchable text database in ELAN (EUDICO Linguistic Annotator)²⁵ or Toolbox²⁶ format to ensure compatibility with the annotations of three-participant events in the other languages participating in the larger project. During the first field season, I had no access to solar or generator power. This meant that transcription, translation, and interlinearisation of texts was completed by hand and by playing back each text on the recorder. Upon returning from the field, an .eaf file of each text was created in ELAN. Each text was then ‘chunked’ into intonation units (IUs). Himmelmann (2006: 260) argues that IUs correspond approximately to a line or verse in spoken genres. He considers them a ‘basic unit into which native speakers themselves chunk their utterances’ (Himmelmann 2006: 260). The defining criteria of what constitutes an IU vary in the literature, although there is usually overlap in defining criteria. Common defining criteria for an IU include change of pitch at the end of the IU, lengthening of the final segment in the IU, a pause at the end of the IU, reset of the baseline pitch at the beginning of the IU, and anacrusis (an acceleration of the unstressed initial syllables at the beginning of the IU) (Du Bois et al. 1992; Chafe 1994; Himmelmann 2006). IUs usually do not display all of these criteria and only two or three of the diagnostic criteria are present (Himmelmann 2006: 260). Once each text was chunked, it was then transcribed in ELAN, creating text-media linkage, before being imported as a .txt file into the Toolbox software program, where it was interlinearised. During subsequent field seasons, I had access to solar power and could import recordings directly into ELAN to chunk and transcribe the text and then move it across to Toolbox to interlinearise and translate. This sped up workflow considerably and allowed for more consistent translation and interlinearisation. Being able to play back the sound file while transcribing, checking and later analysing and describing the language meant that analyses were continuously checked and compared against original data and transcriptions could also be refined.

During the first two field seasons, transcription and translation was physically written out by myself with language experts dictating and verifying the texts and translations, as the majority of speakers have lower levels of Sudest literacy than English literacy and little experience handling recording

²⁵ <https://tla.mpi.nl/tools/tla-tools/elan/>

²⁶ <http://www-01.sil.org/computing/toolbox/>

equipment or computers. During the 2016 field season Virgil Kevin transcribed and translated the majority of texts by hand before I entered them into the digital corpus in consultation with a speaker.

1.5.3 Archiving, citation, transparency and reusability

All recordings of Sudest made over the course of this project are currently in the process of being archived in The Language Archive of the Max Planck Institute.²⁷ The importance of archiving corpora from language documentation and description projects on un(der)-described languages and citing the sources of language examples has been of increasing concern in the field and is considered best practice today (see e.g. Bird & Simons 2003; Woodbury 2003, 2011; Thieberger 2006, 2009; Gawne et al. 2017; Berez-Kroeker et al. 2018). By archiving the corpus and making it accessible and citing each example in the thesis by an identifiable text title, IU and/or timecode, the analysis is more verifiable and replicable. This means that future readers will be able to more critically engage with the analyses presented here.

Archiving the corpus also serves to preserve arguably the most valuable output of the current project: the primary data collection of recorded Sudest texts. Any grammatical description produced will only ever be a partial and biased description of the language; one that follows current fashions in topics that are or are not analysed and explored and also includes the researcher's own language history, training and biases (cf. Thieberger 2006: 6). Archiving the data allows future researchers to explore and investigate further linguistic and extra-linguistic topics. The corpus of an un(der)-described language provides a snapshot of a particular variety of a language spoken at a specific time by a speech community. The corpus could, at some future point, also become one of the primary remaining records of the language if it ceases to be spoken. It is, therefore, a valuable repository for the language, stories and culture of its speakers and potential resource for revitalisation programs (although one strongly hopes that it is never needed for this purpose).

1.5.4 Basic linguistic theory

The description of Sudest presented in this thesis is presented within the informal framework of 'basic linguistic theory', a term coined by Dixon (1997). Within the framework, an analysis is developed inductively through the collection and investigation of naturalistic language data, providing specific justification for each piece of analysis (Dixon 1997; 2010a). The overall

²⁷ All recordings without any kind of accessibility restrictions (so, minimally all interlinearised texts currently in the corpus as well as some elicitation recordings) will be made accessible upon the completion of the project to any users who agree to the terms and conditions of the archive. The corpus will soon be available at <https://hdl.handle.net/1839/a67b355f-a22d-4e86-a95d-e41a2674e196>.

framework of basic linguistic theory is cumulative in nature. The informal descriptive metalanguage is built on linguistic scholarship going back to the Sanskrit and Greek grammarians, continually augmented with concepts from multiple areas of more ‘modern’ linguistics, including structuralism, (pre-1975) generative grammar, and particularly typology (Dryer 2006; Dixon 2010a). The framework is continually added to and revised as new phenomena and issues come to light (Dixon 2010a). It can be considered one of the most suitable and accessible frameworks for a typologically informed approach to descriptive grammatical analysis in the context of language documentation.

The theoretical assumptions and descriptive metalanguage labelled by Dixon (1997; 2010a; 2010b; 2012) and Dryer (2001; 2006) as ‘basic linguistic theory’ have tacitly been the prevailing framework used in many grammatical descriptions of un(der)described languages since the last decade or so of the 20th century (Dryer 2006: 210-2). Grammatical descriptions based within the informal framework have the advantage, as Evans and Dench (2006: 6) highlight, that they have proven to be more readable and accessible to a wider audience of linguistics (and non-linguists) in the short- and long-term compared with more formal theoretical approaches.

1.5.5 The corpus

1.5.5.1 Participants

The corpus contains recordings from 25 speakers, 14 women and 11 men. The ages of the speakers range from early twenties to speakers in their sixties at the time of recording. The list of speakers is presented in Table 1.1 All speakers were given the choice of what name to record (Christian or Sudest) as well as the option to be given an anonymous pseudonym, but no speakers elected to be identified by a pseudonym.

Speaker	Age	Gender	Dialect
Anne Edwards	50-60	F	Central
Colette Stevens	30-40	F	Central
Denise Mary	40-50	F	Central
Jaclyn Sam	30-40	F	Central
Josephine Banian	40-50	F	Central
Joyce Mao	40-50	F	Central
Lydia Noel	50-60	F	Yeina
Lydia Sale	40-50	F	Central
Lydia Saulo	20-30	F	Central
Meira Kebari	60-70	F	Taranggiya
Miriam Michael	30-40	F	Yeina
Monica Michael	30-40	F	Central
Noelyne Livina	60-70	F	Central
Pauline Donny	20-30	F	Central
Abel Sam	50-60	M	Central
Alexander Gitali	50-60	M	Central
Livina Luke	50-60	M	Taranggiya
Michael Karuwo	20-30	M	Central
Michael Kebasi	50-60	M	Central
Norbert Simeon	40-50	M	Taranggiya
Patrick Kieran	30-40	M	Central
Simon Thomas	30-40	M	Central
Sylvester Kieran	40-50	M	Central
Tajin Roberts	20-30	M	Central
Trudo Camillus	40-50	M	Central

Table 1.1 Speakers in the corpus

The majority of participants had some formal primary school education in English. Three participants had had no formal education. Approximately a third attended high school up to grade ten and/or vocational college. One participant had completed grade twelve. All but five speakers were born in and lived within the Central dialect region between Araetha and Njenja. Three speakers come from the Taranggiya area, one of whom still lived there at the time of recording. The remaining two speakers had spent a large portion of their adult life on the central north coast after marrying members of the community there. Two speakers originally come from Yeina but moved to the north central coast upon marriage.

1.5.5.2 Texts

The description of Sudest presented in this thesis is primarily based on a corpus of 73 transcribed, interlinearised, text-audio aligned texts and some 20 hours of elicitation recordings. The corpus was

recorded over three field seasons in 2014, 2015, and 2016 in Uyeuye and Vuwo on Vanatina. The bulk of elicitation data were also collected during these field trips with a small amount of elicitation taking place in 2017 and 2018 via telephone. Table 1.2 presents an overview of the corpus by text type and length (both in IUs and minutes). The corpus can be divided into two subcorpora: one with more ‘naturalistic’ texts like narratives, procedurals, and conversations and a stimuli corpus based on non-linguistic stimuli materials. Throughout the thesis I refer to the collection of naturalistic texts as the ‘text subcorpus’, the stimuli texts as the ‘stimuli subcorpus’ and the combined subcorpora as the ‘corpus’. A full list of the corpus texts, including speakers and text type, is given in Appendix A. Appendix B presents a transcription of two of the corpus texts including a gloss line and free translation. As discussed in §1.5.3, the corpus will be housed in The Language Archive and accessible to all interested parties with the exception of texts that have either been restricted at the wish of speakers) or due to sensitive information. Elicitation recordings and metadata will be archived in the same location.

text type	no. of texts	IU	time mins	time secs
naturalistic texts				
anecdote	6	281	13	3
conversation	1	352	10	43
family/personal history	6	350	18	6
procedural	23	1378	69	41
traditional narrative	17	2175	97	2
total	53	4648	209	7
stimuli texts				
put stimuli task	5	1122	103	19
cut and break task	6	1343	157	28
family problems picture task	8	2006	94	30
frog story task	1	127	5	35
total	20	4598	360	52
	73	9246	569	59

Table 1.2 The Sudest corpus

The corpus comprises nine and a half hours of transcribed, interlinearised, text-audio aligned texts or 9,246 IUs. Arguably, the total number of IUs is a more accurate way to quantify the corpus as they indicate a somewhat ‘objective’ and cross-linguistically comparable unit of spoken language while the total recorded time includes long pauses and periods where no speaking occurs²⁸. This is evidenced by the fact that stimuli recordings make up over 60 percent of total corpus by time (6

²⁸ The corpus is also not measured in ‘words’. Word count can vary greatly depending on whether a language is more analytic or synthetic. Moreover, it is notoriously difficult to define what is a word both for individual languages and cross-linguistically and there is still a lack of consensus for cross-linguistic parameters that can be used to define what a word is (see, e.g., Dixon & Aikhenvald 2002; Haspelmath 2011).

hours) compared with the naturalistic texts (3 hours, 29 minutes) but the stimuli subcorpus contains fewer IUs (4598) than the naturalistic text subcorpus (4648) due to long pauses to view stimuli materials and complete tasks.

The text subcorpus predominantly contains narrative and procedural texts with only one conversational text and reflects the somewhat opportunistic way in which data were collected. This is due to a number of factors. Firstly, the specific texts recorded were overwhelmingly chosen by the speakers themselves and therefore reflect a preference to record narratives and procedurals about traditional practices for posterity. Secondly, as has been repeatedly noted in the literature (e.g., Crowley 2007, Bowerman 2008), recording conversational data in the field can be tricky for a myriad of reasons.

The stimuli subcorpus contains recordings based on tasks with non-linguistic stimuli (picture book, picture cards, and video). The stimuli tasks allow for both intra- and inter-linguistic comparison and were selected to augment the text corpus by targeting particular semantic domains related to 3PEs and language-specific morpheme paradigms. The PUT task (Bowerman et al. 2004) targets putting and taking events, including giving events by playing short videos of these events to speakers who then describe what occurred immediately after watching each video. This task was used because it targets a wide range of different 3PEs and because such events of putting and taking often involve the use of classificatory verbs in Sudest (chapter 5). The CUT-BREAK stimuli task (Bohnenmeyer et al. 2001) also uses short video clips that are played to the speaker. Again, the videos target a semantic domain that includes 3PEs, namely events in which an agent uses an instrument to impact on a patient. The task was also selected because the expression of events of cutting and breaking in Sudest frequently include reference to the manner of causation of the event by way of an eponymously named set of verbal prefixes (chapter 5). In the family problems stimuli task (Carroll et al. 2009), a pair of speakers are presented with 16 picture cards one at a time. The speakers are asked to describe each picture and after doing this discuss amongst themselves how to combine the pictures to make up a narrative. Once they have done this, they then tell the story to an audience. The task targets a range of areas including question and response, the description and categorisation of non-linguistic stimuli, and extended narrative production (San Roque et al. 2012: 138). The family problems task is also very rich in 3PEs, including handling and transferring events that commonly involve classificatory verbs and adds valuable conversational data to the corpus, albeit on limited topics.

All examples presented in the thesis are referenced by their text title (name and date of recording) and by the IU and time code. So, the example presented in (1) comes from the text titled ‘kula exchange’ that was recorded on the tenth of December, 2014. The IU, in this case 14, follows the text title and date and the time code follows the IU, with both the start and end time given (41.910

46.010). The time code is provided as this is a static reference that will not change unlike IUs which may be refined or moved.

- (1) *methi=wa* *Rogha*
 3PL.IMM.PST=go place.name
 ‘we went to Rossel Island’ (kula exchange 101214 014, 41.910 46.010)

Stimuli examples contain ‘stimuli’ in the title, as in (2)

- (2) *ela=ma i=thin-giya ndeghi we=ya wevo=ma*
 woman=DET 3SG=GET.SG.CNTR-give cup PREP=YA young.woman=DET
 ‘the woman gives the cup (with contents) to the girl’
 (put stimuli 191015 01 02 130-3, 487.610 492.072)

All elicitation files contain ‘e’ as their title, as in (3). Because these texts have not been text-audio aligned, they do not include a time code or IU but do include the date of recording (300915 or 30th of September 2015). If more than one elicitation session was run on a single day, the title also indicates the session number the example comes from (‘01’).

- (3) *mbwa kero i=bwala*
 water already 3SG=boil
 ‘the water boiled’ (e 300915 01)

Sudest examples that do not come from my own data collection are cited, as in (4).

- (4) *va* *i=thuwe=nggi=ya* *gharighari* *vavana*
 PST 3SG=see=3PL=YA people some
 ‘he saw some people’
(Anderson & Anderson 1991: 16)

The interlinear glosses in this thesis follow the conventions set out in the Leipzig Glossing Rules.²⁹ For Sudest examples taken from other sources, some glosses have been changed to be consistent with the current glossing system, e.g. ‘3sS’ for ‘third singular subject’ changes to ‘3SG’, as in (4) above.

1.6 Structure of the thesis

The thesis comprises three sections. Chapters 1 to 3 contain introductory matter to the Sudest language and three-participant events. After the presentation of general background information here, Chapter 2 discusses the literature related to the study of three-participant events and presents the event types distinguished by Margetts and Austin (2007) and their encoding strategies, with an emphasis on those constructions attested in the Oceanic languages. Chapter 3 provides a grammatical sketch of Sudest, focussing on areas most relevant to the expression of 3PEs in the

²⁹ <https://www.eva.mpg.de/lingua/resources/glossing-rules.php>

language. Chapters 4 to 6 examine Sudest verbal morphosyntax in detail. Chapter 4 outlines the verb complex, describing the morphemes that can fill each of the possible 22 pre- and post-verbal slots. Chapter 5 examines the two ‘classificatory’ paradigms found in the verb complex. First, it considers the manner-of-causation prefixes that encode the manner in which an action is completed (e.g. ‘by hand’, ‘by cutting’, ‘by spearing’); this type of morpheme is more frequently known as a ‘classificatory’ prefix in the Papuan Tip literature. The second group of morphemes consists of a group of classificatory verbs translatable as ‘get’, which are selected based on properties of the object referent that include consistency, composition, and number. The presence of classificatory verbs in Sudest is of particular note as they are otherwise unattested in the Oceanic (and Austronesian) languages. Chapter 6 then outlines the ways in which verb stems may combine in multi-verb constructions. Finally, Chapter 7 and 8 return to the topic of three-participant events. Chapter 7 investigates the encoding strategies used in Sudest to express 3PEs. Chapter 8 discusses inventory and frequencies of 3PEs in the Sudest data and considers the Sudest 3PEs in a cross-linguistic perspective.

2 Literature and methodology

2.1 Introduction

The semantic notion of three-participant events (3PEs) is often linked to the vast literature on ditransitive verbs and their alternations. Ditransitive verbs, however, are not necessarily as widespread as they may appear when looking at the literature, which often takes major European languages as a starting point. Over the last two decades, events with three participants have begun to receive more widespread attention from linguists. The resulting research has shown that there are a wide range of functionally equivalent morphosyntactic constructions that languages use to encode 3PEs, instead of or as well as verbs with three syntactic arguments.

As noted in the previous chapter (§1.1), one of the aims of this thesis is to provide a comprehensive analysis and description of 3PEs in Sudest. In order to do this, I take the 12 3PE types identified by Margetts and Austin (2007, henceforth abbreviated to M&A) – revised in Margetts et al (2019a; 2019b) – as a starting point for the investigation of 3PEs in Sudest. I follow M&A’s definition of 3PEs as ‘dynamic states of affairs that crucially involve three entities in their conceptualization’ (p. 397). The study of 3PEs presented here took place in the context of a larger project investigating the crosslinguistic patterns in the encoding of 3PEs, examining the patterning of 3PE encoding strategies both intra- and cross-linguistically through the analysis of corpus data from endangered languages.³⁰

This chapter is structured as follows. Section 2.2 discusses the literature and trends related to the investigation of 3PEs and ditransitives. Section 2.3 presents a discussion of 3PE event types. This is followed in §2.4 by a description of crosslinguistically attested morphosyntactic encoding strategies for 3PEs. Each of the encoding strategies relevant to the study of 3PEs in Sudest is then considered in turn in more detail in §2.4.1 to §2.4.6, using examples from the Oceanic family to illustrate the discussion. Finally, §2.5 outlines the methodology used in the corpus-based investigation of 3PEs in Sudest, including the process of corpus annotation.

³⁰ The project was supported by two grants: *Cross-linguistic patterns in the encoding of three-participant events*, funded by the Documentation of Endangered Languages Program, Volkswagen Foundation, 2013-2017 and *Cross-linguistic patterns in the encoding of three-participant events - investigating BRING and TAKE*, Documentation of Endangered Languages Program, Volkswagen Foundation, 2017-2020
<http://dobes.mpi.nl/research-projects/cross-linguistic-patterns-in-the-encoding-of-three-participant-events/>

2.2 Previous research on three-participant events

In this section I consider some of the key literature related to the study of 3PEs. The discussion presented here does not aim to provide an exhaustive summary of 3PE related works, but rather a snapshot to contextualise the current study. For further discussion see, e.g., M&A; Malchukov et al. 2010a). Mukherjee (2005: 3-63) also provides an in-depth review of major approaches of three-place predicates, particularly for English.

The focus of much research in descriptive, typological, and theoretical linguistics has frequently been on syntactic ditransitive verbs, i.e. verbs with three syntactic arguments (e.g. Goldberg 1992; Haspelmath 1993; 2004; Anagnostopoulou 2003; Siewierska & Hollman 2004; Mukherjee 2005; Kittilä 2006a; 2006b) and their alternations such as the ‘dative alternation’, e.g., *Lee gave Sam a biscuit* versus *Lee gave a biscuit to Sam* (e.g. Harley 2002; Krifka 2004; Rappaport Hovav & Levin 2008; see also Levin (1993: 45-50) for a list of works on alternations in English). Yet another body of work looks at the alignment of ditransitives: that is the treatment of the two objects of a ditransitive construction compared with the single object of a monotransitive construction (Blansitt 1984; Dryer 1986; Croft 1991: 100-8; Siewierska 2003; 2004; Haspelmath 2001; 2005a; 2007; Malchukov et al. 2010b). Because of (rather than despite) the large literature on ditransitives, there is little consensus on a definition of ‘ditransitive’. Some definitions relate to specific morphosyntactic constructions while others are semantic in nature, or some mix of both (cf. Dryer 1986; Anagnostopoulou 2003; Mukherjee 2005; Conti 2008).³¹

It is common for ‘give’ verbs to be used as the main or only type of verb in research on ditransitives (e.g. Haspelmath 2001; 2005b; Siewierska 2003). However, relying on a ‘prototypical’ ditransitive verb, particularly ‘give’, can be misleading, as Borg and Comrie warn:

[I]n many languages [...] "give" is syntactically a very atypical ditransitive verb. This is not particularly surprising: items from the most basic vocabulary are more likely to be anomalous morphologically and syntactically. But this does demonstrate that more care needs to be taken in the choice of the most typical ditransitive verb, selection of "give" always requiring cross-checking with a variety of other verbs of similar valency (Borg & Comrie 1984: 123)

This is clearly demonstrated in Newman’s work on ‘give’ (1996; 1997). Newman (1996) explores aspects of ‘give’ and the ‘exceptionality’ of ‘give’ verbs and expressions. This work is continued

³¹ Throughout the thesis the term ‘three-place predicate’ is used interchangeably with ‘ditransitive’ to refer to verbs with three syntactic arguments.

in Newman's (1997) edited volume, which also takes the semantic concept of 'give' as a starting point to investigate typological variation and acquisition of 'give'-type events.³²

Since the turn of the century, there has been an increase in research that takes the explicitly semantic concept of 'three-participant events' as a point of departure for investigation rather than 'ditransitivity'. Three-participant events were the topic of investigation at a series of workshops in Melbourne between 2000 and 2002 and at the Max Planck Institute for Psycholinguistics in 2003, which looked at cross-linguistic variation and developmental perspectives of 3PEs (see Narasimhan et al. 2007 and other contributions in *Linguistics* 43/3). The effects that animacy and animacy hierarchies can have on the expression of 3PEs in some languages have also been the topic of a 2011 workshop at Lancaster University and subsequent publications (see van Lier 2012 and other contributions of *Linguistic Discovery* 10/3). Influential in the ongoing research into 3PEs is the work by M&A and Margetts (2002; 2007) which extends the semantic range of event types from that identified in much of the previous literature and catalogues the morphosyntactic encoding strategies attested in a variety of languages to express such events.³³ As stated above, the current work uses M&A's inventory of event types and attested encoding strategies as a foundation for the investigation of 3PEs in Sudest (see §2.3 for discussion of event types and §2.4 for an outline and examples of encoding strategies).

A parallel and sometimes complementary area of investigation to 3PEs, particularly since Dryer's (1986) influential paper on primary object and direct object languages, has been research that looks at ditransitive alignment types (e.g., Blansitt 1984; Croft 1990: 152-5; Siewierska 2003; 2004: 57-66; Haspelmath 2001; 2005a; 2007; Malchukov et al. 2010a). Alignment traditionally refers to monotransitive verbs – verbs with an agent-like argument A and patient-like argument P (sometimes also labelled 'O') – and how their arguments are treated in relation to the single argument (S) of an intransitive verb. The notion can also be extended to the two non-agent arguments of a ditransitive verb: the theme-like argument T and the recipient- or benefactive-like argument R, and whether one or the other or neither are treated more like the P of a monotransitive

³² Some further work concentrating on give-type events includes Comrie (2003a; 2003b), Kittilä (2006a), Margetts (2008a), and Reesink (2013). Work focussing on other kinds of 3PEs include Siewierska and van Lier's (2013) research on 'promise' and Zúñiga and Kittilä's (2010) study on malefactive and benefactive, Comrie and Polinsky (1993) and Song (1996) on causatives, Peterson (1999) on applicatives, and Song (1997; 1998; 2005) and Margetts (2004a) on the emergence of benefactive constructions in Oceanic.

³³ The origin of the term *three-participant event* is unclear. Possibly the earliest attested use comes from Kemmer (1993). While Kemmer (1993) does not provide defining criteria for 3PEs, her characterisation of events and event participants are not dissimilar from those followed in the current work: 'The term "event" in this work will serve as a convenient cover term for actions, processes and states – in other words, an event is the conceptual correlate of a verb' (Kemmer 1993: 8) and events are 'treat[ed] in terms of **participants**, the referential entities involved in the event, and **relations**, the relationships linking the participants in a given event' (Kemmer 1993: 8 emphasis original).

construction (Dryer 1986: 814).³⁴ Figure 2.1 shows the main types of ditransitive alignment discussed in the literature (e.g. Dryer 1986; Haspelmath 2005a; Malchukov et al. 2010a).

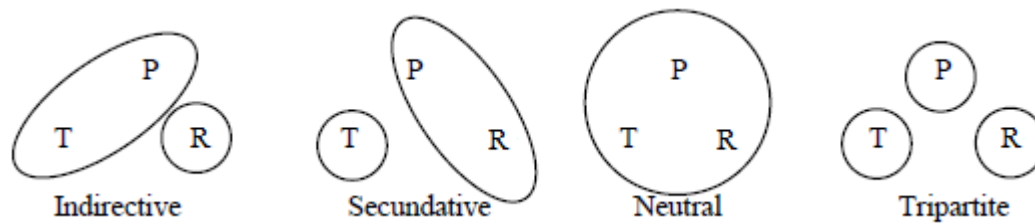


Figure 2.1 Ditransitive alignment types (adapted from Van Lier 2012: 5)

Direct object languages (Dryer 1986) or languages with indirective alignment (Haspelmath 2005a) treat T the same way as P (e.g. by indexing or cross-referencing on the verb) and R is treated differently. Primary object languages (Dryer 1986) or languages with secundative alignment (Haspelmath 2005a) show the inverse patterning: they encode R in the same way as P, and treat T differently. In neutral alignment, P, T, and R are treated identically and in tripartite alignment they are all treated differently (Haspelmath 2005a).³⁵ A language can display a single ditransitive alignment type, or it can have multiple alignment types depending on language specific constraints (e.g. specific verbs, animacy of arguments).

Like in the wider literature on ditransitives, definitions of ‘ditransitive’ vary in the alignment literature. Dryer (1986) specifies that his discussion relates to ‘semantically ditransitive’ clauses. This includes both predicates with three syntactic arguments and some predicates with two syntactic arguments and a third participant expressed by a PP. However, Dryer (1986) does not specify by exactly what semantic criteria a predicate should be included or excluded from the category of ‘ditransitive’. His examples are restricted to ‘typical’ ditransitives, predominantly ‘give’ and other transfer events such as ‘bring’, ‘take’, ‘send’ and ‘sell’. Malchukov et al. (2010a) have a similar definition for ‘ditransitive constructions’, but theirs explicitly includes only transfer verbs with ‘an agent argument (A), a recipient-like argument (R), and a theme argument (T)’ (p. 1).³⁶ Siewierska (2003: 344), however, views ditransitive alignment as ‘neither semantic nor morphosyntactic, but hold[ing] at a more abstract level’. Nevertheless, her discussion, like the above-cited works,

³⁴ Dryer (1986) uses the terms ‘notional direct object’ (DO) for T, and ‘notional indirect object’ (IO) for R. The current discussion adopts the labels used by Haspelmath (2001; 2005a) and subsequent scholars (e.g. Siewierska 2003; 2004; Malchukov et al. 2010a; 2010b) as they are widely used in the literature today.

³⁵ Malchukov et al. (2010a: 6) also identify ‘horizontal’ alignment, in which T and R are treated identically but differently from P. However, there are no attested clear cases of this type of alignment.

³⁶ Like M&A, Malchukov et al. (2010a: 11-5) also analyse ditransitive constructions based on their encoding strategies. Several of their strategies overlap with (and are based on) encoding strategies identified by M&A (see §2.4). Malchukov et al. (2010a), unlike M&A, restrict their investigation to underived constructions only, and do not include constructions with causative or applicative morphology.

primarily relies on ‘give’ verbs and other common transfer verbs in constructions with three arguments or two arguments and an PP.

2.3 The semantics of three-participant events: target events

There is extensive and ongoing debate about the nature of ‘events’ and how to identify and differentiate them in philosophy, psychology, and linguistics (see Pianesi & Varzi 2000; Casati & Varzi 2008; and Pederson & Bohnemeyer 2011 for overviews). The current investigation of 3PEs does not assume a formal definition of ‘event’ but uses ‘event’ as a pretheoretical notion (cf. Margetts 1999: 313). Following Margetts (1999), events are conceptualised as involving participant(s) – again a pretheoretical notion. Events and their participants can be considered to occur in the real world and located in time. For example, an event of putting involves someone placing something somewhere at a particular moment. Importantly, events and participants do not constitute structural units of language like a clause does. For this reason, there is not necessarily a one to one mapping between events and clauses or participants and arguments of the verb (i.e. a clause with a transitive verb with two arguments can still express a 3PE with the third participant expressed as, e.g., an adjunct, the possessor of one of the arguments, or is even evoked by the verb itself but not expressed by an argument or adjunct).

The investigation of 3PEs in Sudest in this work draws on the list of event types provided in Margetts et al. (2019a), which is based on the inventory of types identified by M&A. As noted above, M&A define 3PEs as ‘dynamic states of affairs that crucially involve three entities in their conceptualization’ (p. 397).

Table 2.1 presents the target 3PE types identified by M&A (p. 398) and updated in Margetts et al. (2019a). Both sources classify an event type as a 3PE if it is (a) expressed as a monomorphemic three-place predicate in at least one language – that is, a classic ‘ditransitive’ verb with three arguments that can be identifiable by relevant morphosyntactic operations in the specific language and that can be fully referential – or (b) an event is expressed by a monomorphemic two-place predicate and the third participant is included in the verb’s semantic representation in at least one language (e.g. instruments in *bite* or *punch*) and is also expressed by one of the other 3PE encoded strategies in at least one other language. Margetts and Austin do not differentiate between third participants expressed by an oblique or adjunct given that distinguishing oblique arguments from adjuncts, can be fraught, particularly for less documented languages. They group such constructions together.

Table 2.1 Types of three-participant events (Margetts et al. 2019a)

Type A	<p>Agent causes recipient to receive theme: verbs of discrete or continuous causation of movement of an entity to a recipient <i>give, pass, hand, send, deliver, pay, feed, provide with, sell</i> (s.o. s.th.) including verbs signifying a deictically specified direction <i>bring, take</i> (s.o. s.th.) verbs of instantaneous causation of ballistic motion of an entity to a recipient <i>throw, toss, kick</i> (s.o. s.th.) Comments: including ‘throw s.th. to s.o.’ (for them to have, catch) but not ‘throw s.th. at s.o.’. Excluding ‘inform’ etc. which is classified as Type C</p>
Type B	<p>Agent causes theme to move to or to be located at location: verbs of discrete or continuous causation of movement of an entity to or towards a location cause BE AT location: <i>put, place, position, leave, keep, hold down, plant, sow, build, fix, attach ...</i> (s.th. s.wh.) cause MOVE TO location: <i>bring/take, carry, send, lead, throw, drag, deliver, pull, push, seat, lay, stand up ...</i> (s.th. (to) s.wh.) Comments: including ‘throw s.th. at s.o. or s.th.’ but not ‘throw s.th. to s.o.’. Excluding caused motion FROM location; which is classified as Type E</p>
Type C	<p>Agent acts to communicate information to recipient: verbs of explication <i>tell, show, ask, teach, inform of</i> (s.o. s.th.) Comments: NPs like ‘story’, ‘news’, ‘joke’, ‘warning’, ‘letter’, ‘picture’, etc. are counted as theme participants <ul style="list-style-type: none"> • NPs and pronouns are counted as participants, passages of direct or indirect speech are not • excluding habitual ‘calling’ events e.g. <i>he (habitually) calls her “aunt”</i>, cf. FN 5 In M&A. • Excluding ‘write a letter’ which is classified as Type F </p>
Type D	<p>Agent/recipient takes possession of theme from source: verbs of receiving <i>receive, learn, inherit, get, hear</i> (s.th. from s.o.) Comments: In practice ‘get’ and ‘take’ verbs can often not be clearly identified as belonging to Type D or Type E. They can be classified as DE</p>
Type E	<p>Agent removes theme from R-type possession or location: verbs of discrete or continuous caused motion FROM location <i>get, take, send, carry, throw, lead, deliver, pay, provide with, drag, pull, push, wash off</i> (s.th. from s.wh.) verbs of dispossession from possession <i>rob, steal, snatch, remove, deprive, ask for, demand</i> (s.th. from s.o.) Comments: In practice, ‘get’ and ‘take’ verbs can often not be clearly identified as belonging to Type D or Type E. They can be classified as DE</p>
Type F	<p>Agent intends to cause recipient to receive theme (and it is the activity which <i>creates</i> or <i>makes available</i> the Theme for the Recipient) verbs of creation <i>build, cook, make, write, catch, plant, ...</i> (s.th. for s.o.) verbs of preparation for use, <i>fill, load, pour (drink), prepare, ...</i> (s.th. for s.o.) verbs of obtaining <i>search, hunt, kill, pick, get, take, book, bring, drop off, ...</i> (s.th. for s.o.)</p>

Type G	Agent uses non-body part instrument to impact on or make change to patient: verbs of physical input with non-body part instrument <i>hit, beat, cut, break, kill, cover, pound</i> (s.o./s.th. with instrument), <i>skewer, shovel, snip, spear, join</i> (s.o./s.th.)
Type H	Agent uses body part instrument to impact on or make change to patient: verbs of physical input with body part instrument <i>kick, punch, lick, bite, gore, slap</i> (s.o. /s.th.)
Type I	Conditions of satisfaction imply that agent causes recipient to receive theme: verbs of giving with associated satisfaction conditions <i>promise, lend, guarantee, owe</i> (s.o. s.th.)
Type J	Agent acts to cause recipient to receive theme at some future point in time: verbs of future transfer <i>leave, bequeath, allocate, offer</i> (s.o. s.th.)
Type K	Agent allows recipient to receive theme: verbs of permission and enablement <i>permit, allow, enable, sanction</i> (s.o. [to receive] s.th.)
Type L	Agent causes recipient to not receive or not have access to theme: verbs of refusal <i>refuse, deny, distract, withhold, hide, obstruct access to,</i> (s.o. [from] s.th / s.th. from s.o.)

Margetts and Austin (2007: 396) give the three participants of 3PEs the macro labels A, T and R, in reference to the cross-linguistic patterning of semantic roles that they encounter in much of their data. The A participant is an agent-like participant (M&A: 396). The R participant is named for the role of recipient but can also have the semantic role of addressee, beneficiary, goal, source, or location (M&A: 396). The T participant (theme) is an entity (physical or non-physical) that is moved between A and R (M&A: 396). However, not all participants in the event types identified as 3PEs by M&A fit into these macro labels. For example, type-G and type-H events (see Table 2.1 above) express events which involve an instrument, and it is not clear whether M&A subsume this under the notion of the T participant.

The identified types of 3PE can be divided into 12 semantic subgroups. These include the most commonly discussed type of 3PEs in the literature, namely the one in which the agent causes a recipient to receive a theme (type A). They also include events of refusal where the agent causes the recipient to not receive or have access to the theme (type L), and events without a recipient (or location) but an instrument instead, in which the agent uses a non-body part (type G) or a body part (type H) to impact or make a change to a patient.³⁷

³⁷ There are minor differences in the updated list of event types provided in Margetts et al. (2019b) from the previous version: namely, type B and type E events now include events in which the agent causes the theme to be moved to/from a location, not just to/from an animate entity.

2.4 The morphosyntax of three-participant events: encoding strategies

Margetts and Austin (2007) and Margetts et al. (2019b) identify seven encoding strategies used to express 3PEs in the surveyed languages. Each of these strategies can be further divided into substrategies. Many of the substrategies distinguish how the R and T participant are treated, i.e. which participant is the ‘third’ participant and not encoded as a core argument of the verb. The patterning shown by R-type substrategies can be compared with direct object/indirective alignment and T-type substrategies with primary object/secundative alignment (see Dryer 1986; Haspelmath 2005a; Malchukov et al. 2010a). Table 2.2 presents the seven encoding strategies identified by Margetts et al. (2019b) building on M&A (p. 402-3). While the encoding of a single event is not always restricted to just one clause, the current list of event types and the discussion of 3PEs is restricted to those events that are expressed by a single clause.

Table 2.2 *Encoding strategies of three-participant events (Margetts et al. 2019b)*

encoding strategy	strategy code
1. Three-place predicate strategy All three participants are expressed as syntactic core arguments of the verb. (a) Direct-argument strategy All three arguments are expressed as direct arguments of the verb (which does not carry valence increasing morphology). (b) Causative strategy The verb stem is restricted to two arguments, with a third argument added by a causative affix. (c) Applicative strategy The verb stem is restricted to two arguments, with a third argument added by an applicative affix.	1a 1b 1c
2. Oblique and adjunct strategies The verb takes two arguments. A third participant is expressed as an oblique argument or an adjunct. (a) R-type obliques and adjuncts The verb takes two arguments, and a third, R-type participant is expressed as an oblique argument or an adjunct. • “Oblique applicative”: The verb includes an applicative-like marker: • “Oblique causative”: The verb includes a causative-like marker. (b) T-type obliques and adjuncts The verb takes two arguments and a third, T-type participant (includes instruments) is expressed as an oblique argument or an adjunct. • “Oblique Applicative”: The verb includes an applicative-like marker. • “Oblique Causative”: The verb includes a causative-like marker.	2a 2a-APPL 2a-CAUS 2b 2b-APPL 2b-CAUS
3. Serial verb strategy Two (or more) verbs combine in a complex construction and share the three participants as arguments (or adjuncts) between them. (a) R-type serialized Participant The serialized verb introduces a R-type participant. (b) T-type serialized Participant The serialized verb introduces a T-type participant.	 3a 3b

4.	Incorporation strategy	
	One participant is expressed by an incorporated nominal.	
	(a) R-type incorporated nouns	4a
	(b) T-type incorporated noun	4b
	<ul style="list-style-type: none"> • Argument status of the incorporated noun can be marked as a sub-annotation, e.g. 4c-1. 	
5.	Adnominal strategy	
	The verb takes two arguments. A third participant is expressed as an adnominal dependent of one argument.	
	(f) Possessive strategy (R-type)	5a
	The R-type participant is expressed as the possessor of the theme.	
	(g) Proprietary strategy (T-type)	5b
	The T-type participant is expressed as the dependent of the agent.	
6.	Directional strategy	6
	An adverbial directional marker or serialized verb indicates transactional orientation.	
7.	Absorption strategy	
	The verb stem (typically the verbal lexeme) includes information about one of the participants.	
	(a) Direct lexicalization	7a
	The verb is formally distinct from any noun denoting the event participants, but its semantics include reference to one of the participants.	
	(b) Zero derivation	7b
	The verb derives by zero-conversion from a noun denoting one of the participants.	
	(c) Denominal derivation	7c
	The verb derives by overt derivation from a noun denoting one of the participants.	
	(d) Absorbed classifiers or object markers	7d
	The verb takes two arguments, but the verb stem has absorbed what used to be a classifier, or an object marker which conveys information about a further participant.	
	(e) Participant-based event classification	7e
	The verb stem carries information about one of the participants and characterises the event with respect to one of the participants.	
	(f) Affix-based classification	7f
	A participant is evoked by a non-pronominal, non-valence-increasing affix (e.g. instrument or manner of causation affixes).	

The definitions of the encoding strategies are all predicated on the assumption that the verbal predicate encoding the event is a two-place (monotransitive) or three-place predicate (ditransitive), which may itself be underived or derived. The strategies are defined and labelled according to how the third participant, which is often not an argument of the predicate, is expressed. Verbal arguments, following M&A's (p. 401) working definition, are unmarked or marked by nominative, accusative, ergative, absolutive, or dative case marking, while obliques and adjuncts are marked by adpositions or cases other than those listed above (e.g. instrumental, allative, ablative, locative, etc.).³⁸ In some

³⁸ Malchukov et al. (2010a: 12) critique M&A's division of the dative case marking constructions and dative adpositional constructions into two separate encoding strategies (i.e., the three-place predicate strategy and the oblique/adjunct strategy respectively). They point out that such a distinction can be highly contentious even for large and well-studied language like Japanese (Malchukov et al. 2010a: 12). While this point merits further consideration, it is not relevant to the Sudest data, which has neither case marking nor a dedicated dative adposition.

cases, the third participant may be expressed using more than one encoding strategy (M&A: 437). However, the encoding strategies identified by M&A do not explicitly deal with cases in which a participant expressed as an argument of the predicate may also be indicated by an additional element in the clause (e.g. by a verbal classifier). This is discussed further in chapter 8 (§8.6).

The remainder of this section discusses in turn each of the encoding strategies and sub-types that are relevant to Sudest. Examples used to illustrate these strategies are taken from other Oceanic languages, and in some cases from non-Oceanic Austronesian languages. The discussion also highlights the differences between the encoding strategies set out in M&A and the revised strategies proposed by Margetts et al. (2019b). The revised strategies supersede previous strategy lists. Further discussion and examples, particularly for the strategies not discussed here, can be found in Margetts (2002, 2007) and M&A.

2.4.1 Three-place predicate strategy

In the three-place predicate strategy, all three participants are expressed as syntactic arguments of the verb (M&A: 403). The strategy is divided into substrategies based on whether the predicate is underived or derived: the direct-argument strategy, the causative strategy, and the applicative strategy (M&A: 403). As the names suggest, the causative and applicative strategies form three-place predicates through the addition of causative and applicative derivational morphology respectively.

Three-place predicates, particularly direct argument strategy constructions, have received the most attention cross-linguistically in the literature. They are common in English (e.g. *Billy gave her the toy truck*, *Sam's uncle left him a fortune*, *Micha carried the baby to the house*). Three-place predicates are, however, far less common in Oceanic languages. In a survey of 28 Oceanic languages, Margetts (2007) finds that just over half of the languages (15 or 54%) do not have any three-place predicates. Of the languages that do, typically the language will only have between one and five verbs of this type in total (Margetts 2007: 75). The most common type of three-place predicates attested in Margetts' (2007) Oceanic survey are applicative strategy constructions. In contrast, only the direct-argument and causative substrategies are found in Sudest.

The direct-argument substrategy consists of an underived verb that takes three core arguments, i.e., an underived three-place predicate (M&A: 403).³⁹ Examples of the strategy from Tawala (Papuan Tip, PNG) are shown in (1) and (2). There are two attested direct-argument strategy verbs in Tawala:

³⁹ The verb does not necessarily have to be underived, but rather no derivational morphology can be involved in the expression of the argument(s) (M&A: 403).

wele ‘give’ and *hagu* ‘help (s.o. with s.th.)’ (Ezard 1997). In (1) and (2), the R-type participant is indexed on the verb by an object suffix. In (1), it is also cross-referenced by a NP *lawa* ‘people’. The T-type participant is expressed by an unmarked NP; *aniani po muhala* ‘vegetables and meat’ and *om bagibagi* ‘your work’ in (1) and (2) respectively.

- (1) TAWALA (PAPUAN TIP, PNG)
ega aniani po muhala lawa ta-wele-hi
 NEG vegetable and meat people 1INCL-give-3PL
 ‘we did not give those people vegetables and meat’ (Ezard 1997: 103)
- (2) *apo om bagibagi hi-na-hagu-m*
 FUT 2SG.POSS work 3PL-POT-help-2SG
 ‘if they help you (with) your work’ (Ezard 1997: 102)

The patterning of the three arguments in the Tawala examples is typical of Oceanic languages with underived three-place predicates. In Margetts’ (2007) survey, of the seven languages with the three-place predicate strategy, five show primary object alignment like this, i.e. encoding the R-type participant in the same way as the patient-like object of two-place predicates.

In the causative substrategy, a three-place predicate is derived from a two-place predicate through the addition of causative morphology. The example pairs in (3) and (4) from Mekeo (Papuan Tip, PNG) show the two-place predicates *afi* ‘take’ and *inu* ‘drink’ in (3a) and (4a) respectively followed by causativised ditransitive examples with the causativiser *pa-* ‘CAUS’ in (3b) and (4a).

- (3) MEKEO (PAPUAN TIP, PNG)
 a. *a²iva la-afi-a*
 knife 1SG-take-3SG
 ‘I took a/the knife’ (Jones 1998: 86)
- b. *moni a-la-pa-afi-o*
 money FUT-1SG-CAUS-take-2SG
 ‘I will give you the money’ (Jones 1998: 350)
- (4) a. *tsi mijia-ya a-inu-a*
 tea sweet-3SG.POSS 1SG-drink-3SG
 ‘I drink sweet tea’ (Jones 1998: 187)
- b. *otsi vei la-pa-uni-pa-a*
 horse water 1SG-CAUS-drink-THC-3SG
 ‘I water the horse (lit. I cause the horse to drink water)’ (Jones 1998: 318)

The causative strategy is the least common strategy overall in Margetts’ (2007) sample of Oceanic languages, with just five languages (17%) attested to have this type of three-place predicate. However, it is found in all three Papuan Tip languages in the survey.

2.4.2 Oblique and adjunct strategies

In the oblique and adjunct strategies, a monotransitive verb takes two arguments. The third participant is expressed as an oblique or adjunct, usually by a NP marked by an oblique case (e.g., locative, comitative, instrumental, etc.) or by an adpositional phrase (M&A: 411). Although it is theoretically possible to distinguish between the oblique and adjunct strategies – the former is subcategorised for by the verb while the latter is not – it can be exceedingly difficult to do this in some cases (M&A: 411). Due to their similarities and the potential issues surrounding their division, M&A group the two strategies together.

The oblique/adjunct strategies are divided into two subtypes depending on which participant is expressed by the oblique/adjunct (M&A: 413-5). In the R-type substrategy, the R-type participant is expressed by an oblique/adjunct, and the verb takes A and T as syntactic arguments. In the T-type strategy, the T-type participant is the one encoded by an oblique/adjunct. Margetts (2007: 88) posits that the oblique/adjunct strategy is the most widespread strategy crosslinguistically. It is certainly widespread among the Oceanic languages, where the third participant is usually marked by an adpositional phrase, and only rarely by a case marker (Margetts 2007: 88).

Araki (North Vanuatu linkage, Vanuatu) has both R-type and T-type oblique constructions (François 2012). One group of verbs that express 3PEs always occur in R-type oblique/adjunct constructions, while a second group of three verbs (*sle(i)* ‘give’, *varia* ‘show’, *vse(i)* ‘tell’) show an alternation between the R-type and T-type constructions. This alternation is dependent on an underlying referential hierarchy: \pm local (i.e., speech-act participants or third person) and \pm human (François 2012: 108-19). Consider the examples presented in (5) and (6). The theme participants in (5) are chickens while the recipient is first person singular. Because of this, the human recipient is encoded by an object suffix on the verb *-á* ‘1SG’ and the chickens, which are lower on the hierarchy, are encoded by a PP, making it a T-type substrategy construction.

- (5) ARAKI (NORTH VANUATU, VANUATU)
o=vsei-á *lo* *pla-m* *to*
 2SG.IRR=show-1SG LOC FARMING-2SG.POSS chicken
 ‘show me your chickens’ (François 2012: 113)

In (6), it is the first-person theme that is higher on the referential hierarchy than the third person recipient. The encoding is, therefore, reversed with the theme expressed by the object suffix and the recipient by the PP headed by the dative preposition *sa*.

- (6) *o=pa=vsei-á* *sa-na*
 2SG.IRR=FUT=show-1SG DAT-3SG
 ‘will you show me to her’ (François 2012: 113)

Margetts et al.'s (2019) updated encoding strategies further distinguish oblique/adjunct substrategies in cases where applicative or causative morphology is involved in the expression of the 3PE. The R-type and T-type oblique/adjunct applicative substrategy replaces the 'oblique applicative' substrategy listed in A&M. The amended substrategy allows for the distinction between R-type and T-type oblique/adjunct constructions that include applicative morphology. In this substrategy, the applicative introduces an applied object that is simultaneously expressed as an oblique/adjunct. The Tawala example in (7) shows a R-type oblique/adjunct applicative strategy construction. The use of the applicative *-e* 'TR' with the verb *bah* 'say' derives a verb 'say something to someone', in which T is both marked on the verb by the object suffix and as an oblique by the PP, while R is expressed as secondary object by an unmarked NP.

- (7) TAWALA (PAPUAN TIP, PNG)
lugagayo atapu-hi bada i-bah'-e-hi lawa uyahi-hi
 law all-3PL man 3SG-say-TR-3PL person LOC-3PL
 the official recited all the laws to the people
 (Ezard 1997: 289, cited in Margetts & Austin 2007: 90)

Margetts et al. (2019b) introduce a further distinction in cases where causative morphology plays a role in the construction. The oblique/adjunct causative substrategy introduces an agent encoded as the subject of the verb rather than an R or T-type participant. Like the applicative substrategy, the causative substrategy distinguishes whether it is R or T that is expressed by the oblique/adjunct. The example from Ugehele (Meso-Melanesian, Solomon Islands) presented below shows an underived transitive clause with *ko* 'be' (8) followed by an R-type causative oblique/adjunct construction (9). The derived verb *va-ko* 'CAUS-be' means 'put'. It takes a new agent as the subject of the verb (*ghoi* '2SG'), and demotes the agent of the intransitive verb to object position.

- (8) UGHELE (MESO-MELANESIAN, SOLOMON ISLANDS)
ko rie pa vanua
 be 3PL LOC house
 'they were staying at home' (Frostad 2013: 136)
- (9) *pa vei tughu va-ko-a ghoi na buka taga rau?*
 LOC where EMPH CAUS-be-3SG.OBJ 2SG ART book POSS 1SG
 'where did you put my book?' (Frostad 2013: 121)

2.4.3 Serial verb strategy

In the serial verb strategy, two or more verbs form a complex construction and share the three participants as arguments (or arguments and an adjunct) between them. Like the oblique/adjunct strategy, A&M distinguish sub-types of the strategy depending on whether it is the R-type participant or T-type participant that is introduced by the serial construction.

The examples in (10) and (11) show R-type serialised 3PE constructions in Kokota (Meso-Melanesian, Solomon Islands). The verb *tufa* ‘give’ functions as a benefactive/malefactive in serial verb constructions (Palmer 2009: 212). When it occurs as the final stem in these constructions, it introduces an R-type participant as an object of the verb complex, encoded by an object enclitic. In (10), *tufa* ‘give’ adds an addressee to the clause in a verb complex with *turi* ‘tell’.

- (10) KOKOTA (MESO-MELANESIAN, SOLOMON ISLANDS)
ara-hi a turi tufa=nigo kaike tu-turi
 1-EMPH 1EXCL tell give/affect=2SG one RED-tell
 ‘I’m going to tell you a story’ (Palmer 2009: 174)

The clause in (11) describes a cutting event. The addition of the third verb stem in the sequence, *tufa* ‘give’, specifies that the wood chopping is done for a beneficiary. As the clause in (11) is an imperative, a second person subject marker is omitted (Palmer 2009: 331).

- (11) *toka fa-nhigo tufa=nau gazu ine*
 chop CAUS-be.finished give/affect=1SG wood this(within.reach)
 ‘finish chopping this wood (for) me’ (Palmer 2009: 176)

R-type serialised participant constructions, particularly those with ‘give’ verbs that add a beneficiary or recipient, are a common type of construction (M&A; Margetts 2007). T-type serialised participant constructions are not as common in Oceanic languages. Margetts (2007: 92) identifies a single example from Tobati (Sami/Jayapura Family, Indonesia), which is presented in (12).⁴⁰ Tobati speakers did, however, give the caveat that they preferred a single-verb construction with an instrument case marker.

- (12) TOBATI (NORTH NEW GUINEA, INDONESIA)
nehu adu-re wa hony-re hu
 1SG stone-FOC take dog-FOC throw
 ‘I threw a stone at the dog’ (Donohue 2002: 198, cited in Margetts 2007: 92)

Another example comes from Tetun Dili (Timor-Babar/Timoric, Timor). In this serial verb, the *V*₁ *lori* ‘take’ introduces an instrument participant:

- (13) TETUN DILI (TIMORIC, TIMOR-LESTE)
abó lori tudik ko’a paun
 grandfather take knife cut bread
 ‘grandfather used the knife to cut the bread’ (Hajek 2006: 241)

⁴⁰ Cleary-Kemp (2015: 139 fn. 19) only finds two languages with any instrumental serial verb construction in Oceanic, one is Tobati and the second is Numbami (North New Guinea, PNG), which does not appear to have any 3PEs encoded by this strategy (see Bradshaw 1993 for Numbami instrumental serial verbs).

In some cases, the third participant is an oblique/adjunct and not a direct argument of the multi-verb construction. In the example from Kele (Admiralties, PNG) in (14), the intransitive verb *to* ‘stand’ introduces a source PP *hen eluh* ‘from Eluh’.

- (14) KELE (ADMIRALTIES, PNG)
tamet i-kuni pamei i-to hen eluh
 Tamet 3SG-take betelnut 3SG-stand LOC Eluh
 ‘Tamet took betelnut from Eluh’ (Ross 2002a: 139)

The verb *tar* ‘give’ often occurs in multi-verb constructions to introduce a recipient PP to the action of the V_1 stem in Tolai (Meso-Melanesian, PNG) (Mosel 1984), as in (15) and (16) with the V_1 stems *tak* ‘pick up’ and *kaile* ‘sing’ respectively.

- (15) TOLAI (MESO-MELANESIAN, PNG)
...ma dia tak-tar ia ta=gu
 and 3PL pick.up-give 3SG to=1SG
 ‘...and they gave it to me’ (Mosel 1984: 144, cited in Margetts 2007: 94)
- (16) *...ma i ga kaile-tar a malira ta-diat*
 and 3SG REMOTE sing-give ART love.spell to-3PL
 ‘...and he sang a love spell to them’ (Mosel 1984: 128, cited in Margetts 2007: 94)

In some languages, including many of the Oceanic languages, there is a diachronic connection between directional verbs in serial verb constructions and adverbial directional markers with meanings like ‘hither’ and ‘thither’ (Ross 2004). Given the link between these construction types (at least in Oceanic) and that the difference between them can be a matter of the degree of grammaticalisation, Margetts et al. (2019b) classify some types of serial verb constructions with directional stems as a subtype of the directional strategy (see §2.4.5 for discussion of directional serial verb constructions that are now classified as the directional strategy). Multi-verb constructions with a directional verb that are still analysed as serial verb strategy constructions are those in which the inclusion of the directional verb introduces the expression of the third participant. An example of this can be found in the Jabêm (New Guinea Oceanic, PG) clause below in (16). Locomotion verbs like *pʷanəʔ* ‘insert’ do not entail directionality (Ross 2002: 285). To specify directionality, a directional verb such as *sep* ‘descend’ is added which can also take a bare locative adjunct NP with no adposition (Ross 2002: 286).

- (17) JABÊM (NEW GUINEA OCEANIC, PNG)
ya-pʷanəʔ mɔ e-sep aò-ʔ-sún
 1SG-IRR:insert taro 3SG-IRR:descend mouth-1SG.POSS-hole
 ‘I’ll put the taro into my mouth’ (Ross 2002: 286, cited in Margetts 2007: 93)

2.4.4 Adnominal strategy

The adnominal strategy of expressing 3PEs involves a two-place predicate with the third participant indicated by an adnominal dependent on one of the verb's arguments (M&A: 426). There are two substrategies of the adnominal strategy: the possessive strategy and the propriative strategy. These can be compared to the R-type and T-type substrategies that are found in the other encoding strategies. In the possessive strategy, the R-type participant is expressed as the possessor of the theme, while in the propriative strategy, it is the T-type participant that is a dependent of the agent. The possessive adnominal strategy is well-documented in the Oceanic languages (Song 1997; 1998; 2005; Lichtenberk 2002; Margetts 2007). In some Oceanic languages, the construction is so grammaticalised that only a benefactive interpretation is possible, while in others, both the original possessive interpretation and possessor as beneficiary interpretation are semantically compatible (M&A: 427; Margetts 2007: 110-1). The propriative strategy is a very uncommon strategy crosslinguistically and is unattested among the Oceanic languages (see M&A (pp. 428-9) for discussion and examples of the strategy).

The strategy is attested in Vera'a (North Vanuatu linkage, Vanuatu). The language has two indirect possessive constructions, only one of which can have a benefactive reading. The benefactive reading is only possible (but not obligatory) with possessive constructions in which the classifier and, if present, the possessor, precedes the possessed noun. This is the case in (18) with *le* 'give, take'; the resulting clause has a caused-possession reading in which the possessor is interpreted as the recipient of the transfer event.

- (18) VERA'A (NORTH VANUATU LINKAGE, VANUATU)
- | | | | | | |
|------------|----------|---------------|--------------|-----------|--------------|
| <i>nik</i> | <i>ē</i> | <i>le=n</i> | <i>go-k</i> | <i>ēn</i> | <i>va'al</i> |
| 2SG | TAM | give/take=ART | POSS.EAT-1SG | ART | banana |
- 'give me a banana [to eat] (lit. give'/take my banana)' (Schnell 2012: 132)

In the second construction, exemplified in (19) also with the verb *le* 'give, take', the possessed noun precedes the possessive classifier and possessor, and the resulting event does not have a benefactive interpretation.

- (19)
- | | | | | | |
|--------------|---------------|------------|---------------|-------------------|------------|
| <i>dir=k</i> | <i>le=n</i> | <i>nak</i> | <i>su-suō</i> | <i>mu-gi=k</i> | <i>suō</i> |
| 3PL=TAM | give/take=ART | canoe | RED-paddle | POSS.GNRL-3SG=TAM | paddle |
- den*
away
- 'they took his canoe and paddled away' (Schnell 2012: 141)

2.4.5 Directional strategy

In the directional strategy the verb takes two arguments, and a directional element in the verb complex indicates the transactional orientation of the event (Margetts et al. 2019b). The third participant implicated by the directional morpheme is an R-type participant with the semantic role of goal, recipient, beneficiary, or addressee (Margetts 2007: 97). Margetts et al. (2019b) identify two directional elements: adverbial directional markers, as discussed in M&A (p. 430), and directional verbs in serial verb constructions (Margetts et al. 2019b). A third type of directional strategy is also identified in Sudest: using associated motion prefixes to indicate transactional orientation (see §7.6.3). In some languages, the directional element alone can introduce an R-type participant. In other languages, however, an adjunct or oblique type markers may also be required (Margetts 2007: 98). This results in a combination of oblique/adjunct strategy and directional strategy construction.

The adverbial directional marker substrategy is widespread among Oceanic languages (Margetts 2007: 96-102). Many Oceanic languages have directional markers that follow the verb stem(s) in the verb complex (Lynch et al. 2002: 46). The directional markers are descended from directional verbs in serial verb constructions in Proto-Oceanic (Ross 2004: 311). The specific number of directional adverbials and distinctions made by them vary from language to language, but frequent distinctions include a binary contrast ‘towards speaker’ and ‘away from speaker’ or a ternary contrast ‘towards speaker’, ‘towards addressee’, and ‘away from both’ (Margetts 2007: 98). A ternary system is found in the Papuan Tip language Misima, as shown in (20) to (22). In (20) and (21) the directional suffixes *-im* ‘towards speaker’ and *-iwa* ‘towards addressee’ are the only indication of a third, R-type participant, while in (22) the suffix *-ik* ‘towards third person/away (from speaker and addressee)’ occurs with a PP with the semantic role of goal.

- (20) MISIMA (PAPUAN TIP, PNG)
*wawayā u-nana-he=an-im*⁴¹
 child 2SG.RL-NANA-go.up=3-towards.SPKR
 ‘bring the child up to me’ (W. Callister 1985a: 8)
- (21) *henala baba ya i-baun=an-iwa?*
 who word this 3SG-say=3-towards.ADDR
 ‘who told you that word?’ (W. Callister 1985a: 51)
- (22) *u-pwat=an-ik* *limi-ya*
 2SG.R-move=3-away(from.speaker) house-LOC
 ‘take it/them to the house’ (W. Callister 1985a: 49)

As mentioned in §2.4.3, the second type of directional substrategy involves directional verbs in serial verb constructions rather than grammaticalised directional markers. Margetts and Austin (2007) analyse all directional serial verb constructions as instances of the serial verb strategy. Given that the distinction between adverbial directional and directional verb in a serialised construction is not always clear-cut but rather a matter of the degree of grammaticalisation, Margetts et al. (2019b) prefer to classify some types of directional multi-verb constructions as a subtype of the directional strategy. In cases where the directional verb in the construction only indicates directionality towards a (potential) third participant, the 3PE is analysed as a type of directional strategy construction (Margetts et al. 2019b). In practical terms, this means that serialised verbs with a directional stem are classed as the directional strategy in cases where the third participant can also be encoded by an NP or PP with a target concept/verb, regardless of whether the directional verb is present or not (Margetts et al. 2019b).⁴²

Some serial verb constructions with directional verbs in Saliba-Logea (Papuan Tip, PNG) can be analysed as examples of the directional strategy. Consider the examples in (23) to (25). In (23), the transitive verb *gabae* ‘throw’ does not occur in a serialised construction with a directional verb but can still take a PP with the semantic role of goal. In (24) and (25), *gabae* ‘throw’ occurs with the directional verb *dobi* ‘go down’ in a serial verb construction. In (24), the third participant is indicated by both a PP with the semantic role of goal and by the directional verb *dobi* ‘go down’ –

⁴¹ W. Callister (1985a) analyses Misima verbs as ‘action-focussed’ and ‘undergoer-focussed’ rather than intransitive and transitive respectively. He labels the verbal suffix *-an* sometimes as an ‘undergoer referencing clitic’ (UR) and at other times as a third person object enclitic that does not specify number (W. Callister 1985a). For the sake of clarity and comparability, the enclitic is glossed as an object enclitic in the examples presented here. W. Callister (1985a: 8) describes the verbal prefix *nana-* as a ‘movement prefix’ that derives undergoer-focussed verbs (i.e. two-place predicates), typically with verbs of motion.

⁴² As a reminder, serial verb constructions with directional stems are still analysed as cases of the serial verb strategy when a third participant cannot be expressed as an NP or PP with a particular target verb *unless* it is in serial verb construction with directional verb.

making it a combination oblique/adjunct and directional strategy construction – but in (25), the directional verb is the only indication of the third participant.

- (23) SALIBA-LOGEA (PAPUAN TIP, PNG)
wawayo-o wa ye-gabae-di tenema-i
 child-PL ANA 3SG-throw-3PL DIST-LOC
 ‘he abandoned the children there (lit. he threw the children there)’ (Dawuda 2009: 62)
- (24) *se-gabae-dobi-yei-Ø gana-kano ne unai*
 3PL-throw-go.down-TR-3SG fence-inside DIST PP.SG
 ‘they throw it (human body) down into that inside part (of the drum)’
 (Dawuda 2009: 321)
- (25) *se-gabae-dobi-ei-Ø*
 3PL-throw-go.down-TR-3SG
 ‘they throw it down’ (Margetts 1999: 103)

In cases where it may be unclear whether a certain serial verb construction is an instance of the serial verb or directional strategy, Margetts et al. (2019) propose that the construction should be coded as an instance of the directional strategy until further data and/or analysis indicates otherwise.

The directional serial verbs that can be analysed as instances of the directional strategy in the updated encoding strategies is larger than those in M&A’s serial verb strategy. This is because directional serial verbs without an overt expression of a third participant in the form of an NP or PP are also considered expressions of 3PEs by Margetts et al. (2019b). However, not all directional serialised verbs can necessarily be analysed as expressing a 3PE. If there is not a clear endpoint implied by the directional verb due to the context and/or verbal semantics, the clause is not analysed as a 3PE (e.g. ‘put up’ in ‘put up the fish smoker’ where ‘up’ does not imply a goal).

2.4.6 Absorption Strategy

In the absorption strategy, information about the third participant is included in the verb stem, typically – but not always – in the verbal lexeme (Margetts et al. 2019b). Margetts et al. (2019b) identify six substrategies of the absorption strategy: the direct lexicalisation strategy, zero derivation strategy, denominal derivation strategy, absorbed classifier or object marker strategy, participant-based event classification strategy, and the affix-based classification. The current definition of the strategy differs from previous definitions (M&A: 431; Margetts 2007: 116) in that the element carrying information about a third participant does not have to be the verbal lexeme itself, but can also be an affix, as is the case for the affix-based classification substrategy.

The absorption strategy is different from the other encoding strategies in that the expression of the third participant is not necessarily a matter of argument structure and syntactic expressions. Because

of this, as M&A point out, it can be hard to determine ‘what counts as information “included” in the verb [stem]’ (p. 432). Should information that is implicated count or only information that is entailed? Making these distinctions would require a very fine-grained (and time-intensive) semantic analysis of each individual verb, and could be subject of a study in its own right. A detailed account of the absorption strategy in Sudest is therefore beyond the scope of this thesis. Nevertheless, the strategy should not be ignored completely and in particular the affix-based classification substrategy will be considered as it has a prominent role in the encoding of some types of 3PEs.

All six substrategies of the absorption strategy are attested in the Oceanic languages (Margetts 2007). However, only the direct lexicalisation, zero derivation, and affix-based classification strategies are attested in Sudest. In the direct lexicalisation strategy, the semantics of the verb include reference to a third participant, although the verb stem itself is distinct from any noun denoting the participant (Margetts et al. 2019).⁴³ Common examples from English like *bite*, *gore*, and *kick* include information about an instrument participant – i.e. teeth, horn/tusk, and foot/feet respectively. Similar examples can also be found in Oceanic languages, as in the Toqabaqita (Southeast Solomonian, Solomon Islands) and Kokota (New Ireland/Northwest Solomonian, Solomon Islands) examples with *qale* ‘bite’ (26) and *dupa* ‘punch’ (27).

- (26) TOQABAQITA (GUADALCANAL-GELIC, SOLOMON ISLANDS)
thaama-ka qae! teqe kui mai nena, ada ka
 father-INCL.PERS VOC one dog VEN there(2) TIM 3SG.INT
qale kulu
 bite INCL
 ‘Oy!, there is a dog over there; it might bite us’ (Lichtenberk 2008: 383)

- (27) KOKOTA (NEW IRELAND/NORTHWEST SOLOMONIAN, SOLOMON ISLANDS)
manei n-e-ke dupa=nau ara
 3SG RL-3SG-PFV punch=1SG 1SG
 ‘he punched me’ (Palmer 2009: 193)

In the example of the direct lexicalisation substrategy from Tolai in (28), it is the participant with the semantic role of theme that is indicated by the verb *tabar* ‘give food’. The participant is also expressed here by an optional PP.

⁴³ Margetts and Austin (p. 432) label this substrategy the ‘inherent lexical meaning strategy’.

(28) TOLAI (MESO-MELANESIAN, PNG)

...upi dia ga tabar nam ra umana Iapan ma ta
 so.that they TAM give.food DEM ART PL Japan with some
umana kakaruk
 PL chicken

‘... (they were asked) to give chicken to the Japanese’

(Mosel 1984: 144, cited in Margetts 2007: 118)

In the zero derivation substrategy, the verb indicating the third participant is derived from a noun denoting the third participant without any derivational morphology. In the Saliba example presented below, the noun *tuha* ‘poison root’ functions as a verb meaning ‘kill with poison root’ and specifies the instrument of the event:

(29) SALIBA (PAPUAN TIP, PNG)

yama se-tuha
 fish 3PL-poison.root

‘they killed fish with poison root’

(Margetts 2007: 118)

Margetts et al. (2019b) include a sixth substrategy that is labelled the affix-based classification substrategy. In this substrategy, a third participant is indicated by a non-pronominal, non-valence-increasing affix such as an instrument or manner-of-causation affix. Prefixes that indicate the manner of causation of an event are attested in a number of other Oceanic languages (Ezard 1978; Margetts 2007; Osumi 1995; Ozanne-Riverre & Rivierre 2004; Lichtenberk 1983; Ross 2002b) (see §5.2 for further discussion of these prefixes in Oceanic languages). They are often labelled ‘classificatory prefixes’ in the Papuan Tip literature (e.g. Ezard 1978). The manner semantics of the prefixes frequently evoke a specific type instrument participant; common instruments indicated by the prefixes include body-part instruments like hands, teeth, and feet, or non-body part instruments like blades and pointy objects like sticks and spears. W. Callister (1985a: 3-5) describes Misima ‘classificatory prefixes’, some of which appear to be good candidates for the affix-based classification substrategy. In examples (30) to (32), the prefixes *ala* ‘with teeth’, *go* ‘with knife’ and *hana* ‘with trunk (of a person or object)’ occur with verbs of breaking and evoke an instrument participant.

(30) MISIMA (PAPUAN TIP, PNG)

ala-gebal
 with.teeth-break

‘break it with teeth’

(W. Callister 1985a: 4)

(31) *go-tomwa*

with.knife-cut

‘cut it up with a knife’

(W. Callister 1985a: 4)

- (32) *hana-gabom*
 with.trunk(person/thing)-break
 ‘break it (by leaning or bumping against theme)’ (W. Callister 1985a: 4)

Verbal modifiers indicating the involvement of an instrument participant are not restricted to Oceanic languages, and, for example are widely attested in multiple language families of North America (Mithun 1999: 118-26).

The affix-based classification substrategy is not included in M&A, but Margetts (2007) does identify the strategy, labelling it as the ‘classifier strategy’. She considers it as a substrategy of the ‘verbal modifier strategy’ along with the directional strategy. Grouping the two strategies together makes sense in the context of the Oceanic languages, as they both diachronically come from verb stems in multi-verb constructions that have grammaticalised (Bradshaw 1982; Lynch et al 2002; Verkerk & Frostad 2013). Margetts et al. (2019) include the affix-based classification substrategy as a type of absorption, despite the fact that the information evoking the third participant is not strictly absorbed into the verbal lexeme. They argue for this categorisation because affix-based classification supplements the absorbed classifier/object marker substrategy. As discussed in §5.2, data from Sudest clearly demonstrate that constructions in which a still-productive, unabsorbed morpheme separate from the verbal lexeme can also play an important role in the expression of 3PEs and, therefore, need to be included in the typology.

A further issue that is highlighted when considering the absorption substrategies is that the definition of the encoding strategy has an inbuilt assumption that the information included in the semantics of the verb lexeme or affix relate to a third participant and not to an argument of the verb. Indeed, all of the encoding strategies only specify the expression of the third participant with the two other participants (assumed to be) encoded as core arguments of the verb. Such definitions automatically disregard cases where a verbal lexeme or affix carries information about one of the argument participants. A consequence of this is that verbal classifiers, which operate on an absolutive basis (Keenan 1984), are not taken into consideration in the coding of 3PEs despite their important role in the expression of handling and transfer events in some languages (see Mithun 1999; Aikhenvald 2000). This topic is discussed further in chapters 7 and 8 (see also §5.2 for a description of the Sudest verbal classifiers).

2.5 Corpus annotation of 3PEs

In order to investigate the event types, their encoding strategies, and their frequencies, the entire Sudest corpus was coded for 3PEs. The updated 12 event types from Margetts et al. (2019a) were used as a starting point for corpus searches (see Table 2.1 for list of event types). The corpus was

searched for both Sudest and English⁴⁴ target words. Once identified, each 3PE token was tagged in a custom tier with a three-part annotation, noting the event type, the specific concept, and the encoding strategy. Cases where a target verb occurs but does not express a 3PE were also coded as such. Consider the two examples in (33) and (34), both with the verb *wo* ‘get (singular rigid entity)’. Example (33) shows a 3PE with the third, R-type, participant expressed as an adjunct PP. The event expresses a Type-E event in which an agent removes a theme from a location. Because the R-type participant is expressed as an adjunct, this is a token of the R-type oblique/adjunct strategy. The resulting code in the corpus is therefore ‘E(get)2a’.

- (33) *ela=ma i=wo ndeghi=ma e mbwa=ma variye*
 woman=DET 3SG=GET.SG.RIGD cup=DET PREP water=DET container
tine
 inside
 ‘the woman gets the cup from inside the water container
 (put_stimuli_191015_02_02 086-87, 592.593 601.682)

In (34), there is no expression of a third, source participant and the event is consequently not counted as a 3PE token (this is coded as ‘X(get)’ in the annotation tier).⁴⁵

- (34) *wevo=ko i=wo sises i=ki-ten=a kaliko*
 young.woman=DIST 3SG=GET.SG.RIGD scissors 3SG=by.cutting-break=YA cloth
 ‘the woman gets the scissors (and) cuts the cloth’
 (cb_stimuli_051016_02_02 124, 903.213 906.758)

The application of the coding to the corpus resulted in a searchable database that enables the filtering of results by event type, specific events, and encoding strategy which in turn allows for the investigation of a wide range of 3PE related questions.⁴⁶

⁴⁴ English is the contact language and language used for glossing and translating the corpus.

⁴⁵ The second clause in (34), however, is counted as a Type G event encoded by the affix-based classification absorption substrategy, in which an instrument participant is evoked by the manner-of-causation prefix *ki-* ‘by cutting’.

⁴⁶ The 3PE annotations are included in the Sudest corpus that is in the process of being archived (see § 1.5)

3 Grammatical sketch

3.1 Introduction

This chapter provides a grammatical overview of Sudest. The topics covered give a basic understanding of the language and provide a background for the focus of the study. There are two previous sketch grammars of the language. Anderson and Anderson (1991) is an unpublished manuscript and M Anderson and Ross (2002) is a shorter, published sketch grammar, henceforth referred to as A&A and A&R respectively.⁴⁷ The current grammatical sketch is based on corpus and elicitation data collected for the present study, but references the previous sketch grammars where relevant.

As noted earlier, Sudest is a nominative-accusative head-marking language with SV/AVO constituent order (see also the typological profile in §1.4.1). The current chapter is ordered as follows: §3.2 outlines the phonology of Sudest; §3.3 discusses the major (and some minor) word classes; and §3.4 describes the noun phrase. Section 3.5 describes basic verbal clauses in §3.5.1, and the major types of non-verbal clauses in § 3.5.2. Finally, §3.6 describes clause combinations and §3.7 outlines negation.

3.2 Phonology and orthography

With 33 consonants, Sudest has a relatively large phoneme inventory for an Oceanic language. A main characteristic of the phoneme system is the contrast between plain consonants and labialised, prenasalised, and prenasalised labialised consonants. Prenasalised and labialised consonants are common features among the Oceanic languages of Melanesia (Lynch et al. 2002: 34-5). The Sudest phoneme system presented here is based on A&R (2002: 322-4), with amendments and supporting data drawn from the current project. Table 3.1 presents the Sudest consonant phonemes of the language.

⁴⁷ As A&R is more recent, published description of the language, I view it as superseding A&A for all topics covered in both sketch grammars.

	bilabial		labiodental	dental	alveolar		alveopalatal	palatal	velar
stop	p	b			t	d			k g
labialised stop	p ^w	b ^w							k ^w g ^w
prenasalised stop		^m b				ⁿ d			^ŋ g
prenasalised labialised stop		^m b ^w							^ŋ g ^w
nasal		m				n		ɲ	ŋ
labialised nasal		m ^w							ŋ ^w
fricative			v	ð	s				ɣ
labialised fricative			v ^w						ɣ ^w
affricate								ɟʒ	
prenasalised affricate								ⁿ ɟʒ	
trill						r			
approximant								j	w
lateral approximate						l			

Table 3.1 *Sudest consonants (based on Anderson and Ross 2002: 322)*

The velar fricative /ɣ/ has an allophone [h], which occurs before the back vowels /o/ and /u/. Anderson and Ross (p. 322) note that the labialised velar fricative /ɣ^w/ has two allophones [ɣ^w] and [h^w] in apparent free variation. In the current dataset, only [h^w] is attested.

There are six vowels found in Sudest, as presented in Table 3.2 below:

	front	middle	back
close	i		u
mid-open	e	ə	o
open		a	

Table 3.2 *Sudest vowels*

A contrast does exist between long and short vowels, illustrated by the minimal pairs (1):

- (1) *ma* ‘already’, ‘bird’ *maa* ‘NEG’
 u ‘friend’ *uu* ‘clan’
 thonggo ‘if’ *thoonggo* ‘deep sea, saltwater’

However, long vowels are uncommon. The majority of orthographically repeated vowels (e.g. ‘aa’, ‘oo’) in the corpus are the result of reduplication and are in separate syllables belonging to the base and reduplicant (e.g. *ama-amala* /a.ma.a.ma.la/ ‘men’ and *utu-utu* /u.tu.u.tu/ ‘talking’ or ‘story’). This separation implies a process of glottal stop insertion (i.e. [amaʔamala] and [utuʔutu]) (see §3.3.2.3 and §3.3.3.1.1 for discussion of verbal and nominal reduplication).

All vowel sequences are rising, i.e. /ai/, /ae/, /ao/, /au/, /ei/, /eu/, /oi/, /ou/. The schwa /ə/ does not occur in any vowel sequence. Vowel sequences are not analysed as diphthongs; evidence for their monophthong status comes from reduplication rules.⁴⁸ When reduplicated, a vowel sequence is

⁴⁸ This is found in other Oceanic languages, e.g., Tamambo (Jauncey 2011: 30).

‘split’, as shown in the following examples listed in (2). Thus, the second vowel in a sequence is analysed as a separate syllable from the preceding vowel

- | | | |
|-----|--------------------------------------|---|
| (2) | <i>kaiwo</i> → <i>ka-kaiwo</i> | ‘work’ → working’ |
| | <i>mwaewo</i> → <i>mwa-mwaewo</i> | ‘greet’ → ‘greeting’ |
| | <i>vaona</i> → <i>va-vaona</i> | ‘count’ → ‘counting’ |
| | <i>thoi</i> → <i>tho-thoi</i> | ‘leak’ → leaking’ |
| | <i>morouma</i> → <i>moro-morouma</i> | ‘k.o. fish (singular)’ → ‘k.o. fish (plural)’ |

Syllable structure is (C)V(N).⁴⁹ The labialised, prenasalised, and prenasalised labialised consonants are analysed as unit phonemes and there are no consonant clusters. Stress is not always predictable; however, it frequently falls on the penultimate syllable (or the antepenultimate syllable, if the penultimate syllable contains a schwa).

Throughout the thesis and the corpus, I use the orthography set out in A&R (p. 324), which has also been adopted by Sudest speakers. It differs from the phonemic symbols presented in Table 3.1 and Table 3.2 in the following ways: /ɣ/ is written as *gh*, /ɲ/ as *ny*, /ð/ as *th* and /ŋ/ as *ng*.⁵⁰ The schwa is written as *i*. Superscripts are written as ordinary letters; thus, /b^w/ becomes *bw*, /m^bw/ becomes *mbw* and so on, /ŋ^g/ and /ŋ^gw/ are written as *ngg* and *nggw* respectively, and *d̥z* and *n̥d̥z* are written as *j* and *nj*.

Declaratives, imperatives, and interrogatives can generally be distinguished based on intonation. The following observations are made based on simple auditory analysis. The pitch trace shown in examples (3) to (6) illustrates these three clause types. Declarative clauses typically show falling intonation - particularly clause-finally, as in (3) and (4).

- (3) *kero thi=mararu rama-nji*
 already 3PL=be.afraid father-3PL.POSS
 ‘they were afraid of their father’ (fp_stimuli_191015_02 166, 461.981 463.511)
- (4) *rama-Ø ne i=mararu=inda*
 father-3SG.POSS FUT 3SG=be.afraid=1INCL
 ‘father will be afraid of us’ (couples_story_101214 031, 94.380 96.680)

⁴⁹ Some loanwords retain word final consonants, although a word-final schwa is also frequently added to loanwords ending in a consonant.

⁵⁰ The velar nasal is written as *ŋ* in the New Testament translation (2014) produced by SIL.

Polar (yes-no) questions are syntactically identical to declarative sentences. They can be identified by the rising intonation on the penultimate syllable followed immediately by falling intonation on the final syllable. This is shown in the pitch trace in (5).



- (5) “*u= mararu =ime?*”
 2SG= be.afraid =1EXCL
 ‘are you afraid of us?’” (couples_story_101214 046, 125.510 127.990)

Prototypical imperatives, including prohibitions like the one shown in (6), rise sharply at the beginning and then fall throughout the rest of the clause.



- (6) *thava u= mararu =ime!*
 PROH 2SG=be.afraid =1EXCL
 ‘don’t be afraid of us!’ (couples_story_101214 052, 139.690 141.947)

Minimal pairs of consonants with similar places of articulation are presented in (7), along with their phonemic status. The labialised stops (excluding the voiced labialised bilabial stop /b^w/) only occur in a small number of words/morphemes in the corpus. No minimal pairs with their non-labialised counterparts could be identified.

(7)	/p/ - /b/	kapo	‘cover (body)’	kabo	‘make cracking sound’
	/b/ - /b ^w /	bebe	‘break’	bwebwe	‘dad’
	/b/ - / ^m b/	baba	‘wall’	mbamba	‘numeral classifier (bundles/bunches)’
	/b ^w / - / ^m b/	bwala	‘boil’	mbala	‘OBL (should)’
	/ ^m b/ - / ^m b ^w /	Mba	‘place name’	mbwa	‘water’
	/t/ - /d/	tu	‘post’	du	‘throw’
	/d/ - / ⁿ d/	da	‘mat’	nda	‘burn’
	/k/ - /g/	koukou	‘canoe’	gougou	‘night’
	/g/ - / ⁿ g/ - / ⁿ g ^w /	ge	‘cook (in liquid)’	ngge	‘hit’
				nggwe	‘be ripe’
	/m/ - /m ^w /	ma	‘already’, ‘bird’	mwa	‘be dry’
	/ŋ/ - /ŋ ^w /	ngingi	‘tooth, teeth’	ngwingwi	‘rub back and forth (reduplicated)’
	/v/ vs. /v ^w /	vara	‘really’	vwara	‘crack’
	/d͡z/ - / ⁿ d͡z/	ja	‘rubbish’	nja	‘go down’

3.3 Word classes

The major word classes in Sudest are verbs (§3.3.1) and nouns (§3.3.3). Minor word classes include pronouns (§3.3.4), demonstratives (§3.3.5), adpositions (§3.3.6), TAM particles (§3.3.7), and interrogatives (§3.3.8) (see §3.4.3 for discussion of nominal modifiers including adjectives, quantifiers, and numerals).

3.3.1 Noun-verb distinction and lexical flexibility

Judging from text occurrences, most Sudest roots clearly belong to a single word class. They only function as a different word class via overt derivational processes. A subset of roots, however, may function as both the head of a verb complex (VC) or NP without any overt derivational morphemes or processes (63 distinct roots in the current data). The verbal and nominal use of two of these roots, *kaiwo* ‘the act of working’ or ‘work’ and *kewe* ‘carry (on stick)’ or ‘carrying stick’ are shown in (8) and (9) respectively. The verbal use of the lexemes in (8a) and (9a) is indicated by the subject proclitic preceding them. In (8b), *kaiwo* ‘work’ is the head of a possessive NP, indicated by the possessive classifier *le* ‘POSS.CLF2’ preceding the lexeme. In (9b), *kewe* ‘carrying stick’ is the object of the general preposition *e*, a position that can only be filled by an NP.

- (8) a. *ra=kaiwo* *e* *uma* *tine*
 1INCL=work PREP garden inside
 ‘we work in the garden’ (education_241214 069, 246.091 247.800)
- b. *le-∅* *kaiwo* *ne* *i=vuyowo*
 POSS.CLF2-3SG.POSS work FUT 3SG=be.heavy
 ‘her work(ing) will be hard’ (widow_251015 035, 109.481 111.800)
- (9) a. *thi=kewe* *mbombo*
 3PL=carry(on.stick) pig
 ‘they carry a pig (on a stick)’ (hunting_261214 036, 78.480 82.800)
- b. *ra=va-kwate=nggi* *e* *kewe*
 1INCL=CAUS-hang=3PL PREP carrying.stick
 ‘we hang them (sago bundles) on a carrying stick’ (sago_101214 065, 171.310 174.090)

In such cases as those illustrated in (8) and (9), it is difficult (if not impossible) to say whether the verbal or nominal use “came first”. Austronesian and particularly Oceanic languages often display some level of lexical ‘flexibility’ like in Sudest. The literature shows two robust schools of thought. The first posits that certain languages or lexeme groups lack a distinction between major word

classes such as verbs and nouns (and sometimes adjectives); i.e. that these are precategory roots.⁵¹ Some Oceanic languages, especially Polynesian languages, have been analysed as lacking a distinction between these word classes entirely, e.g. Tongan (Churchward 1953; Tchekhoff 1981; Broschart 1997; Völkel 2017), Samoan (Mosel & Hovdhaugen 1992), Fijian (Milner 1956, 1972), (although see Dixon (1988) for an alternate analysis of Fijian). The second, alternative analysis posits that a lexeme is assigned to a particular word class and through conversion or zero-derivation the same form can then occur in a different word class.⁵² Oceanic languages analysed as possessing zero-derivation or conversion include Tinrin (Osumi 1995), Nafsan (Thieberger 2006), and Paluai (Schokkin 2014). Recent typological work, however, proposes that the flexibility or rigidity of word classes in a given language should be viewed not as “all-or-nothing”, but rather as a matter of degree of flexibility (Bisang 2013; van Lier & Rijkhoff 2013; van Lier 2016). Criteria for establishing and/or measuring such flexibility, however, are still up for debate (again, see van Lier and Rijkhoff (2013) for a recent overview). An extended discussion of this issue is beyond the scope of the current study. For the present work, roots that occur as verbs and nouns without derivational morphology are referred to as ‘verbs’ when functioning as the head of a VC and nouns when functioning as the head of a NP.

3.3.2 Verbs

Inflected Verbs are the only words that take a bound subject index. They form a large open word class in Sudest, with over 600 entries in the current corpus lexicon. Verbs can be divided into intransitive and transitive. The vast majority of transitive verbs are monotransitive; only three attested transitive stems are ditransitive. It is possible that some verb stems are ambitransitive, but due to the specifics of Sudest verbal morphosyntax, it is difficult to establish whether there is a class of ambitransitive verbs (see §3.3.2.2 below for further discussion).

The majority of verb stems can occur as simplex independent verbs, i.e. they can occur in a VC with only a subject index and optionally pre- and postverbal elements. A small number of verb stems, however, do not function as fully independent verbs and can only i) occur in VC with specific preverbal elements such as a posture prefix (§4.3.5) or manner-of-causation prefixes (§5.2) as a sort of crutch when occurring in a simplex VC, and/or ii) they can only occur in complex verb constructions with at least one other verb stem (see chapter 6), or iii) a verb stem has a sense that

⁵¹ The crosslinguistic literature on this topic is extensive, for example, in the case of Mundari (Austroasiatic, India), debate on this topic extends back over a century to Hoffmann (1903) and continues into the present (e.g. Evans and Osada 2005; Peterson 2005; Hengeveld & Rijkhoff 2005). For a general overview, see van Lier and Rijkhoff (2013).

⁵² Rijkhoff and van Lier (2013) highlight that the terms ‘zero-derivation’ and ‘conversion’ are used relatively interchangeably by many scholars but point out that zero-derivation assumes a zero-affix while conversion does not.

differs in complex verb constructions from its sense when in a simplex construction. Verb stems, particularly ones on either end of a sequence of verbs in complex verb constructions, have been widely documented to grammaticalise in Oceanic languages but also cross-linguistically (see Crowley 2002; Aikhenvald 2006 for overviews). Verb stems of this kind include some stems with aspectual and adverbial semantics (§6.3.8 and §6.3.9) and the four PUT stems that encode putting events (§6.3.3). The gradualness of the grammaticalisation process means that old and new senses of a stem (and potentially structures) can often coexist in a language synchronically (Lichtenberk 1991a). The gradualness of the process can also mean that it is not necessarily clear or testable when a morpheme moves from the lexicon and becomes fully grammaticalised. These three types of restricted verb stems were once presumably fully verbal and functioned as simplex independent verbs. When analysing them, one could take an approach that only looks at whether they can synchronically function as independent verbs and has the same sense in both simplex and complex constructions and group all other stems as grammaticalised postverbal morphemes. However, this means that stems that semantically form a group – in the case of Sudest primarily adverbial, aspectual, and PUT stems – are divided between the lexicon and grammar. In the current analysis, I group such stems semantically and regard them as verb stems that cannot function independently (see Margetts 1991, 2005 for a similar approach).

The basic verb class distinctions of intransitive and transitive verbs are outlined in §3.3.2.1 and §3.3.2.2 respectively. Verbal reduplication is discussed in §3.3.2.3. The verb complex is by far one of the most complicated areas of Sudest grammar, with aspects of its morphosyntax forming a major part of this thesis. Chapter 4 discusses the VC and its slots; Chapter 5 presents a discussion of manner-of-causation prefixes and classificatory verbs (CLFVs), and an analysis of multi-verb constructions is presented in Chapter 6. See also §3.3.1 for a discussion of lexical flexibility.

3.3.2.1 Intransitive verbs

Intransitive verbs take an obligatory argument (S), which is expressed by a subject proclitic and an optional conominal (using Haspelmath's 2013 terminology). They cannot take an object enclitic. Intransitive verbs can be divided into stative and active verbs. Stative verbs denote states while the active verbs describe events. Intransitive verbs that take valence-increasing morphology can be further divided into O-type and A-type verbs depending on whether S corresponds to A or O of the derived verb.

The basis for the division of stative and active verbs is both semantic and morphosyntactic. The S argument of stative verbs takes the semantic role of undergoer rather than actor. Stative verbs are the only verbs that function attributively (see §3.4.3.1). Examples (10) and (11) show the stative

verbs *dayagha* ‘be hot’ and *bwadi* ‘be black/blue’ functioning as verbal predicates in (10a) and (11a), and as postnominal modifiers in (10b) and (11b). It should be noted that *bwadi* ‘be black/blue’ is obligatorily reduplicated when functioning attributively. This does not appear to be the case for any other attested stative verbs.

- (10) a. *i=nga* “*mbe* *i=dayagha*”
 3SG=say still 3SG=be.hot
 ‘he said “it’s still hot”’ (sinenabe_and_takonabe_231115 094, 247.020 249.673)
- b. *tina-e* *thi=ge* *mbwa* *dayagha*
 mother-3SG.POSS 3PL=boil water be.hot
 ‘Mother(s), they boil hot water’ (new_mother_251214 066-7, 156.460 160.713)
- (11) a. *i=nga* “*ngingi-na* *i=bwadi*
 3SG=say tooth/teeth-2SG.POSS 3SG=be.black/blue
 ‘he said “your teeth are black”’ (child_and_giant_201015 103, 273.561 277.120)
- b. *wewe* *bwadi-bwadi*
 grass.skirt RED-be.black/blue
 ‘black grass skirts’ (traditional_dress_051214 017, 40.880 44.520)

Unlike active intransitive (and transitive) verbs, reduplication of the stative verbs has an intensifying function (§3.3.2.3). Consider the sentences shown in (12) with *bane* ‘be tired’. In (12a), the particle *moli* ‘really, very’ is used to indicate that the subject is ‘very tired’, while in (12b) the verb is reduplicated to indicate the intensity of the state.

- (12) a. *menda* *riwa-me* *i=bane* *moli*
 yesterday body-1EXCL.POSS 3SG=be.tired INTS
 ‘yesterday we were really tired (lit. our body was tired really tired)’
 (stone_cooking_251015 006, 17.520 19.730)
- b. *riwa-nggu* *i=bane-bane*
 body-1SG.POSS 3SG=RED-be.tired
 ‘I am really tired’ (sudest_lexicon)

Active intransitive verbs encode events that are instigated in some manner by the S argument. Examples of active intransitive verbs are presented in examples (13) to (15).

- (13) *a=wa* *e* *uma* *tine*
 1SG=go PREP garden inside
 ‘I go to the garden’ (womens_work_221214 026, 64.578 68.348)
- (14) *thi=yaku* *na* *regha*
 3PL=live/sit/stay and one
 ‘they sit together’ (fp_stimuli_201015_04 094, 282.628 284.030)

- (15) *nggama=ma mbugha=ma thi=do bu*
 child=DET dog=DET 3PL=fall
 ‘the child (and) the dog fall’ (frogstory_161214 093-4, 240.750 244.400)

Stative and active intransitive verbs that take valence-increasing morphology can be further categorised as A-type and O-type verbs; this is discussed further in §4.2.8.2 and §4.3.1. Intransitive verbs can also be derived from some transitive stems with the detransitivising prefixes *ma-* and *rara-* (§4.2.8.1).

3.3.2.2 Transitive verbs

Monotransitive stems take two core arguments (A and O). As Sudest has nominative-accusative alignment, the A argument is expressed in the same way as an S argument of an intransitive verb, i.e. by a subject proclitic and optional co-referential NP. The O argument can be expressed by either an object enclitic (16), NP (17) or both (18) (see §3.3.4 and §4.1 for discussion of independent and bound pronouns).

- (16) *i=nga “mbwata ne hu=ghan=nggo?”*
 3SG=say maybe FUT 2PL=eat=1SG
 ‘he said “maybe you will eat me?”’ (mandumbunga_02_181016 202, 507.846 513.271)
- (17) *i=tate=ya uye*
 3SG=open=YA pot
 ‘she opens the pot’ (crab_girl_081115 044, 111.460 113.744)
- (18) *i=ten=nggi=ya karot=ma e tebol=ma vwata-Ø*
 3PL=break=3PL=YA carrot=DET PREP table=DET top-3SG.POSS
 ‘he cuts the carrots on the tabletop’ (cb_stimuli_101116 011, 119.250 123.668)

Nearly all transitive verbs are monotransitive, as in the above examples. There are only three attested ditransitive verbs. (For examples and discussion of the ditransitive verbs, see 4.2.8.2, §6.3.2, §6.3.8, §7.1, and §7.3).

It was not possible to determine the transitivity status of a subset of verb stems in the corpus at the time of writing, due to gaps in the data. This is because third person objects can be omitted in discourse when retrievable from the context and, importantly, the third person singular objects are unmarked in the bound object paradigm (§3.3.4). This means that the transitivity of some stems is ambiguous without additional evidence (such as elicitation data). For examples like in (19) with *thuwe* ‘see’, it is not clear whether the verb is transitive or intransitive.

- (19) *ra=thuwe=?*
 1INCL=see=?
 ‘we see (it?)’ (snake_passage_061215 086, 201.759 203.624)

Additional data, like the example presented in (20), show us that *thuwe* ‘see’ can take an object enclitic:

- (20) *me=thuwe=nggo*
 3SG.IMM.PST=see=1SG
 ‘he saw me’ (family_ties_081115 045, 111.939 113.332)

Testing a verb’s ability to take an object marker tells us that a verb stem is not exclusively intransitive. It is, however, possible that verbs like *thuwe* ‘see’ are actually ambitransitive, but this remains an issue that is not obviously testable. This is not an isolated issue among Oceanic languages: see Margetts (1999a: 75) and Schokkin (2014: 103, 286) for similar comments on Saliba and Paluai respectively. All demonstrably transitive stems are, therefore, analysed as transitive in this thesis.

Transitive verbs can be derived from intransitive verbs through the addition of the causative prefix *va-* (§4.2.8.2), the transitivising enclitic *=nga* (§4.3.1.1), a combination of both the causative prefix and transitive enclitic (§4.2.8.2.1), or the applicative enclitic *=wana* (§4.3.1.2). A prominent subgroup of the transitive verbs are the classificatory verbs: see §5.2 for a discussion of these verbs.

3.3.2.3 Reduplication

Verbal reduplication has several related functions in Sudest. Depending on the type of event expressed by the verb, it can indicate i) intensification, ii) progressive aspect, or ii) iterative aspect. Only one morpheme in the VC is ever reduplicated. In some cases, a prefix or the second verb in a multi-verb construction is reduplicated instead of the (first) verb. Some data suggest that the variation in the element reduplicated in some cases indicates participant number; however, there is also contradicting evidence (see further below in this section for discussion).

3.3.2.3.1 Formal realisation

Reduplication typically consists of the repetition of either the first syllable, as in (21) and (22), or the first two syllables of the verb root, as in (23) and (24).

- (21) *i=yo-yo* *eee*
 3SG=RED-fly EMPH
 ‘he is flying (for a long time)’ (bush_betelnut_011115 106, 255.259 256.468)

- (22) *va mbe thi=vi-vivatha=∅*
 REM.PST still 3PL=RED-prepare=3SG
 ‘they still kept on preparing it (a feast)’ (bush_betelnut_011115 094, 224.138 227.617)
- (23) *thi=keli-keli*
 3PL=RED-grate
 ‘they were grating (cassava)’ (stone_cooking_251015 029, 82.129 83.390)
- (24) *mbugha i=mena kero i=kwara-kwarabithi*
 dog 3SG=come already 3SG=RED-jump
 ‘the dog comes (and) is jumping repeatedly’ (frogstory_161214 053, 133.220 136.516)

Aside from single-syllable verb roots, it is far more common for the first two syllables to be reduplicated for verbs with two or more syllables. From a sample of 241 verbs with more than one syllable, 84 percent (203) reduplicate the first two syllables and only 16 percent (38) reduplicate only the initial stem. Some general statements can be made about which verb stems take single or double reduplication; however, these do not account for the majority of reduplicated forms.

In verbs with vowel sequences, the vowels are ‘split’ and the second vowel is excluded from the reduplicated stem (for this reason vowel sequences are not analysed as diphthongs, see §3.2). If the first syllable is followed by a vowel, only the first syllable is reduplicated. as with *gaithi* ‘fight’ in (25). If an onsetless syllable follows the second syllable, the first two syllables are reduplicated, as is the case with *ngginau* ‘build’ in (26).⁵³

- (25) *mbe thi=ga-gaithi*
 still 3PL=RED-fight
 ‘they are still fighting’ (fp_stimuli_191015_05 164, 316.436 317.838)
- (26) *umo-umoru=ko thi=nggina-ngginau la-ma nggolo*
 RED-young.man=DIST 3PL=RED-build POSS.CLF2-1EXCL house
 ‘the men are building our house’ (e_081116_02)

All verbs that begin with a vowel reduplicate the first two syllables, as in (27) with *utu* ‘speak’ and *uthighe* ‘shit’ in (28).

- (27) *ma ra=utu-utu=engge*
 already 1INCL-RED-speak-just
 ‘we are just speaking’ (fp_stimuli_201015_01 002, 62.578 64.080)
- (28) *i=uthi-uthighe-ranggi=∅*
 3SG=RED-shit-go.out=3SG
 ‘she is shitting it out’ (Sudest_lexicon)

⁵³ As stated in §3.2, syllable structure in Sudest is (C)V(N).

Two patterns can be observed for those verbs with CVN syllable structure with single syllables. The first pattern involves simple reduplication of the entire syllable, as in (29) with *kom* ‘crawl’. The second pattern is possibly best represented by a templatic rule of CVN > CVN_iCV (remember that the ‘i’ is a schwa); thus, the verb *mun* ‘drink’ becomes *munimu* ‘drinking’ as in (30).

- (29) *nari-ye=ma* *kero* *i=k^hom-kom*
 son-3SG.POSS=DET already 3SG=red-crawl
 ‘his son is already crawling’ (fp_stimuli_191015_02 088, 213.690 215.230)

- (30) *ne* *i=njogha* *kero* *i=^hmunimu=∅=va*
 FUT 3SG=go.back already 3SG=drink.PROG=3SG=REP
 ‘he will go back (to his friends) he is already drinking it (beer) again’
 (fp_stimuli_191015_03 176, 469.555 471.200)

Among the latter type of verbs with a syllable-final nasal, the verb *ghan* ‘eat’ takes an irregular progressive form *ghaningga* ‘eating’, with the velar fricative becoming a prenasalised velar stop:

- (31) “*u=^hghaningga* *buda,* *rumbu-me?*”
 2SG=eat.PROG what grandparent/child-1EXCL
 “what are you eating, grandmother?” (mandumbunga_061215 051, 145.528 148.850)

The formal patterns described here for the reduplication of verbal stems also apply to the reduplication of nominal stems, as in example (26) above with *umo-umoru* ‘young men’. Reduplication plays a role in nominalisation (§3.3.3.1.1) and number marking for nouns (§3.4.1). Many synchronically monomorphemic verbs and nouns also appear to be the result of reduplication, although these inherently reduplicated roots no longer have unreduplicated counterparts in the language, e.g. *njighinjighi* ‘be cold’, *ghareghare* ‘know’, *yamwayamwa* ‘appearance’, *wadawada* ‘witch’, and *yenggiyanggi* ‘monitor lizard’.

3.3.2.3.2 Function

The functions of verbal reduplication depend on the type of verb. For stative verbs, reduplication functions as an intensifier. In (32), the stative verb *laghiye* ‘be big’ in the idiomatic phrase *ghareye ilaghiye* ‘she is scared’ (lit. ‘her heart is big’) is reduplicated to indicate that she is very scared (lit. ‘her heart is very big’):

- (32) *gh-e* *u=ko* *ghare-ye* *i=^hlaghi-laghiye*
 POSS.CLF1-3SG.POSS friend=DIST heart-3SG.POSS 3SG=RED-be.big
 ‘her friend is very scared (lit. her friend’s heart is very big)’
 (bush_betelnut_011115 031, 76.830 78.466)

For non-punctual events, reduplication expresses the progressive aspect, with the action viewed as ‘ongoing at time of reference’ (Bybee et al. 1994: 126). In (33), the reduplication of *yaku* ‘live, stay’

indicates that the event is ongoing. See examples (21) to (23), (25) to (28), and (30) and (31) above for further examples of reduplicated verbs with progressive semantics.

- (33) *va thi=yaku-yaku ghe=ko*
 REM.PST 3PL=RED-live/stay LOC=DIST
 ‘they were living there’ (skeleton_1810 01215, 35.740 37.210)

For verbs that express a punctual event, the resulting reduplicated form is iterative. The reduplicated form can indicate an action that is immediately repeated, as in (33) with *ughi* ‘smash’, or one that is repeated over a longer period of time, as in (34) with *giya* ‘give’, which has a somewhat habitual reading ‘I always give you shell money’.

- (34) *lolo=ma i=taga-ughi-ughi=ya ghaningga=ma umbwa-ra*
 person=DET 3SG=by.striking-RED-smash=YA food=DET NUM.CLF-one
 ‘the person is smashing a (piece of) food repeatedly’
 (cb_stimuli_051016_01 119, 1272.741 1276.930)

- (35) *a=giya-giya ndavari*
 1SG=RED-give shell.money
 ‘I always/repeatedly give you shell money’ (e_211116_02)

Only one element in the VC can be reduplicated. When the verb is detransitivised or causativised, it is the derivational prefix *ma-* ‘DETR’ or *va-* ‘CAUS’ that is reduplicated instead of the verb root. The reduplication of the prefix has the same effect as reduplication of the verb stem in an underived predicate. In (36) the reduplicated detransitiviser *ma-* specifies that the punctual action of tearing a piece of cloth is repeated. In (37) the reduplicated causative prefix signals intensification.

- (36) *kaliko=ko i=ma-ma-nggangga*
 cloth=DIST 3SG=RED-DETR-tear
 ‘the cloth keeps tearing’ (cb_stimuli_051016_02_01 061, 378.020 379.892)

- (37) *i=va-va-loghe=Ø*
 3SG=RED-CAUS-be.sweet/fatty=3SG
 ‘he (a husband) makes her (his wife) very happy (lit. makes very greasy/sweet)’
 (fp_stimuli_191015_03 162, 430.310 432.080)

In VCs with manner-of-causation prefixes (§5.2) generally, the verb root is reduplicated in corpus tokens. However, there are also two tokens in which the prefix is reduplicated. Consider the two VCs below with a reduplicated verb root (38) and reduplicated manner-of-causation prefix (39). Both VCs involve a punctual verb and, in both cases, the reduplication specifies that the action is repeated even though the reduplicated element differs.

- (38) *lolo=ko i=mwana-ten-ten=a wool=ko e tebol=ko*
 person=DIST 3SG=by.hand-RED-break=YA wook=DIST PREP table=DIST
vwata-e
 top-3SG.POSS
 ‘the person repeatedly breaks the wool on the table top’
 (cb_stimuli_051016_01 162, 1823.990 1828.139)

- (39) *thi=mwana-mwana-thatha=∅*
 3PL=RED-w.hands-tear=3SG
 ‘they repeatedly tear it (a piece of cloth)’
 (cb_stimuli_051016_02_01 065, 405.940 407.552)

In elicitation, speakers also find reduplication of either the manner-of-causation prefix or verb stem grammatical. However, the majority of speakers identify a semantic distinction that relates to ‘verbal number’ (Corbett 2001) or ‘pluractionality’ (Newman 1980). Specifically, the distinction appears to be one between ‘event number’ and ‘participant number’ (Corbett 2001: 246). Depending on which element is reduplicated, speakers identify the resulting VC as indicating repetition of the action for punctual verbs (or an event in progress for non-punctual verbs), i.e. event number, or actions carried out on multiple entities (i.e. participant number). However, the situation is not as clear-cut when comparing speaker responses. In some cases, speakers associated participant number with the reduplication of the prefix and event number with reduplication of the verb root, as in (40). In other cases (such as (41)), speakers attributed event number to examples with reduplicated prefixes and participant number to those with reduplicated verb roots.

- (40) a. *ela=ma i=vuri-vuri-ten=a ndamwa-ndamwa*
 woman=DET 3SG=RED-w.feet-break=YA RED-leaf
 ‘the woman breaks the leaves by standing on them/while standing on them’
 (e_231116_02)
- b. *ela=ma i=vuri-ten-ten=a ndamwa*
 woman=DET 3SG=w.feet-RED-break=YA leaf
 ‘the woman repeatedly breaks the leaf by standing on it/while standing on it’
 (e_231116_02)
- (41) a. *ela=ma i=taga-tag-ten=a thiyo=ma*
 woman=DET 3SG=RED-by.striking-break=YA string=DET
 ‘the woman is breaking the string/keeps breaking the string’
 (e_161116_01)
- b. *ela=ma i=taga-ten-ten=a thiyo=ma*
 woman=DET 3SG=by.striking-RED-break=YA string=DET
 ‘the woman breaks the strings’
 (e_161116_01)

In yet other cases such as (42) with a reduplicated prefix, either a plural event number or participant number interpretation was possible depending on context.

- (42) *a=ghala-ghala-ten=a* *thiyo=ma*
 1SG=RED-by.body.weight-break=YA string/rope=DET
 ‘I repeatedly break the rope using my body weight (e.g. of a swing by sitting on it)’
 ‘I break more than one rope using my body weight (e.g. of swings by sitting on them)’
 (e_161116_01)

The current data indicate that verbal reduplication can have a variety of pluractional functions in Sudest. However, the range of responses and differences in use between corpus tokens and elicitation responses and lack of consensus point to verbal reduplication, particularly predicates with manner-of-causation prefixes, as an area of interest for future research. Plural participant number is also expressed by classificatory verbs (§5.2).⁵⁴

3.3.3 Nouns

Nouns can be formally identified as they can function as the head of a noun phrase. They can be distinguished from verbs by the fact that they do not take subject or object indexes (see §4.2). Nouns form a large open word class in Sudest with over 800 entries in the corpus lexicon. Sudest, like all the Papuan Tip languages (Lynch et al. 2002: 102), does not have any common or proper articles, so nouns cannot be subcategorised based on the article they take. Unmarked nouns can have a definite or indefinite interpretation. Definiteness can be indicated by a determiner enclitic. The remainder of this section outlines the different types of nominalisation. Pronouns are presented in §3.3.4 and the noun phrase is discussed in §3.4.

3.3.3.1 Nominalisation

A noun can be formed from a verb in Sudest by reduplication (§3.3.3.1.1), or with the addition of the agentive prefix *ra-* (§3.3.3.1.2) or the instrumental prefix *ghe-* (§3.3.3.1.3) and reduplication of the verb stem. Place nouns are formed by compounding the noun *ghamba* ‘place’ with verbs (§3.3.3.1.4).

3.3.3.1.1 Reduplication

Nouns may be derived from verbs by reduplication. There are less than a dozen such tokens attested in the corpus. They tend to be nouns denoting actions/activities as in (43) and (44), or the results of activities, as in (45).

⁵⁴ There are also at least two suppletive verb pairs that specify participant number: *wa* ‘go’ and *raka* ‘go (pl.)’, and *ngge* ‘hit (sg. OBJ)’ and *gabwa* ‘hit (pl. OBJ)’.

- (43) *thi=vaghare=nggo nangge-nangge a=nangge=ya mat*
 3PL=teach=1SG RED-weave 1SG=weave=YA mat
 ‘they taught me weaving, I wove mats’ (education_241214 026-8, 85.640 93.550)
- (44) ...*kaiwa-Ø thonggo i=ghena wei-ye le-Ø*
 reason-3SG.POSS if 3SG=sleep PREP-3SG.POSS POSS.CLF2-3SG.POSS
umoru le-Ø ghambi-ghambi ne i=vuyuwo
 young.man POSS.CLF2-3SG.POSS RED-give.birth FUT 3SG=be.heavy
 ‘...because if she sleeps with her husband, her labour will be difficult’
 (new_mother_251214 012-4, 31.203 40.563)
- (45) *wo-i=vo-rori-yathu le ro-rori=na*
 HORT-3SG=by.spear-ing-write-throw.away POSS.CFL2 RED-write=ADDR.PROX
 ‘she must/will write down her writing’ (c_031116 243, 440.500 443.360)

The reduplication patterns for nouns derived from verbs follows the same patterning as verbal reduplication discussed in the previous section (§3.3.2.3). Reduplication is also used to mark plural nouns (§3.4.1).

3.3.3.1.2 *Ra-* agentive

The prefix *ra-* is used to form agentive nouns. The prefix most frequently combines with a reduplicated verb stem to form as agentive noun as in (46), but also combines with multi-verb construction (47), verbal prefix-verb stem combinations (48), and verb-noun compounds (49).

- (46) *gha-nda ra-vanggu-vanggu thi=mena thi=vanggu=inda*
 POSS.CLF1-1INCL.POSS AG-RED-lead 3PL=come 3PL=lead=1INCL
e garowo=ko
 PREP shore=DIST
 ‘our ancestors (lit. leaders) come (and) lead us to the shore’
 (engginas_story_231016 019, 40.680 44.033)
- (47) *lolo=ko i=mare=ko o=rama-e ida-nji*
 person=DIST 3SG=die=DIST PL=father-3SG.POSS name-3PL.POSS
ra-ghan-thaga
 AG-eat-feast
 ‘the person who died’s father’s (relatives) are called ‘feast eaters’’
 (funeral_feasting_081015_01 159, 447.169 450.137)
- (48) ***ra-nde-vuva***
 AG-stand.and-go.first
 ‘leader’ (e_091215)
- (49) ***ra-ngginau-wangga*** *thovuye*
 AG-build-boat good
 ‘a good canoe builder’ (canoe_021015 030, 66.310 67.879)

3.3.3.1.3 *Ghe-* instrumental

Instrumental nouns can be productively formed by combining the instrumental prefix *ghe-* with a reduplicated verb, as shown in (50) and (51).

- (50) *wevo* *i=wo* ***ghe-ro-rori***
 young.woman 3SG=GET.SG.RIGD INS-RED-draw/write
 ‘the young woman gets the pencil’
 (put_stimuli_191015_01_02 070-1, 278.695 281.370)

- (51) *va* *i=taga-vewo* *bali=ma* *o* ***ghe-mwadi-mwadiwo=ma***
 REM.PST 3SG=by.striking-push ball=DET or INS-RED-play=DET
gamagai=ko *we=nggi*
 children=DIST PREP=3PL
 ‘he threw the ball or the toy to the children’
 (e_021115_01)

In a single attested instance shown in (52b), the verb stem *vana* ‘climb’ is not reduplicated, and instead combines with the manner-of-causation prefix *nji-* ‘by hand’ (§5.1) and the causative prefix *va-* (§4.2.8.2), meaning ‘cause to climb using the hands’. The resulting instrumental noun *ghenjivavana* specifies a single-plank ladder and contrasts with the instrumental noun *ghevanavana*, meaning ‘rung ladder’ (52a).

- (52) a. ***ghe-vana-vana***
 INS-RED-climb
 ‘ladder’
 (e_091215)
- b. *ande* *e* *la-ma* ***ghe-nji-va-vana***
 NEG1 PREP POSS.CLF2-1EXCL.POSS INS-by.hand-CAUS-climb
 ‘we don’t have a single-plank/stick ladder’ (moving_291214 030, 56.566 58.806)

3.3.3.1.4 Compound place nouns with *ghamba* ‘place’

Many place nouns are formed by compounding the noun *ghamba* ‘place’ with verb stem(s) or verb-noun combinations. The resulting compound denotes the location where the action specified by the verb stem(s) occurs. In (53), *ghamba* ‘place’ combines with the verb stem *ghena* ‘sleep’ to mean ‘bed’. In (54) it combines with the multi-verb construction *bebe-yathu* ‘break-throw away’ to mean ‘reef break’. In the third example, shown in (55), *ghamba* combines with a verb-noun compound *gudu mbwa* ‘fetch water’ to mean ‘water-fetching place’ or ‘watering hole’.

- (53) *wevo=ko* *i=yaku* *e* *le-Ø* ***ghamba*** ***ghena***
 young.woman =DIST 3SG=stay PREP POSS.CLF2-3SG.POSS place sleep
 ‘the girl sits on her bed (place of sleeping/sleeping place)’
 (cb_stimuli_051016_01 237, 2558.110 2561.460)

- (54) *ve=yaku* *vara* [...] *e* *bagodi=ko* *nggora*
 3SG.INT=stay/live really PREP wave=DIST like
le-∅ *ghamba* *bebe-yathu*
 POSS.CLF2-3SG.POSS place break-throw.away
 ‘she really lives [...] at the waves, like the reef break (lit. place of breaking-throwing away)’
 (crab_girl_081115 098-101, 243.872 251.007)

- (55) ...*nggora* *vara* *le-nji* *ghamba* *gudu* *mbwa=ko*
 like really POSS.CLF2-3PL.POSS place fetch water=DIST
 ‘...like their water-fetching place’ (mandumbunga_02_181016 136, 336.183 338.877)

In the above examples, the compound NPs are all indirectly possessed, taking the possessive classifier *le* ‘POSS.CLF2’ (§3.4.4.2). When *ghamba* ‘place’ occurs as an independent noun, it is directly possessed, with a possessive pronoun suffix attaching directly to the noun (§3.4.4.1), as in (56). In (56), the directly possessed noun *ghamba-nggu* ‘place-1SG.POSS’ refers to the speaker’s birthplace, while in (57) the compound *ghamba yaku* ‘living place’ denotes where the speaker lives.

- (56) *ghamba-nggu=ko* *ida-e* *Yeina*
 place-1SG.POSS=DIST name-3SG.POSS place.name
 ‘my place’s name is Yeina (Piron) island’ (family_ties_081115 003-4, 10.240 13.292)
- (57) *ghino* *lo* *ghamba* *yaku* *Vanatina-e*
 1SG POSS.CLF2.1SG place live/stay place.name-3SG.POSS
 ‘me, my living place is Vanatinae’ (pig_and_dugong_101214 040, 134.900 137.058)

3.3.4 Pronouns

Sudest has four basic types of pronouns: independent pronouns, possessive suffixes (see 3.4.4), subject proclitics (see §4.1.1), and object enclitics (see §4.1.2) presented in Table 3.3. These pronoun types are widespread in the Oceanic languages. The subject proclitics are further divided into the ‘basic’ subject indexes and two sets of portmanteau subject indexes, which specify tense and intentionality of the event respectively. All pronoun sets distinguish first, second and third person, and singular and plural number. First person plural pronouns further distinguish clusivity; the inclusive pronouns include the speaker and addressee, while the exclusive pronouns include the speaker and non-speech act participants and exclude the addressee.

	independent	basic subject index	immediate past subject index	intentional subject index	object index	possessive
1SG	<i>ghino</i>	(y)a=	ma=	va=	=nggo	-nggu
2SG	<i>ghen</i>	u=	mo=	vo=	=ngge	-n
3SG	<i>iye</i>	i=	me=	ve=	=Ø	-ye, -e, -Ø
1INCL	<i>ghinda</i>	ra=	mara=	vara=	=inda	-nda
1EXCL	<i>ghime</i>	wo=	moo=	voo=	=ime	-me
2PL	<i>ghemi</i>	hu=	mou=	vohu=	=ngga	-mi
3PL	<i>thiye</i>	thi=	methi=	vathi=	=nggi	-nji

Table 3.3 Pronouns

The independent pronouns can replace nouns and function as the head of a NP. The independent pronouns can fill the subject (58) and object (59) NP slots with verbal predicates, and function as the subject of non-verbal predicates (60) or the object of an preposition (or postposition) (61). NPs consisting of an independent pronoun do not take nominal modifiers.

- (58) *ela-ela moli thiye ne thi=tuthi-tuthi=ya*
 RED-woman INTS 3PL FUT 3PL=RED-choose=YA
gharighari thegha
 people youth
 ‘the older women, they choose the youths’
 (funeral_feasting_081015_02 076-8, 199.840 207.120)

- (59) *nggama=ko ne i=ghan ghino*
 child=DIST FUT 3SG=eat 1SG
 ‘that child will eat me’ (child_and_giant_201015 110, 292.980 294.400)

- (60) *iye nggama wevo*
 3SG child young.woman
 ‘she is a female child’ (crab_girl_081115 004-5, 9.750 17.052)

- (61) *nggorongga methi=dage e ghen?*
 how 3PL.IMM.PST=speak PREP 2SG
 ‘how did they tell you (lit. speak to you)?’ (cooking_111015 033, 95.860 97.673)

The co-occurrence of the independent pronouns with the subject and object proclitics is discussed in §4.2.

3.3.5 Demonstratives

Sudest has demonstrative enclitics, which express spatio-temporal and discourse deictic relations. The exophoric functions of the Sudest demonstratives have been investigated more systematically

than their endophoric functions. Endophoric functions are not commented on further here and remain a topic of future investigation.⁵⁵ The demonstrative enclitics are listed in Table 3.4.

Demonstrative	Meaning	Function
= <i>ke</i>	‘this (near speaker)’	speaker-proximate, temporal (present/time of speaking/time of event, near past/future), anaphoric
= <i>na</i>	‘this/that (near addressee)’	Addressee-proximate, anaphoric
= <i>ko</i>	‘that (distant from speaker and addressee)’	distal, temporal (past), anaphoric
= <i>yo</i>	‘that (distant from speaker and addressee)’	distal (places only)

Table 3.4 demonstrative enclitics

There is a basic three-way distinction in the spatial use of the demonstratives =*ke* ‘this (speaker-proximate)’, =*na* ‘this/that (addressee-proximate)’, =*ko* ‘that (distal)’. The fourth demonstrative =*yo* ‘that’ (distal)’ is not identified in previous literature on the language. It has a more restricted use than the other demonstratives and is only ever used to establish exophoric reference to a place. The demonstratives are not independent words, but rather enclitics that occur in both noun phrases (see §3.3.7) and VCs (see §4.4.4). Their distribution within the NP is relatively flexible and they are in complementary distribution with another determiner, the givenness marker =*ma* (see §3.4.2). They occur postnominally and cliticise onto the noun, a nominal modifier, or both. Excluding the distal demonstrative =*yo*, the demonstrative enclitics can mark the beginning and end of relative clauses (see §3.4.5). They can also form demonstrative pronouns with the demonstrative bases *iya* and *thiya* (§3.3.5.1), and locative proforms with the locative base *ghe* (§3.3.5.2).

The speaker- and addressee-proximate demonstratives are used when something is judged to be close to either the speaker or addressee, or judged to be within their physical space or sphere of influence. This includes items that the speaker/addressee is touching, but also items that are judged to be closer to one speech-act participant (SAP) over the other – this can be something that is centimetres away or metres away. Examples (62) and (63) show the speaker- and addressee-proximate demonstratives. In (62) the demonstrative occurs with a directly-possessed body part noun. This is common, even though the semantics of the noun and the possessive construction already indicate physical proximity to the speaker.

- (62) *ghino njima-nggu=ke thonggo thi=li=Ø na*
 1SG skin-1SG.POSS=SPKR.PROX if 3PL=GET.SG.FLEX=3SG and
thi=li-ra=Ø e thilo!
 3PL= GET.SG.FLEX-put=3SG PREP kundu.drum
 ‘my skin, if they get it they (will) put it on a kundu drum!’
 (lizard_and_possum_121015 040-1, 107.830 112.231)

⁵⁵ Wilkins’s (1999) demonstrative questionnaire was carried out with five speakers to complement and supplement corpus data and fieldnotes.

- (63) *thare bosowa-e u=yengge-giya gha-mi*
 REQ possibility-3SG.POSS 2SG=GET.FIRE-give POS.CLF1-2PL.POSS
ndighe=na we=nggo?
 fire=ADDR.PROX PREP=1SG
 ‘is it possible (that) you give your fire to me?’
 (skeleton_181015 026-28, 66.600 73.180)

The distal demonstrative =*ko* is used when the referent is judged to be neither close nor connected to either speech act participant. The referent can be a few metres from the speaker and hearer, or kilometres away from the interlocutors and out of sight. In (64), the speaker is referring to a neighbouring house some 10 metres away from the house where the recording was taking place, while the example in (65) describes a reef approximately five kilometres away and not visible at the time of utterance. Example (65) also demonstrates the use of the speaker-proximate deictic =*ke* to encompass not just the speaker, but a larger area in which the speaker is located: in this case the whole island of Vanatina.

- (64) *ve=ruku-ruku=ma nggora nggolo=ko mayao=ko*
 3SG.INT=RED-run=hither like house=DIST inland=DIST
 ‘he was running like to that house inland [speaker points with hand to neighbouring house]’
 (Bwaindiya_151115 093, 258.070 260.980)
- (65) *ragha=ko iya=ko ina Yeina na Vanatina=ke*
 reef=DIST DEM=DIST location place.name and place.name=SPKR.PROX
 ‘that reef is between Yeina and Vanatina’
 (feast_of_the_fish_271015 164-5, 426.163 431.210)

The final deictic, =*yo*, is also a distal deictic. Like =*ko*, it is used when a referent is judged to be far from both the speaker and hearer. As with the distal enclitic =*ko*, =*yo* can be used to refer to an entity mere metres away or a location on the far side of the island, as in (66), in which the speaker is describing a place located off the north coast.

- (66) *gha=niye mwari-mwaritau iya baria=yo*
 LOC=SP RED-fish DEM barrier.reef=DIST
 ‘that fishing place is (at) the barrier reef (at Madawa)’
 (mandumbunga_02_181016 016-8, 59.343 55.709)

While =*ko* and =*yo* are used to describe entities the same distance from the deictic centre, =*yo* adds an emphatic element which can be translated as ‘over there’. The enclitic =*yo* is typically spoken with a lengthened vowel and a change to falsetto voice, and is accompanied by a hand gesture indicating the direction of the entity. As mentioned above, unlike the other demonstrative enclitics, =*yo* is only ever used exophorically and to indicate a location. The enclitic only occurs five times in the corpus; in narratives, it only ever occurs reporting direct speech. This contrasts drastically with the token counts of the other demonstratives (=ke 711 tokens, =na 307 tokens, and =ko 1375 tokens). No speakers produced -*yo* while completing Wilkins’ (1999) demonstrative questionnaire,

although all of them found its use grammatical for the large-scale geographic space questions (scenes 24 and 25) when prompted and questioned about its use in these scenes. In some cases, speakers produced additional examples with the enclitic. Deictics with long vowels (and in some cases, falsetto voice) with distal and remote semantics are attested in other Milne Bay Papuan Tip languages, including Buhutu (Cooper 1992), Kilivila (Senft 2004: 64), and Saliba-Logea (Dawuda 2009: 63-4; Margetts 2018: 268-9). Dawuda (2009: 101) finds that the Logea demonstrative is used as an additional identification device when the speaker is uncertain that a hearer has identified or can correctly identify a referent. The limited Sudest data suggest that this may also be the function of the enclitic =yo (see examples (78) and (84) and for further tokens).⁵⁶

As well as having spatial use, the speaker-proximate demonstrative =ke and distal demonstrative =ko function temporally. The speaker-proximate =ke is used to specify that the time being referred to is the same or temporally close to the time of utterance. Consider the following examples, in which *mbanga=ke* ‘time=SPKR.PROX’ can refer to a very specific ‘now’ (67), or to a more general ‘nowadays’ (68).

- (67) *mbanga=ke* *ne* *a=vaona* *lolo* *riwa-ye*
 time=SPKR.PROX FUT 1SG=count/read person body-3SG.POSS
 ‘now I will list (lit. count) a person’s body’ (body_parts_251015 001-3, 1.821 7.480)

- (68) *iya* *kaiwa* *ne* *u=thuwe* *mbanga=ke* *mara-mara=ko* *ma*
 DEM reason FUT 2SG=see time=SPKR.PROX RED-eye=DIST already
voghi=wo *vara* *ma* *ina* *e* *valivangga* *regha*
 NUM.CLF-two really already location PREP side.of one
 ‘that’s why nowadays you will see the two eyes (of the fish) on one side (of its head)’
 (feast_of_the_fish_271015 138-9, 347.650 355.120)

The speaker-proximate demonstrative =ke also occurs with the temporal verb *ghiviya* ‘be morning’ to mean ‘this morning, as in (69).

- (69) *me=ghiviya=ke* *mo=ghena-thuweiru*
 3SG.IMM.PST=be.morning=SPKR.PROX 1SG.IMM.PST=sleep-be.awake
 ‘this morning I got up’ (cooking_111015 002-3, 14.690 17.407)

The speaker-proximate demonstrative is also used in at least one type of expression about the future to mean, for example, ‘next month’ (70) and ‘next year’ (71). In this temporal construction, the object of the PP is the inalienably-possessed noun *ghamwa* ‘face, forehead’, that takes the third person inclusive possessive pronoun and the speaker-proximate demonstrative. The noun is the head of a possessive NP, in which the unit of time specified is expressed as the possessor of

⁵⁶ This could also explain why =yo DIST’ does not occur in any of the elicitation sessions with the demonstrative questionnaire (Wilkins 1999) that were completed for Sudest, as the referent was already identifiable to all SAPS.

ghamwa-nda ‘forehead-1INCL.POSS’ or ‘our head’ and precedes the preposition (as is the case for all nominal possessors in PPs with *e* §3.3.6.1).

- (70) *lo umoru manjela=ke e*
 POSS.CLF2.1SG young.man moon/month=SPKR.PROX PREP
ghamwa-nda=ke amba i=mena ve=thuwe=nggo
 face/horehead=SPKR.PROX then 3SG=come 3SG.INT=see=1SG
 ‘my husband, next month, then he comes to see me’ (e_221015_02)

- (71) *ne thi=wa e sikulu theghathegha=ke e*
 FUT 3PL=go PREP school harvest/year=SPKR.PROX PREP
ghamwa-nda=ke
 face/horehead=SPKR.PROX
 ‘they will go to school next year’ (e_221015_01)

The distal deictic *=ko* is used to refer to events and times further in the past. In (72), the speaker is describing a period of time from her youth.

- (72) *e theghathegha=ko umbwe-to=ko... va e tine...*
 PREP year=DIST NUM.CLF-three=DIST REM.PST PREP inside
 ‘during those three years...’ (education_241214 074, 263.480 270.150)

The distal is used in (73) in the possessive NP *mbangako iyako gaithiko* ‘time of that fight’ while discussing a fight from legend, to specify that the event is in the past.

- (73) *ra=nga e mbanga=ko iya=ko gaithi=ko va*
 1INCL=say PREP time=DIST DEM=DIST fight=DIST REM.PST
i=ya-raka=nggi boda=ko
 3SG=all-clear/separate=3PL relative=DIST
 ‘we say, at that time of that fight, it separated the relatives/people’
 (feast_of_the_fish_271015 158-60, 411.660 417.487)

3.3.5.1 Pronominal and adnominal demonstratives with *iya* and *thiya*

The singular demonstrative base *iya* and its plural counterpart *thiya* can form demonstrative pronouns and adnominal demonstratives in combination with the demonstrative enclitics. The demonstrative bases appear to have developed from the singular and plural third person independent pronouns *iye* ‘3SG’ and *thiye* ‘3PL’. Examples of *iya* as a demonstrative pronoun are shown in (74) to (76) and examples of *thiya* in (77) and (78). While *thiya* is used exclusively as a plural demonstrative, *iya* is sometimes used with non-singular referent, including both (human) animate referents (75) and inanimate referents as in (77).

- (74) *amba thi=vivatha=engge iya=ko*
 then 3PL=prepare=just DEM=DIST
 ‘then they prepare that’ (kula_exchange_081215 034, 101.400 106.130)
- (75) *ela-ela=nggi iya*
 RED-woman=3PL DEM
 ‘these are women (lit. women are these)’ (fp_stimuli_201015_126, 501.570 503.480)
- (76) *gheghe-Ø ghae iya=ke*
 leg-3SG.POSS cover DEM=SPKR.PROX
 ‘these are his shoes (lit. his shoes/leg covers are these)’
 (fp_stimuli_201015_01 054, 225.480 226.890)
- (77) *wo-ra=tamwe=nggi-va thiya=ke*
 NEC-1EXCL=look.for=3PL-REP DEM.PL=SPKR.PROX
 ‘let’s look for these’ (fp_stimuli_191015_05 121, 204.820 206.130)
- (78) *ma thiya=yo*
 already DEM=DIST
 ‘those (over there)’ (fp_stimuli_191015_05 110, 190.150 191.120)

The demonstrative bases can also combine with the demonstrative enclitics to function as adnominal demonstratives. The adnominal demonstratives follow the noun in the NP with a demonstrative enclitic occurring both on the noun and demonstrative base. This is shown in (79) with =*ke* ‘this (speaker proximate)’ and =*ko* ‘that (distal)’, and in (80) with , =*na* ‘this/that (addressee proximate)’.

- (79) *wo=vaidi=ya thari=ke iya=ke e*
 1EXCL=find=YA badness=SPKR.PROX DEM=SPKR.PROX PREP
ghemba=ko iya=ko
 village=DIST DEM=DIST
 ‘we found these problems (lit. this badness) in that village’
 (moving_291214 009-10, 14.000 18.060)
- (80) *mbe hu=uno-uno vara ida-e=na*
 still 2PL=RED-say(name) really name-3SG.POSS=ADDR.PROX
iya=na
 DEM=ADDR.PROX
 ‘you still keep saying that name’ (mandumbunga_02_181016 252, 642.040 645.051)

The demonstrative base *iya* also obligatorily occurs in non-verbal clauses that express want and need (see §3.5.2.5).

3.3.5.2 Locative adverbials with *ghe*

Locative adverbials are formed by combining the locative base *ghe* with one of the demonstrative enclitics. In (81) to (82), the adverbial demonstrative functions as a locative adjunct, following an intransitive and transitive verb respectively.

- (81) *iya=ke* *ne* *i=wa* ***ghe=na***
 DEM=SPKR.PROX FUT 3SG=go LOC=ADDR.PROX
 ‘this will go there (near addressee)’ (fp_stimuli_191015_03 331, 802.240 803.750)
- (82) *wo-u=tamwe=ya* *ghamba-e* ***ghe=na***
 HORT=2SG=look.for=YA place-3SG.POSS LOC=ADDR.PROX
 ‘look for a place there (near addressee)’
 (fp_stimuli_191015_03 090, 256.990 259.360)

Examples (83) and (84) show the locative adverbial functioning as a predicate in non-verbal clauses (§3.5.2.2).

- (83) *umbaumbala=ma* *i=nga* “*lolo* *regha* *ina-Ø*”
 giant=DET 3SG=say person one location-3SG.POSS
ghe=ke”
 LOC=SPKR.PROX
 ‘the giant said “someone is in here”’ (child_and_giant_201015 083, 212.180 214.930)
- (84) *yangga=ra* ***ghe=yo***
 NUM.CLF=one LOC=DIST
 ‘one is over there [points to picture nearby on the floor]’
 (fp_stimuli_191015_05 100, 170.230 171.490)

3.3.6 Adpositions

Sudest has four adpositions. It is one of the few Papuan Tip languages (along with the languages of the Kilivila-Misima linkage and the Central Papuan Tip languages Magori and Yoba) that retain canonic Oceanic prepositions (Lynch et al. 2002: 104).

The four adpositions can be divided into free and bound adpositions using Crowley’s (1998: 151-2) model. The general preposition *e* ‘to, from, with’ is the only free preposition. The bound adpositions can be further divided into verbal and nominal adpositions; *we* ‘to, from’ is a verbal ambiposition and takes an object enclitic, while the postposition *kaiwa* ‘for’ and the preposition *wei-* ‘with’ are nominal adpositions and take a possessive pronominal suffix. Interestingly, while the adpositions *we* ‘to, from’ and *kaiwa* ‘for’ take pronominal markings that agree with the NP complement of the adposition, *wei-* ‘with’ takes a possessive pronominal suffix that indicates the person and number of the S/A argument (that is, the ‘accompanier’ rather than the ‘accompanied’, with the latter expressed by a NP complement).

3.3.6.1 *e* general locative preposition ‘to, from, with’

The free preposition *e* ‘to, from, with’ has a general locative meaning. It can be used to indicate a goal, source, location, moment or period in time, but also an instrument, and, infrequently, a recipient. The preposition *e* ‘to, from, with’ is not used with locational adjuncts headed by inherently locational nouns. These include place names, the nouns *thotho* ‘home’, *bode* ‘down (low)’, or *yavoro* ‘up (high)’, or locative adverbials with the locative base *ghe* (§3.3.5.2). Tokens of each of the attested semantic roles of the general preposition are presented in examples (85) to (90).

- (85) *kerō wo=raka [e uma]*_{GOAL}
 already 1EXCL=go.PL PREP garden
 ‘we already went to the garden’ (stone_cooking_251015 018, 50.050 52.730)

- (86) *wevo=ma i=wo apel=ma [e buku=ma]*
 youngwoman=DET 3SG=GET.SG.RIGD apple=DET PREP book=DET
*vwata-nji*_{SOURCE}
 top-3SG.POSS
 ‘the girl gets the apple from on top of the books’
 (put_stimuli_201015_02 163, 982.360 985.110)

If the object of the preposition occurs with a possessor NP, the possessor precedes the preposition, as in (87).

- (87) *veti=yaku [Rose e ghamba-e]*_{LOC}
 3PL.INT=stay pers.name PREP place-3SG.POSS
 ‘they stay at Rose’s place’ (fp_stimuli_191015_07 038, 98.860 100.890)

- (88) *i=njogha we=nggi tina-e na rama-e [e]*
 3SG=go.back PREP=3PL mother-3SG.POSS and father-3SG.POSS PREP
*mbanga=ko iya=ko*_{TIME}
 time=DIST DEM=DIST
 ‘she returned to her mother and father at that time’ (bush_betelnut_011115 137-138)

- (89) *ra=va-kwate=nggi-ya [e kewe]*_{INST}
 1INCL=CAUS-hang=3PL-FOC PREP carry.stick
 ‘we lift them with a carrying stick’ (sago_101214 065, 171.310 174.090)

Recipient PPs usually take the adposition *we* ‘to, from’. Less commonly, the general preposition can also be used to indicate a recipient (90).

- (90) *nggorongga methi=dage [e ghen]*_{REC}
 how 3PL.IMM.PST=speak PREP 2SG
 ‘how did they tell you?’ (cooking_111015 033, 95.860 97.673)

The directly-possessed noun *ina* ‘location’ occurs in locational adjuncts, including PPs which indicate that a referent is already located in the place specified by the adjunct. The directly-possessed noun precedes the preposition and, when following verbal predicates, takes a possessive suffix that ‘agrees’ with the S (91) or O (92) argument of the verb (see also §3.5.2.2 for examples of verbless locative predicates with *ina* and *e*).

- (91) *ve=yaku* [*ina-∅* *e* *thiyo*]_{LOC}
 3SG.INT-stay location-3SG.POSS PREP rope/jail
 ‘he stays in the cell’ (fp_stimuli_191015_05 453-4, 1006.620 1008.490)
- (92) *i=nde-thin=a* *mbwa* *ina-∅* *e* *buket*
 3SG=stand.and=GET.SG.CNTR=YA water location-3SG.POSS PREP bucket
 ‘she holds water in a bucket’ (fp_stimuli_191015_01 021-2, 93.259 97.210)

Non-verbal predicates of ‘having’ are also expressed by a PP construction with *e*, see §3.5.2.2.

Objects of PPs with *e* are frequently headed by directly-possessed locative or body-part relational noun such as *ghadidi* ‘side’, *gherei* ‘behind’, *mbothi* ‘nose, tip, point’, *raberabe* ‘underneath’, *tine* ‘inside, during’, and *ghamwa* ‘face, forehead, front’. See (86) above with *vwata* ‘top’ and (93) below with *ghadidi* ‘beside’.

- (93) *umoru=ma* *i=ndeghathi* [*e* *tebol=ma* *ghadidi-ye*]_{LOC}
 young.man=DET 3SG=stand PREP table=DET beside/near-3SG.POSS
 ‘the man stands beside the table’ (cb_stimuli_051016_01 244-5, 2620.325 2624.864)

3.3.6.2 *we* recipient ‘to’ and source ‘from’

The adposition *we* ‘to, from, with’ is primarily used to indicate recipients and animate sources but can also be used to encode goals and instruments under certain conditions. It is also used to respond to questions pertaining to possession or location of an entity. The adposition is analysed as an ambiposition as it may occur before or after its complement (Libert 2006).⁵⁷ In the corpus, it most frequently precedes its NP complement when one is present. It can further be classed as a verbal ambiposition, as it takes an object marker from the verbal object enclitic paradigm (§4.2.2) that agrees with the person and number of its complement.

The object marker and a lexical object can cooccur in the same ambipositional phrase, as shown in examples (94) to (97). The ambiposition precedes its object NP in (94) and (95), and follows its NP

⁵⁷ Flexible adpositions like this have also been labelled ‘bipositional adpositions’ or ‘bipositions’ (Grünthal (2003: 59) and ‘alternpositions’ (Reindl 2001).

object in (96) and (97). When the ambiposition is followed by a lexical object, it takes the enclitic =*ya* which may be a paragogic syllable (see §4.4.3 for further discussion).

- (94) *i=njogha* [we=nggi=*ya* *tina-e* *na* *rama-e*]_{REC}
 3SG=go.back to/from=3PL=YA mother-3SG.POSS and father-3SG.POSS
 ‘she returned to her mother and father’ (bush_betelnut_011115 137, 323.950 326.120)

- (95) *i=njogha* [we=∅=*ya* *levo*]_{REC}
 3PL=go.back to/from=3SG=YA POSS.CLF2.3SG.POSS:young.woman
 ‘he returns to his wife’ (fp_stimuli_201214_04 062, 189.150 191.070)

- (96) *iya* *second last=ko* *i=wo-giya=∅*
 DEM second.last.person=DIST 3SG=GET.SG.RIGD-giya=3SG
 [last=*ko* we=∅]_{REC}
 last.person=DIST-PREP to/from=3SG
 ‘that second last (man) give it (ceremonial limestick) to the last (man)’
 (bwaindiya_151115 079, 231.340 234.373)

- (97) *vethi=wo* *umu* [Sabali *une* we=nggi]_{REC}
 3PL.INT=GET.SG.RIGD lime place.name friends PREP=3PL
 ‘they get lime from their Sabari friends’ (skeleton_181015 041, 99.004 102.170)

The ambiposition can also occur without a lexical object, as in (98) to (100).

- (98) “*te-mbe* *ne* *u=njogha=va* [we=nggo]_{GOAL}
 more-still FUT 2SG=go.back=REP to/from=1SG
 “come back again to me” (mandumbunga_02_181016 394, 990.683 992.800)

Ambipositional phrases nearly always follow lexical objects of the predicate, (99) but they may also come between verb and its lexical object, as in (100).

- (99) *i=nanggo* *ndighe=ko* [we=nggi]_{SOURCE}
 3SG=ask.for fire=DIST to/from=3PL
 ‘he asked for fire from them’ (skeleton_181015 041, 99.004 102.170)

- (100) *thi=giya* [we=nggi]_{REC} *ghaningga* *dayagha*
 3PL=give to/from=3PL food hot
 ‘they give to them hot food’ (hunting_261214 017-8, 37.440 40.430)

While ambipositional phrases most frequently take the semantic roles of recipient and animate sources, they are also used to express goals and instruments. The preposition *e* ‘to, from, with’ is the default adposition used to express these latter roles, but it cannot occur without a lexical object. In cases where the object referent is easily retrievable from the discourse and, therefore, does not have to be overtly expressed, the ambiposition *we* replaces *e*.⁵⁸ Consider the examples presented in

⁵⁸ It is most likely that under these conditions *we* can also be used for an inanimate source. There are, however, no such examples in the corpus or elicitation data.

in (101) and (102), in which the referent of the prepositional complement is the O argument in the preceding clause. In these cases, the adposition cannot take a lexical object.

- (101) *i=wo* *gaeba* *i=wo-mban=a* *nggama=ma*
 3SG=GET.SG.RIGD wooden.dish 3PL=GET.SG.RIGD-put=YA child=DET
 [*we=∅*]_{GOAL}
 to/from=3SG
 ‘she got a wooden dish (and) put the child in it’
 (crab_girl_081115 041-2, 103.69 110.380)
- (102) *thi=rumbo* *ndighe* *na* *thi=vada* *nggama=ko* *riwa-e*
 3PL=make(fire) fire and 3PL=warm child=DIST body-3SG.POSS
 [*we=∅*]_{INST}
 to/from=3SG
 ‘they make a fire and they warm the child with it’
 (new_mother_251214 059-60, 143.810 148.350)

The ambiposition can also occur in questions and responses relating to ownership and possession. When asking or answering questions of ownership or possession, *we* often occurs postpositionally with an independent pronoun complement, as in the response speaker 2 gives in (103) or the question in (104).

- (103) <1> *thela* *le-∅* *thelau* *iya=ko?*
 who POSS.CLF2-3SG.POSS land DEM=DIST
 <2> [*ghime* *we*]_{REC} *bubu* *va* *i=va-modo=∅*
 1EXCL to/from grandparent/child REM.PST 3SG=CAUS-payment=3SG
 speaker 1: ‘whose land is that?’
 speaker 2: ‘ours, grandad bought it’ (short_story_111015 013, 31.293 35.183)
- (104) *botel=na* [*ghen* *we*]_{REC}
 bottle=ADDR.PROX 2SG to/from
 ‘is that bottle yours?’ (dem_quest_311016)

3.3.6.3 *kaiwa* benefactive and purposive ‘for’

The postposition *kaiwa* ‘for’ has a benefactive or purposive function. It is a nominal postposition and takes a possessive pronominal suffix (§3.4.4) that agrees with the person and number of its object.⁵⁹

The postpositional objects in (105) and (106) have animate referents that take the semantic role of benefactive:

⁵⁹ The postpositional function has grammaticalised from the directly possessed noun *kaiwa* ‘reason’, which is used to introduce reason and result clauses (§3.6.3.2).

- (105) *hu=kabu ghelethi=ke iya=ke [ghemi kaiwa-mi]_{BEN}*
 2PL=plant betel.nut=SPKR.PROX DEM=SPKR.PROX 2PL for-2PL.POSS
 ‘you plant this betel nut for you’ (working_011115 014-15, 50.106 52.576)

- (106) *bwebwe me=la-lovivina=Ø [kaiwa-nggu]_{BEN}*
 dad 3SG.IMM.PST-and.go-prepare=3SG for-1SG.POSS
 ‘Dad prepared it for me (before I left)’ (family_ties_081115 044, 108.868 111.137)

Postpositional phrases with an inanimate-object referent have a purposive interpretation. They indicate for what purpose or reason the action of the verb is performed, as in (107) and (108).

- (107) *vethi=ghalolo=Ø [le-nji market kaiwa-e]_{PURP}*
 3PL.INT=harvest=3SG POSS.CLF2-3PL.POSS market for-3SG.POSS
 ‘they harvest it for their market’ (fp_stimuli_191015_02 015, 30.510 32.568)

- (108) *mbanga=niye thi=raka-ranggi na thi=ghiva=va thi=rumbo ndighe*
 time=SP 3PL=go.PL-go.out and 3PL=trade(kula) 3PL=make(fire) fire
[ranggi=ko kaiwa-Ø]_{PURP}
 going.out=DIST for-3SG.POSS
 ‘when they go out and trade, they make a fire for the going out (i.e. they light a fire in order to prepare for the journey by completing various rituals)
 (funeral_feasting_081015_02 091-2, 233.850 240.419)

3.3.6.4 *wei-* accompaniment ‘with’

The bound preposition *wei-* ‘with’ expresses accompaniment. The preposition can be characterised as a nominal adposition like the benefactive postposition *kaiwa* ‘for’ as it also takes a possessive pronominal suffix. In contrast to *kaiwa* and the nominal adpositions typically attested in Oceanic languages (e.g. Crowley 1998), in the case of *wei-*, the suffix does not agree in person and number with the object of the PP, i.e. the companion, but rather with the accompanier – typically the S/A argument of the verb in clauses with a verbal complex. In (109), the preposition takes the second person singular possessive suffix *-n* to agree with the S argument of the verb *yaku* ‘live, stay’, while the object of the PP is expressed by an lexical NP. In (110), the preposition takes the first person singular possessive suffix *-nggu* and likewise agrees with the S argument of *mena* ‘come’. The object of the PP is expressed by the pronoun *ghen* ‘2SG’.

- (109) *thi=nga “u=re-yaku [wei-n*
 3PL=say 2SG=stay.and-stay/live with-2SG.POSS
lou-n=ke]_{ACCOMP}”
 sibling.opp.sex-2SG.POSS=SPKR.PROX
 ‘they said “you stay with your brother”’ (crab_girl_081115 009-10, 25.150 28.470)

- (110) *a=mena [wei-nggu ghen]_{ACCOMP}*
 1SG=come with-1SG.POSS 2SG
 ‘I (will) come with you’ (e_161215)

When the complement of the PP is plural, regardless of person, the preposition takes additional morphology, with the enclitic =*ya* (§4.3.3) and the third person plural object enclitic =*nggi*. If the PP includes a lexical object, a second instance of the enclitic =*ya* attaches to the plural object enclitic, as in (111).

- (111) *thera=ko kero thi=raka e mbwa=ko tine*
 youth=DIST already 3PL=go.PL PREP water=DIST inside
vethi=mun=a yee [wei-nji=ya=nggi=ya giya-giya
 3PL.INT=drink=YA k.o.herbs with-3PL.POSS=YA=3PL RED-big.person
*vavana=va]*ACCOMP
 some=REP
 ‘the youths go to the water to drink herbs with some big men again’
 (funeral_feasting_081015_02 026-7, 70.530 76.480)

The preposition typically takes an animate complement, as in the above examples. However, it can also take inanimate complements, as shown in (112) and (113).

- (112) *ghenangga=ko Ware=ko une ma thi=voro-ma*
 decorative.limestick=DIST place.name=DIST friends already 3PL=go.up-hither
*[wei-nji]*ACCOMP
 with-3PL.POSS
 ‘the lime stick, the Ware friends already came up with it’
 (bwaindiya_151115 028-9, 95.020 103.216)
- (113) *iye va [wei-ye le-Ø ghare*
 3SG REM.PST with-3SG.POSS POSS.CLF2-3SG.POSS heart
*laghi-laghiye]*ACCOMP
 RED-big
 ‘he was very worried (lit. he was with a very big heart)’
 (mandumbunga_02_181016 161, 397.295 401.079)

The PP can occur with =*engge* ‘just’ to specify that no additional participants accompanied the subject(s) of the event, as in (114) *wei-me=engge* ‘with-1EXCL.POSS=just’ meaning ‘with just us’.

- (114) *wo=nja [wei-me=engge]*ACCOMP
 1EXCL=go.down with-1EXCL.POSS=just
 ‘we went down with just us (women)’ (menstruation_081015 018-19, 58.48 61.600)

3.3.7 Tense, aspect, mood particles

There are seven particles that express information about tense, aspect, and mood (TAM) in Sudest which are listed in Table 3.5.

TAM particle	meaning
<i>me</i>	immediate past
<i>va</i>	remote past
<i>ne</i>	future
<i>kero, ma</i>	already
<i>mbe</i>	still
<i>mbala</i>	should
<i>mbwata, nunggo</i>	perhaps

Table 3.5 TAM particles

The Tam Particles are independent, invariable forms with a grammatical function. They occur in clauses with non-verbal and verbal predicates. The tense particles also occur in temporal adjuncts. The particles are not obligatory and can be omitted when the pertinent information is retrievable from the context.

The particles generally precede the predicate. If there is a subject conominal in a clause with a VC, any TAM particles usually occur between the conominal and VC. However, this is not always the case and the TAM particles are also attested preceding both the conominal and VC. Because the TAM particles can be separated from the VC by a conominal, they are analysed as outside of VC when occurring in clauses with verbal predication.⁶⁰

When there is more than one TAM particle in a clause, the tense particles (*me* ‘immediate past’, *va* ‘past’ and *ne* ‘future’) follow all aspect and modality particles, with the exception of *ma* ‘already’, which follows the tense particles. Modal directives that occur within the VC are discussed in chapter 4 (see §4.4.1 and §4.4.2).

3.3.7.1 *Me* immediate past

The immediate past tense particle *me* is named for its function in specifying that the moment of the situation occurred shortly before the moment of speech (or reference point). The particle is also used in the corpus in historical/traditional narratives and procedurals that describe past, habitual events.

The particle *me* is used to indicate that the situation occurred in the near past, either the same day as the moment of speech/reference point or the previous night, but not the previous day. In (115), *me* occurs in the non-verbal predicate in a passage of direct speech in which a grandmother asks her granddaughter about how the previous night went with her new husband.

⁶⁰ The variation in the order of TAM particles and subject conominals may relate to scope and e.g. predicate focus vs. sentence focus as appears to be the case for negation (see §3.7.2.1) and is a matter for future research.

- (115) *elisari=ko* *i=vaito=∅* *i=nga* “*nggorongga* ***me*** *gougou?*”
 old.woman=DIST 3SG=ask=3SG 3SG=say how IMM.PST night
 ‘the old woman asks her “how was last night?”’
 (mandumbunga_02_181016 359-60, 901.494 906.204)

In clauses with a verbal predicate, the particle combines with the subject index. This can be seen in (116), in which *me* combines with the first person singular subject index *a=* (see §4.2.1.2 for immediate past subject indexes).

- (116) *ma=ghena-thuweiru* *i=vuva* *moli* ***ma=wa*** *e*
 1SG.IMM.PST=sleep-be.awake 1SG=go.first INTS 1SG.IMM.PST=go PREP
kamwathi...
 path
 ‘(today) I woke up, first I went to the toilet (lit. I went to the path)...’
 cooking_111015 004-5, 19.270 22.733)

The label ‘immediate past’ is adopted from A&A and A&R. Anderson and Anderson (p. 20) state that the particle is also used to specify recent past when the moment of the situation is the same day as or the day before the moment of speech/reference point, i.e. ‘yesterday’ and not just ‘last night’. However, speakers rejected such biduonal (‘within two days’) usage – the conflation of hodiernal past (today) and hesternal past (yesterday) (Botne 2012). Instead, speakers use the temporal noun *menda* ‘yesterday’ when describing situations that occurred the day before the moment of speech. To locate situations that occurred further in the past than a few days, speakers use the remote past particle *va* (§3.3.7.2).

The immediate past particle also appears to have a discourse function to mark past, habitual activities and situations. In the corpus, it occurs in traditional narratives set in the distant past, and in procedural texts when describing traditional practices that are no longer adhered to. The example in (117) comes from a narrative about the first person to use fire on Vanatina:

- (117) *a=utu=nga* *elisari* *Mandumbunga* *me=ngamwa* *barogi=ke*
 1SG=speak=T old.woman pers.name 3SG.IMM.PST=feed fish=SPKR.PROX
 R
- morouma=ke* [...] *mbanga* *regha* *rumbu-nji=ko*
 k.o.fish=SPKR.PROX [...] time one grandparent/child=3PL.POSS=DIST
- me=wa* *e* *kamwathi* *amba* *thi=kubaro* *reghamba*
 3SG.IMM.PST=go PREP path then 3PL=hide behind
- we=∅* *rumbu-nji=ko* *i=wa* *ve=dighadigha* *thi=thuwe*
 PREP=3SG grandparent/child=3PL.POSS=DIST 3SG=go 3SG.INT=poo 3PL=see
- rumbu-nji=ko* *le-∅* *re=ko* *kerō*
 grandparent/child-3PL.POSS=DIST POSS.CLF2-3SG.POSS excrement=DIST already
- thi=nga* “*aee* *rumbu-me* *nggorongga* *ghen*
 3SG=say EXCL grandparent/child-1EXCL.POSS how 2SG
- re-n=ke* *bwadibwadi=ke* *na* *ghine*
 excrement-2SG.POSS=SPKR.PROX black=SPKR.PROX and 1EXCL
- re-me=ke* *kakalava=ke?*”
 excrement-1EXCL.POSS=SPKR.PROX white=SPKR.PROX
- ‘I (will) talk about old woman, Mandumbunga. She fed the morouma fish [...] one time their grandmother went to the toilet (lit. went to the path) then they (her granddaughters) follow behind her. Their grandmother goes to poo, they see their grandmother’s poo and said “oh grandmother, how is your poo black and our poo is white?”’
 (mandumbunga_061215 001-50, 2.585 145.528)

The first 42 intonation units (IUs) in (117) nearly exclusively use the immediate past particle and subject indexes (excluding sequences of clauses that describe series of events in which only the first VC is marked for tense). This part of the narrative describes how Mandumbunga, the first person to have fire, would secretly go about her day in order to procure and cook her food. The narrator uses the immediate past particle and immediate past subject indexes to outline Mandumbunga’s daily routine, up to the point of describing her going to the toilet one day, at which time her secret is discovered by her granddaughters. At this point, the narrator switches to the general subject indexes and does not mark the clause for tense in any way (*amba thikubaro reghamba we...* ‘then they follow behind her...’). The remainder of the text describes what happens after Mandumbunga is discovered. Here, the immediate past particle/indexes are only used in their immediate past function in the text in situations describing situations that took place shortly before the reference point.

A second example of the habitual function of *me* ‘IMM.PST’ is presented in (118) from a procedural text on menstruation. Here the immediate past is used when describing traditional practices associated with menstruation that are no longer adhered to today, when the speaker switches to describing what menstruating people do today after *noroke* ‘today’, like in the previous example, she switches from the immediate past to the general subject indexes.

- (118) *ne a=utu=nga nggorongga wevo me=yaku e*
 FUT 1SG=speak=TR how young.woman 3SG.IMM.PST=stay PREP
njamnjam me=viva=ko yaku njamnjam o ro ghemba
 bush 3SG.IMM.PST=go.first=DIST stay bush or stay village
methi=va-boboma=nga=Ø [...] *noroke wevo*
 3PL.IMM.PST=CAUS-be.forbidden/sacred=TR=3SG today young.woman
yaku njamnjam thi=thin-yere=Ø umo-umoru e
 stay bush 3PL=GET.SG.CNTR-walk.past=3SG RED-young.man PREP
mara-nji ...
 eye-3PL.POSS
 ‘I will talk about how a woman menstruated, in the past menstruation or menstruation,
 they made it secret/taboo [...] today, a woman’s period, they (women) walk while
 menstruating in front of men...’
 lit: ‘I will talk about how a woman stayed in the bush, it went first there, stay (in) the
 bush or stay (in the) village they made it secret/taboo [...] today woman’s staying (in
 the) bush, they walk (with) it in front of men...’
 (menstruation_081015 001-15, 6.030 50.828)

3.3.7.2 *Va* remote past

The remote past particle *va* contrasts with the immediate past marker *me* (§3.3.7.1). It is used to specify that a situation occurred a few days ago, a few weeks ago, a few years ago, or in the distant past.⁶¹ The elicited example (119) describes an event from the previous week. Note that the past particle *va* combines with *menda* ‘yesterday’ to indicate a location in time at least a few days prior to the reference point.

- (119) *lolo=ko iya=ko menda=va i=vutha wik=ko*
 person=DIST DEM=DIST yesterday=REM.PST 3SG=arrive week=DIST
va ma i=wa=ko
 REM.PST already 3SG=go=DIST
 ‘that person arrived last week (lit. that person arrived the week that already went)’
 (e_251115_01)

In (120), the remote past particle is used when describing an event from a few years ago.

- (120) *va a=utu-nga wo=mbe=regha a=uno-giya*
 REM.PST 1SG=speak-TR POSS.CLF1.1SG.POSS=still=one 1SG=call(name)-give
ida-nggu we=nggi lo teechea
 name-1SG.POSS to=3PL POSS.CLF2.1SG.POSS teacher
 ‘I talked about myself, I gave my name to my teachers’
 (education_241214 011-3, 38.790 47.290)

The example from a traditional narrative in (121) describes events from the distant past.

⁶¹ Anderson and Ross (2002: 335) label *va* ‘a ‘distant past’ particle. The term ‘remote past’ is used to align more closely with terminology used in cross-linguistic studies (e.g. Comrie 1985; Dahl 1985; Bybee et al. 1994; Botne 2012).

- (121) *regha va numobwalabwala na regha wadawada*
 one REM.PST non.witch and one witch
 ‘one (girl) was a muggle and one was a witch’
 (bush_betelnut_011115 003-4, 10.015 14.680)

In (122), *va* ‘REM.PST’ occurs with the temporal adjunct *mbanga regha* ‘one time’ to specify that the situation is located in the past.

- (122) *va mbanga regha yenggiyenggi na ighai-ye wondeya...*
 REM.PST time one monitor.lizard and cousin-3SG.POSS possum
 ‘one time monitor lizard and his cousin possum...’
 (lizard_and_possum_121015 004, 11.100 14.778)

3.3.7.3 *Ne* future

The tense particle *ne* is used to mark future reference. It can be used to signal a situation or event that will occur in the near future, as in (123) and (124) which describe events that occurred immediately after the moment of speech or events anticipated to occur at a later time, as in (125).

- (123) *ne a=utu-nga umoru na wevo*
 FUT 1SG=speak-APPL young.man and young.woman
methi=vi-ghathi
 3PL.IMM.PST=w.fingers-tight
 ‘I will talk about how young men and women (traditionally) had relationships (lit. touched)’
 (dating_081015 001-3, 1.360 11.041)

- (124) *ne u=lingg=ya mbwa*
 FUT 2SG=pour=YA water
 ‘you will pour out the water’
 (c_031116 017, 43.110 44.430)

- (125) *thaga=ko ne ina e Friday*
 feast=DIST FUT be.located PREP Friday
 ‘the feast will be on Friday’
 (e_081116_02)

The future particle also introduces the apodosis in predictive conditional constructions that describe a hypothetical future event, as in (126). See §3.6.3.3 for further discussion of conditionals.

- (126) *thonggo u=wa e njighi e rimu=ko vwata-e [...]*
 if 2SG=go PREP sea PREP reef=DIST on.top-3SG.POSS
ne u=vaidi=ya undiviri ina ghe=ko
 FUT 2SG=find=YA mud.crab be.located LOC=DIST
 ‘if you go to the sea, to on the reef [...] you will find the crab there’
 (crab_girl_081115 103-10, 252.882 270.026)

Languages which mark multiple past intervals are commonly symmetrical, meaning that they also mark the same relative temporal intervals in the future (Botne 2012). Anderson and Ross (p. 337) describe an immediate future marker *na*, which contrasts with the future marker *ne*. They (A&R p.

337) report that the particle *na* is used when the situation is anticipated to occur the same day as the time of reference. However, the current corpus shows *ne* performing this function (see examples (123) and (124) above). Furthermore, no near-future particle is attested in the corpus. In targeted elicitation speakers also only produced the particle *ne* and corrected the researcher's use of *na* to *ne*. The current data, therefore, contrast with the diachronic record of the language, indicating that Sudest today no longer has symmetrical tense markers.

3.3.7.4 *Kero* and *ma* 'already'

The two particles *kero* and *ma* signal the completeness of a state, or that an action/event is already completed. The two particles are typically translated as 'already' and are glossed as such in the corpus. *Kero* occurs more frequently in the corpus than *ma* (318 tokens to 222). Consider examples (127) and (128).

- (127) *mborowa-ye=ko* [...] ***kero*** *i=mweghe* *na* *ma*
 trunk-3SG.POSS=DIST already 3SG=be.ripe and already
i=garimbi
 3SG=be.strong/hard
 '(at this point in its growth) the tree trunk is already mature and is already strong'
 (c_031116 121-3, 229.070 234.890)

- (128) *Mwalaghagha* *va* ***ma*** *thi=raka-voro-wo=ko* *na* *thari*
 place.name REM.PST already 3PL=go.PL-go.up-thither=DIST and dance
kero *thi=va-voro-nga=∅* *vara* *e* *mbanga=ko* *iya=ko*
 already 3PL=CAUS-go.up-APPL=3SG really PREP time=DIST DEM=DIST
 '(the people of) Mwalaghagha had already gone up (west to Nju) and the dance, they
 already took it up (west) at that time'
 (feast_of_the_fish_271015 059-60, 141.960 145.610)

The two appear to be used interchangeably by speakers, however, they do not share the same relative position when co-occurring with other TAM particles; *kero* precedes any tense particles, as in (129), and *ma* follows any tense particles, as in (128) above. This suggests that there may be differences between the two particles. The particle *ma* also collocates more frequently with the remote past particle *va* (22 tokens) than *kero* (5 tokens).

- (129) *ngingi-nggu=ke* ***kero*** *va* *i=ma-bebe*
 tooth/teeth-1SG.POSS=SPKR.PROX already REM.PST 3SG=DETR-break
 'my tooth was already broken' (dem_quest_201015 038, 115.370 117.240)

When the particles *kero* and *ma* 'already' occur with the continuative aspect (expressed by the reduplication of the verb stem, §3.3.2.3), they indicate that the situation of the proposition is already underway and ongoing at the time of reference, as in (130) and (131).

- (130) *kero* *wo=vwala-vwala*
 already 1EXCL=RED-bake/mumu
 ‘we are already baking (by stone oven/mumu)’
 (stone_cooking_251015 061, 168.590 177.200)
- (131) *ma* *i=ro-sike-sike* *vara*
 already 3SG=sit.and-RED-hop really
 ‘he is already kneeling’
 (bwaindiya_151115 076, 221.111 224.380)

See also §6.2.1 for discussion of sequencing constructions with the verb *ko* ‘finish’ and §6.3.9 for complex verbs with the completive stem *vao* ‘COMPL’.

3.3.7.5 *Mbe* ‘still’

The particle *mbe* has an anterior continuing function (cf. Bybee et al. 1994: 318): it indicates that the situation commenced before the time of reference and continues into the time of reference, as in (132) to (134).

- (132) *mbe* *i=ghena* *e* *daghata=ma* *vwata-e*
 still 3SG=sleep PREP log=DET back/top-3SG.POSS
 ‘he is still asleep on top of the log’ (child_and_giant_201015 016-7, 50.220 53.410)
- (133) *ela=ma* *mbe* *ina-Ø* *e* *to=ke*
 woman=DET still be.located-3SG.POSS PREP outside=SPKR.PROX
 ‘the woman is still out there (on the reef)’ (chicken_story_181015 031, 72.860 76.300)
- (134) *kero* *i=ghambi=ya* *nggama=ma* *mbe* *e* *rovo=ma* *engge*
 already 3SG=give.birth=YA child=DET still PREP grave=DET just
tine
 inside
 ‘she gave birth to the baby (while) still in the grave’
 (couples_story_101214 013-4, 50.700 55.100)

In clauses with negative polarity, the particle indicates that the situation has not yet eventuated at the time of reference, with an expectation that it will ‘still’ eventuate at some future point, consider (135) and (136):

- (135) *ande* *mbe* *methi=ghe=re*
 NEG1 still 3PL.IMM.PST=marry=NEG2
 ‘they still don’t marry/they aren’t married yet’ (dating_081015 007, 19.540 21.304)
- (136) *ko* *ande* *mbe* *ne* *i=wa=re* *e* *ghemba* *than*
 CONJ NEG1 still FUT 3SG=go=NEG2 PREP village another/one
 ‘but she still will not go to another village’ [context: during specific parts of the mourning period a widow has certain restrictions placed on her, including restrictions of movement]
 (funeral_feasting_081015_01 120, 348.630 352.160)

The particle combines with the first possessive classifier *gha* and the numeral *regha* ‘one’ to mean ‘myself’, ‘yourself’, itself, as in (137) (see also §3.4.4.2).

- (137) *i=longga gha-Ø=mbe=regha*
 3SG=walk POSS.CLF1-3SG.POSS=still=one
 ‘(the child) walks by itself’ (new_mother_251214 114-5, 284.884 288.363)

3.3.7.6 *Mbala* obligation

The particle *mbala* ‘should’ expresses weak obligation and is an agent-oriented modality (cf. Bybee et al. 1994: 177), consider (138) and (139).

- (138) *iya=ke mbala i=ru ghe=ke*
 DEM=SPKR.PROX OBL 3SG=go.in LOC=SPKR.PROX
 ‘this should go in here’ (fp_stimuli_191015_03 374, 890.055 891.860)
- (139) *mbala u=thuwa-thuwa mbanga=ko*
 OBL 2SG=RED-see time=DIST
 ‘you should be watching the time’ (chicken_story_181015 046, 105.530 108.329)

The particle is also used at the beginning of the apodosis in counterfactual conditional sentences (see also §3.6.3.3):

- (140) *thonggo me ve=ranggi e ghaiwabu=ko mbala*
 if IMM.PST 3SG.INT=go.out PREP north=DIST OBL
me=thalaten Yeina
 3SG.IMM.PST=break.in.half place.name
 ‘if (the giant snake) had gone out to the north, she would have broken Yeina (Piron Island) in half’ (snake_passage_061215 197-9, 477.760 483.656)

See §4.4.1 for modal directives and §4.4.2 for the dehortative in the VC.

3.3.7.7 *Mbwata* and *nunggo* ‘perhaps’

The probability mood particles *mbwata* and *nunggo* ‘perhaps’ both indicate that a speaker is not willing to assert the truth of the proposition. It is unclear if the two particles differ semantically or pragmatically. Both typically occur clause initially, but *mbwata* occurs far more frequently in the corpus (62 tokens to 6):

- (141) *i=nga “mbwata ne a=wa va=ruku-thuwe=nggi”*
 3SG=say perhaps FUT 1SG=go 1SG.INT=run-see=3PL
 ‘he said “maybe I will go to see them”’
 (mandumbunga_02_181016 057, 161.581 164.074)

- (142) *mbwata iya nari-ye?*
 perhaps DEM son-3SG.POSS
 ‘perhaps this is his son?’ (fp_stimuli_201015_01 236, 882.560 884.303)
- (143) *nunggo maa u=ghan=a bwarogi ghe=ke*
 perhaps NEG 2SG=eat=YA fish LOC=SPKR.PROX
wo-vo=ruku-ghan=ya wondeya le-n boda-boda
 HORT-2SG.INT=run-eat=YA possum POSS.CLF2-2SG.POSS RED-relative
we=nggi
 PREP=3PL
 ‘maybe you don’t eat fish here, go to eat possum with your relatives’
 (marriage_111015 072-3, 218.535 226.110)

3.3.8 Interrogatives

Content questions are marked by question words. As is common for Oceanic languages (see Lynch et al. 2002: 52), question words in Sudest generally belong to the same word class as the constituent being questioned, and do not constitute a single group among themselves, however they are listed together here for convenience. The majority of the question words can also function alone to form a question sentence, e.g. *nggorongga?* ‘how?’ is a complete sentence. All attested question words are listed in Table 3.6.

form	gloss	questions what	related word class
<i>thela</i>	‘who’	identity of person	nominal
<i>thevala</i>	‘who (PL)’	identity of persons	nominal
<i>buda (kai)</i>	‘what (thing)’	identity of non-human/non-animate	nominal
<i>thembanga</i>	‘when’	(point in) time	adverbial
<i>maninggiye</i>	‘when’	(point in) time	adverbial
<i>angga</i>	‘where’	location	adverbial
<i>ningga</i>	‘where’	location	adverbial
<i>nggorongga</i>	‘how, why’	manner, quality	adverbial
<i>the</i>	‘which’	identity of object/item	modifier
<i>thambo</i>	‘which (of a set)’	identity of object/item	modifier
<i>thare</i>	‘is it/are there/do...’	request for item/action	modifier
<i>tab</i>	‘is it/are there/do...’	request for item/action	modifier
<i>(na)ka</i>	‘what about...’	purpose/use of a specific item/entity	modifier
<i>-viye</i>	‘how many’	quantity	numeral

Table 3.6 Question words

There are three pairs of question words that appear to be used interchangeably: *thembanga* and *maninggiye* ‘when’, *angga* and *ningga* ‘where’, and the general interrogative lexemes *thare* and *tab* both meaning ‘are there...’ or ‘do...’. At least the *tab* is borrowed from Misima (S. Callister et al. 2005). The origins of the other competing pairs are unknown. *Buda* ‘what’ and *buda kai* ‘what thing’ are used interchangeably.

Content questions can have rising intonation, although this is not always the case. The lexemes can occur in situ, as in (144) and (145), or fronted, as in (146) and (147).

- (144) *thi=nga* “*ida-n* *thela?*”
 3PL=say name-2SG.POSS who
 ‘they said “what’s your name?” (lit. your name is who?)’
 (mandumbunga_02_181016 222, 563.622 566.306)

- (145) *wabwi* *theghe-viye* *ina-nji* *e* *mare=ko* *tine?*
 group NUM.CLF-how.many location-3L.POSS PREP death=DIST inside
 ‘how many groups are inside the death (place) (i.e. the village where a person has died)?’
 (funeral_feasting_081015_01 039-41, 118.310 126.756)

- (146) *i=nga* “*angga* *hu=yaku?*”
 3SG=say where 2PL=live/stay
 ‘he said “where do you live?”’ (mandumbunga_02_181016 219, 554.244 555.653)

- (147) *nggorongga* *ra=nga* *pileti=ko*
 how 1INCL=say plate=DIST
 ‘how do we say ‘plate?’’ (put_stimuli_191015_01_02 015, 53.860 56.120)

The general requests *thare* and *tab* ‘are there, is there, do’ and *(na)ka* ‘what about’ are always fronted. Examples (148) and (149) show the use of *thare*, and (150) shows an example with *tab* (which is used interchangeably).

- (148) *thare* *kunumwana?*
 REQ banana
 ‘are there any bananas?’ (e_171015_03 099)

- (149) *thare* *va* *u=ravu* *ngingi-n=na* *va*
 REQ REM.PST 2SG=know tooth-2SG.POSS=ADDR.PROX REM.PST
i=ma-bebe?
 3SG=DETR-break
 ‘did you know your tooth is broken’ (dem_quest_201015)

- (150) *thi=nga* “*tab* *valikaiwa-e* *wo=u=nja=ma?*”
 3PL=say REQ possibility-3SG.POSS HORT=2SG
 ‘they said “is it possible (that) you come down here?”’
 (mandumbunga_02_181016 208, 525.677 528.663)

Questions with *naka* request information about a referent already known to all SAPS. Example (151) comes from a discussion on kinship terms between two relatives in which one speaker asks about their relationships to particular relatives.

- (151) *naka* *tina-nda?*
 what.about mother-1INC:PL.POSS
 ‘what about our mother?’ (kinship_071015 009, 35.510 36.943)

3.4 The noun phrase

The head of a noun phrase (NP) can be a lexical noun, an independent pronoun, a demonstrative pronoun or a (nominalised) modifier (i.e. adjectives, quantifiers and numerals). Noun phrases can function as the subject and object of verbal predicates, i.e. as a *conominal* of the subject and object indexes (cf. Haspelmath 2013, see §4.2 for further discussion), or as an adjunct in an oblique role. They also function as predicates and subjects in non-verbal predicates (§3.5).

A lexical noun is the only head of a NP that can take all possible NP modifiers. Pronouns do not take any modifiers. Demonstrative pronouns and nominalised modifiers can be modified by a demonstrative enclitic. Figure 3.1 shows the maximal lexical NP. The head of the phrase is the only obligatory element of the NP.

(*vata* ‘(too) much/many’) (POSS.N) (PL=) (CLF-POSS) **N** (-POSS/SP) (=DET) (MOD) (=PL)
(RC) (=DET)

Figure 3.1 Maximal lexical noun phrase

The following sections describes each of the elements of the NP in turn. Number marking is outlined in §3.4.1 and determiners in §3.4.2. Section 3.4.3 describes the different nominal modifiers, including adjectives (§3.4.3.1), quantifiers (§3.4.3.2), and numerals (§3.4.3.3). Finally, §3.4.4 and §3.4.5 discuss possession and relative clauses respectively.

3.4.1 Number marking

Number is not obligatorily marked on all nouns in Sudest. The higher a noun is on the animacy hierarchy, the more likely it is that the noun can (or must) take overt plural marking. Human nouns are nearly always marked for plural by at least one of the four plural markers; speakers generally do not accept unmarked human nouns for plural referents in elicitation. Other animate and inanimate nouns lower on the animacy hierarchy with a non-singular referent are not necessarily marked for plural. In these cases, number may be marked within the NP by a quantifier (§3.4.3.2) or a numeral (§3.4.3.3). Many non-singular NPs are not marked for number at all. In these cases, number may be indicated elsewhere in the clause, e.g. by a subject index (152) on the verb, an object index on the verb (153), on an adposition (154), or even by one of the classificatory verbs (155) which mark verbal number. See §4.2 for subject and object indexes, §3.3.6 for adpositions, and §5.2 for discussion of the classificatory verbs.

- (152) *vwakirakira=ma thi=raka-voro e ghamba-nji=ma*
 frog=DET 3PL=all-go.up REP Place-3PL.POSS=DET
 ‘the frogs all climb up to their place’ (frogstory_161214 124, 323.794 327.226)
- (153) *u=vile=nggi=ya vari*
 2SG=turn.over=3PL=YA stone
 ‘you turn over the stones’ (crab_girl_081115 108, 262.810 264.281)
- (154) *i=dage we=nggi=ya gha-Ø thegha*
 3SG=speak PREP=3PL=YA POSS.CLF1-3SG.POSS male.youth
 ‘she speaks to her young men’ (chicken_story_181015 004-5, 15.680 18.800)
- (155) *gamaina=ma i=mena i=langa-ra buku=ma*
 pubescent.girl=DET 3SG=come 3SG=GET.PL.FLEX-put book=DET
 ‘the girl comes (and) puts her books’ (put_stimuli_201015_01 092, 570.237 572.860)

There are four ways in which plurals may be overtly marked within a NP. They can be marked by an irregular or suppletive form (§3.4.1.1), a reduplicated form (§3.4.1.2), the plural proclitic *o=* (§3.4.1.3), and/or the third person plural object enclitic *=nggi* (§3.4.1.4).

3.4.1.1 Irregular and suppletive plurals

A small number of nouns have an irregular or suppletive plural form. There are just four irregular or suppletive pairs attested in the corpus and all are for human nouns: *lolo* ‘person’ and *gharighari* ‘people’ (156), *nggama* ‘child’ and *gamagai* ‘children’ (157),⁶² *u* ‘friend’ and *une* ‘friends’ (158), and *wevo* ‘young woman, wife’ and *wanakau* ‘young women’ (159). The base forms can only be interpreted as singular; the irregular or suppletive forms are therefore obligatory in plural contexts.

- (156) a. *mbanga lolo i=mare...*
 time person 3SG=die
 ‘when a person dies...’ (funeral_feasting_081015_01 008, 31.280 36.980)
- b. *gharighari=ke methi=mena e uma tine*
 people=SPKR.PROX 3PL.IMM.PST=come PREP garden inside
 ‘the people came to the garden’ (fp_stimuli_201015_01 133, 541.900 543.869)
- (157) a. *nggama=ke i=randa*
 child=SPKR.PROX 3SG=cry
 ‘the child cries’ (fp_stimuli_191015_02 105, 260.810 262.122)

⁶² The noun *nggama* ‘child’ may also be reduplicated to form a plural *nggama-nggama* ‘children’. There is a semantic distinction between the two plural forms, the irregular form *gamagai* refers to any group of two or more children while the reduplicated form *nggamanggama* is restricted to describing an individual’s offspring (biological or adopted).

- b. *gamagai thi=vutha*
 children 3PL=arrive
 ‘the children arrive’ (snake_passage_061215 037, 87.822 89.510)
- (158) a. *gha-n u=na ne i=ro-thuweiru*
 POSS.CLF1-2SG.POSS friend=ADDR.PROX FUT 3SG=sit.and-be.awake
 ‘your friend will stay and wake up’ (crab_girl_081115 021, 51.630 54.060)
- b. *gha-Ø une kero methi=ya-raka e*
 POSS.CLF1-3SG.POSS friends already 3PL.IMM.PST=all-go.PL PREP
ghemba
 village
 ‘all his friends had already gone to the village’
 (child_and_giant_201015 024, 60.140 61.894)
- (159) a. *wevo=ke i=li-ranggi=ya gha-Ø*
 young.woman=SPKR.PROX 3SG=GET.SG.FLEX-go.out POSS.CLF1-3SG.POSS
koat
 coat
 ‘the young woman takes off her coat’
 (put_stimuli_201015_02 131, 761.440 764.420)
- b. *wanakau=ko methi=njimbo yami-nji=ko*
 young.women=DIST 3PL.IMM.PST=wear k.o.grass.skirt-3PL.POSS=DIST
 ‘the young women wore their grass skirts’
 (traditional_dress_051214 049, 144.330 147.448)

3.4.1.2 Reduplicated plurals

Plural nouns can also be formed by way of reduplication. Reduplication patterns for forming plural nouns are the same as those for nominalisation (§3.3.3.1.1) and verb stems (§4.3). As with verbal reduplication and nominalising reduplication, only a small number of multisyllabic nouns attested in the corpus reduplicate the first syllable (7.8% or 4 nouns), as in (160) and (161). The majority of nouns reduplicate the first two syllables (90.2% or 46 nouns), as in (162) and (163). Reduplication is a productive process for deriving plurals, as can be observed by the reduplication of the loan word *pileti* ‘plate’ in (163).

- (160) *i=go-vaito=nggi=ya euni-wo=ma i=nga “ka-kaka*
 3SG=by.speaking-ask=3PL=YA NUM.CLF-two=DET 3SG=say RED-spirit/ghost
ghemi?”
 2PL
 ‘he asked the two (women), he said “are you ghosts?”’
 (mandumbunga_02_181016 200-201, 501.448 507.846)

- (161) *wanakau theuni-wo va ga-gamaina=nggi*
 female.PL NUM.CLF-two REM.PST RED-adolescent.girl=3PL
 ‘the two women were adolescent girls’ (bush_betelnut_011115 002, 5.499 10.015)
- (162) *mwata regha ande e wala-walau-ye=re umba-umbali-nji*
 snake one NEG1 PREP RED-tail-3SG.POSS=NEG2 RED-head-3PL.POSS
theghe-wo
 NUM.CLF-two
 ‘a snake did not have tails (it does have) two heads’
 (snake_story_101214 005-14, 22.310 29.880)
- (163) *a=bigi-ranggi=ya pile-pileti*
 1SG=GET.PL.CNTR-go.out=YA RED-plate
 ‘I take out the plates’ (kitchen_271214 032, 129.988 133.840)

Fifty-one plural nouns in the corpus are formed by reduplication. Elicitation and field notes indicate that the number of reduplicated plural forms far exceeds that number. It is not completely predictable which nouns may form a plural in this way, although attested reduplicated nouns show some patterns. All human and animate nouns tested have a reduplicated plural form with a small number of exceptions. The human nouns with an irregular or suppletive plural, as discussed §3.4.1.1 above, do not have a reduplicated plural form; neither does the noun *thegha* ‘(male) youth’. The latter may be due to the fact that a noun *theghathegha* ‘harvest season, year’ also exists. Generally, unmarked nouns that already contain reduplication (e.g., *kamkam* ‘chicken’ and *mbombo* ‘pig’) do not form plurals by reduplication. However, an exception to this is the plural *ka-kaka* ‘RED-ghost/spirit’ meaning ‘ghosts’ or ‘spirits’ (see (160) above). Many inanimate nouns also have a reduplicated plural form.

3.4.1.3 Kin term plurals with *o=*

Kin terms take a plural proclitic *o=*. If the kin term is directly possessed (§3.4.4.1), the proclitic attaches to the noun, as in (164). For indirectly-possessed nouns (§3.4.4.2), the clitic attaches to the possessive classifier (A&R, p. 327), as in (165).⁶³

- (164) *kaiwa-e o=rama-e*
 reason-3SG.POSS PL=father-3SG.POSS
 ‘because of his fathers (i.e. his father and forefathers)’
 (family_ties_081115 011, 31.050 32.610)

⁶³ The current corpus and elicitation data do not contain any tokens of indirectly possessed kin terms with the plural proclitic.

- (165) *amala=ma na o=gha-Ø boda-boda thi=ro-nja*
 man=DET and PL=POSS.CLF1-3SG.POSS RED-relative 3PL-sit-go.down
e vasiwa-e
 PREP side-3SG.POSS
 ‘the man and his nephews sat down beside her’ (Anderson & Anderson 1991: 68)

In addition to the proclitic, plural kin term nouns can also be optionally reduplicated for number, consider the two sentences in (166).

- (166)a. *o=lou-n=ko ne thi=vutha noroke?*
 PL=sibling.opposite.sex-2SG.POSS=DIST FUT 3PL=arrive today
 ‘will your brothers/sisters arrive today?’ (e_221015_01)
- b. *o=lo-lou-nggu theu-vari*
 PL=RED-sibling.opposite.sex-1SG.POSS NUM.CLF-four
 ‘I have four brothers/sisters’ (e_171015_03)

3.4.1.4 Plurals with =nggi

The final way in which plurality is explicitly marked in the NP is through the addition of the plural clitic =nggi. This appears to be an extended use of the third person plural object index that marks objects in VCs (see §3.3.4 and §4.2). The enclitic in its plural function is optional and can occur with any lexical noun. It cliticises either onto the head of the NP, as in (167) and (168), or to a modifier (when a modifier is present), as in (169) and (170).

- (167) *thangwethangwe le-Ø mbari=nggi*
 k.o.eagle POSS.CLF2-3SG.POSS spear=3PL
 ‘Thangwethangwe eagle’s spears’ (eagle_story_081115 026, 77.900 81.170)
- (168) *wevo=ma o ela=ma i=bigi-ranggi=ya*
 young.woman=DET or woman=DET 3PL=GET.PL.CNTR-go.out=YA
buku=nggi=ma
 book=3PL=DET
 ‘the young woman or the woman takes out the books’
 (put_stimuli_191015_01_02 034-5, 118.610 122.440)
- (169) *gha-Ø mbandi-mbandi vavana=nggi*
 POSS.CLF1-3SG.POSS red-warriors/clan.member some=3PL
 ‘some of his warriors’ (bwaindiya_151115 018, 63.770 68.760)
- (170) *wo une=ke gharighari thovu-thovuye=nggi*
 POSS.CLF1.1SG friends=SPKR.PROX people RED-people=3PL
 ‘my friends (are) good people’ (e_221015_01 007, 34.580 37.561)

The enclitic can cooccur with all other plural markers. In (171), =nggi combines with a suppletive plural and a reduplicated plural and in (172) it occur in combination with the kin term plural enclitic.

- (171) *i=nga* “*gharighari=nggi* *o* *ka-kaka=nggi?*”
 3SG=say people=3PL or RED-ghost=3PL
 ‘he said (are they) people or spirits?’”
 (mandumbunga_02_181016 163, 403.944 407.210)
- (172) *bwebwe* *o=rama-e* *moli=nggi*
 dad PL=father-3SG.POSS INTS=3PL
 ‘Dad’s true ancestors’ (family_ties_081115 032, 78.704 82.084)

3.4.2 Determiners

A defining feature of the Papuan Tip languages is their lack of reflexes for the Proto-Oceanic common articles (Lynch et al. 2002: 104). Postnominal elements that have been analysed as having an anaphoric, givenness, specificity and/or definiteness function, however, are relatively widespread among the cluster (e.g. Misima [W. Callister 1985b: 5], Gapapaiwa [McGuckin 2002: 300], Tawala [Ezard 1991: 143], Saliba [Cleary-Kemp 2006], Dobu [Lithgow 1985: 33]). In Sudest, there are seven determiner enclitics which can be divided into two groups based on their distribution. The first contains the determiners *=niye* and *=ninji*. The second consists of five elements: the determiner *=ma* and the four demonstrative enclitics (see §3.3.5 for discussion of the demonstrative enclitics).

Anderson and Anderson (1991: 10-1) analyse the determiner set *=niye* and *=ninji* as marking specificity and *=ma* as a givenness marker. Without undertaking a systematic investigation, the current corpus data appear to support this analysis in general terms. Anderson and Anderson’s analysis, therefore, is adopted throughout the current work. A future discourse-based investigation (and comparison of the determiners) is needed to give a more fine-grained understanding of their uses and functions.

As stated above, the enclitics *=niye* and *=ninji* are analysed as primarily marking specificity. They are also used in the formation of ordinal numbers (§3.4.3.3). They occur postnominally and attach to the noun (173), or to a modifier when present (174). Example (173) also illustrates the relative positions of the specificity markers to the second group of determiners, with the specificity markers always preceding the other determiners.

- (173) *iya* *oliman=niye=ke*
 DEM old.man=SP=SPKR.PROX
 ‘this is the old man’ (fp_stimuli_191015_02 097, 245.540 246.901)
- (174) *yawarumbu-nggu* *laghiye=niye*
 daughter-3SG.POSS big=SP
 ‘my eldest daughter’ (widow_251015 049, 139.076 141.637)

These clitics contain the third person singular and plural possessive pronouns *-ye* and *-nji* (§3.3.4, §3.4.4). The specificity marker *=niye* occurs in singular NPs, as in the above examples as well as in plural NPs (175). The second enclitic, *=ninji*, only occurs with plural nouns. However, it appears to be falling out of use, with only one token of it in the corpus (176), which comes from a text from one of the older speakers in the corpus. This contrasts with the 120 tokens of *=niye* in the corpus.

- (175) *tha-thanavu=niye iya ma=nga=ma*
 RED-custom=SP DEM 1SG.IMM.PST=say=DET
 ‘the customs (for dating) are these that I said’ (dating_081015 048, 125.270 127.550)

- (176) *Sinenabe na Takonabe utu-utu=ninji*
 pers.name and pers.sname RED-story=SP.PL
 ‘the story (lit. words) of Sinenabe and Takonabe’
 (sinenabe_and_takonabe_231115 001, 4.930 9.710)

The enclitic *=ma* has a paradigmatic relationship with the demonstrative determiners (§3.3.5). It attaches to the noun or nominal modifiers in the NP, and follows a specificity marker when one is present. The enclitic is used to indicate givenness.⁶⁴ It is used when an entity has already been introduced in the discourse and is therefore already known, or when the speaker assumes the hearer is familiar with the referent. In (177), the NP *gha une* ‘his friends’ first occurs without a determiner; a few clauses later, it occurs with the givenness marker, as the referent has already been introduced.

- (177) *gha-Ø une thi=nga “kero me=wa” [...]*
 POSS.CLF1-3SG.POSS friends 3PL=say already 3SG=go
gha-Ø une=ma thi=raka-iteten=Ø mbe
 POSS.CLF1-3SG.POSS friends=DET 3PL=leave=3SG still
i=ro-ghena-ghena ghe=ko
 3SG=stay.and-RED-sleep LOC=DIST
 ‘his friends said “he already went” [...]his friends left him, he was still staying and sleeping there’
 (child_and_giant_201015 013-20, 41.929 57.032)

In (178), *=ma* occurs on all of the three NPs. This is presumably because the speaker is describing a video that they watched together with the hearer and therefore assumes that they are known referents.

- (178) *ela=ma i=vatadi kandel=ma e righe=ma*
 woman=DET 3SG=build candle=DET PREP base/trunk=DET
 ‘the woman puts (lit. builds) the candle in the candlestick holder’
 (put_stimuli_191015_02_02 004-5, 27.435 31.262)

⁶⁴ The marker *=ma* is homophonous with the spatially deictic directional marker *=ma* ‘hither’ (§4.4.2). Interestingly, this parallels the Saliba anaphoric marker *wa* which is also homophonous with a directional marker *=wa* ‘towards addressee’ (Cleary-Kemp 2006: 6-7). Cleary-Kemp points out that this could be a case of heterosemy (see Lichtenberk 1991b) with both deriving from a common historical source. The fact that semantically and syntactically comparable morphemes in Sudest also show this potential heterosemy might suggest that this is a more widespread grammaticalisation pathway among the Papuan Tip languages.

3.4.3 Modifiers

The nominal modifiers include adjectives (§3.4.3.1), quantifiers (3.4.3.2) and numerals (§3.4.3.3). The modifiers occur postnominally in the NP, with the exception of the prenominal quantifier *vata* ‘many’. The plural enclitic *=nggi* ‘3PL’ or a determiner may attach to either the head noun or a modifier or both. Modifiers from all three groups are attested functioning as the head of a NP. It is uncommon for a noun to take two modifiers; however, the limited data indicate that there is some variation in the respective ordering of the modifiers. This can be seen in examples (179) to (181). In (179), the numeral precedes the adjective, while in (180) and (181) the adjective precedes the numeral.

- (179) *e ghemba regha togha*
 PREP village one new
 ‘at a new village’ (bush_betelnut_011115 065, 150.790 153.580)
- (180) *buket kelakelava regha*
 bucket white one
 ‘one white bucket’ (put_stimuli_231015 050, 400.650 403.400)
- (181) *mbombo laghiye umbwa-iwo*
 pig be.big NUM.CLF-two
 ‘two big pigs’ (e_251115_01 107)

3.4.3.1 Adjectives

The Sudest ‘adjectives’ are lexemes that also function as stative verbs⁶⁵. A small number of adjectives are unattested as stative verbs; systematic testing is needed to verify whether all property words have identical distribution patterns.⁶⁶ Examples (182) to (185) present the lexemes *molao* ‘(be) long/tall’ and *laghiye* ‘(be) big’ functioning predicatively and attributively.

- (182) *gha-Ø yamwaywamwa ne i=molao*
 POSS.CLF1-3SG.POSS appearance FUT 3SG=be.long/tall
 ‘its (a recording/story) appearance will be long (i.e. it will seem to long)’

⁶⁵ Like the zero-derivation nouns discussed in §3.3.1, the question of whether these should be considered stative verbs that are functioning attributively, members of a more flexible word class, or a distinct adjective word class is not considered further here. The term ‘adjective’ is used for convenience to refer to modifiers of a noun phrase that are neither quantifiers nor numerals and ‘state a property [...] and further specify the referent of a noun’ (Dixon 2010: 70). With that caveat in mind and in the interests of readability, the quotation marks are omitted elsewhere in the thesis.

⁶⁶ Whether all lexemes that function as stative verbs may also function adjectively in Sudest also remains an open question at the present. Property lexemes functioning attributively tend to be smaller, closed classes in Oceanic languages, Van Lier (2016) shows that lexemes for certain property concepts tend to occur in both function in Oceanic languages and others are restricted, only occurring as stative verbs.

(c_031116 322, 591.113 592.760)

- (183) *lolo=ma* *i=wo* *sises=ma* *na* *i=ten=a*
 person=DET 3SG=GET.SG.RIGD scissors=DET and 3SG=break=YA
wevo=ma *umbali-ye* ***mola-molao***
 young.woman=DET head/hair-3SG.POSS RED-long/tall
 ‘the person gets the scissors and cuts the woman’s long hair’
 (cb_stimuli_051016_01 136, 1507.700 1514.630)

- (184) *gamoi-ye=ko* *i=laghiye*
 stomach-3SG.POSS=DIST 3SG=be.big
 ‘her stomach is big’ (new_mother_251214 082-83, 194.260 198.094)

- (185) *i=wo* *umbwa* ***laghiye***
 3SG=GET.SG.RIGD stick big
 ‘she gets a big stick’ (crab_girl_081115 083, 206.010 208.783)

A defining morphosyntactic innovation of the Papuan Tip linkage is that nearly all languages ‘retain or reflect the addition of a pronominal possessive suffix to the adjective (both attributive and predicative) agreeing in person and number with the noun it describes’ (Lynch et al. 2002: 104). Some property lexemes in Sudest appear to reflect this and end in ‘ye’ (which is identical to the third person singular possessive pronominal *-ye*). Examples of this are given above in (184) and (185) with *laghiye* ‘(be) big’, and below in (186) and (187) with *thovuye* ‘(be) good’.

- (186) *ra-ghina-ghinagha* ***thovuye***
 AG-RED-travel.by.sea good
 ‘good sailor’ (canoe_021015 029, 65.055 66.310)

- (187) *gha-Ø* *une=ma* ***thovu-thovuye=ma*** *otam*
 POSS.CLF1-3SG.POSS friends=DET RED-good=DET all.the.time
i=munimu=Ø *wei-ye=nggi*
 3SG=drink.PROG=3SG PREP-3SG.POSS=3PL
 ‘his good friends, all the time he drinks (alcohol) with them’
 (fp_stimuli_201015_04 066, 206.750 209.980)

Unlike in some other Papuan Tip languages, the ending of the property words in Sudest is invariant. It does not change to reflect the number or person of the noun, as can be observed above in (187), in which the adjective modifies a noun with a plural referent. However, adjectives occurring in NPs with a plural referent are usually reduplicated, as in (187). This is the case even when there is no other overt expression of plural in the NP (see (183) above).

3.4.3.2 Quantifiers

A small group of nominal modifiers express quantity, and are therefore labelled as quantifiers. The quantifiers are listed below in Table 3.7. All occur postnominally save for *vata* ‘many’, which fills a prenominal position in the NP.

form	meaning	position in NP/VP
<i>mun</i>	‘a bit, few’	follows N in NP, also used adverbially following V ‘a bit’
<i>seiwo</i>	‘a bit, few’	follows N, also used adverbially following V ‘a bit, slowly’
<i>than</i>	‘another’	follows N
<i>thangari</i>	‘all, every, many (lit. 100)’	follows N
<i>wolaghiye</i>	‘all, every’	follows N
<i>lemoyo</i>	‘many’	follows N
<i>vata</i>	‘many’	precedes N
<i>ighanagha</i>	‘many, most’	follows N
<i>vavana</i>	‘other, some’	follows N

Table 3.7 Quantifiers

Examples of some of the quantifiers are given in (188) to (191). The only prenominal quantifier *vata* ‘many’ is presented in (188), while the remaining examples all contain postnominal modifiers.

- (188) *bwarogi=niye* *mbe* *ina-Ø* *we,* *ne* *u=thuwe*
 fish=SP still be.located-3SG.POSS PREP FUT 2SG=see
riwa-e=ko *vata* *le* *kin-kin*
 body-3SG.POSS=DIST many POSS.CLF2 RED-spear
 ‘that fish is still there, you will see it’s body’s many spines (lit. spears)’
 (feast_of_the_fish_271015 154, 397.570 402.840)
- (189) *thi=ngamwe* *mbugha-mbugha* *lemoyo*
 3PL=feed RED-dog many
 ‘they feed many dogs’ (hunting_261214 006, 14.900 17.450)
- (190) *gha-Ø* *mbandi-mbandi* *vavana=nggi*
 POSS.CLF1-3SG.POSS RED-clan.member/warrior some=3PL
 ‘some of his clan member/warriors’ (bwaindiya_151115 018, 63.770 68.760)
- (191) *bagi* *ghemba* *thangari* *kero* *thi=mban=Ø*
 shell.money.necklace village every/hundred already 3PL=GET.PL.RIGD=3SG
 ‘shell money, every village uses (lit. gets) it’ (bagi_181215 033-4, 104.170 109.590)

3.4.3.3 Numerals

Sudest has a decimal numeral system. The language has an elaborate system of numeral classification, with at least 66 attested classifiers that are selected based on qualities of the counted entity/ies. In the Papuan Tip languages, numeral classifiers are found in both Sudest and Nimowa, as well as all Kilivila-Misima languages save Misima (Owens & Lean 2018: 149). Like all of the Papuan Tip languages with numeral classifiers, Sudest numeral classifiers prefix onto the numeral

root. The numeral roots from one to ten are listed in (192). All of the numeral roots require a numeral classifier prefix in order to be grammatical, with the exception of the generic numeral *regha* ‘one’, which does not take a classifier prefix and can be used with any noun.

(192)	1	<i>ra, regha</i>	6	<i>wona</i>
	2	<i>wo, iwo</i>	7	<i>piri</i>
	3	<i>to</i>	8	<i>wa</i>
	4	<i>vari</i>	9	<i>siwo</i>
	5	<i>lima</i>	10	<i>yawora/o, -woro</i>

The numerals for multiples of ten, hundred and thousand are listed in (193). These are additive; multiples of ten are formed using the prefix *ye-*, multiples of one hundred with the prefix *sari-*, and multiples of a thousand with the prefix *ho-*:

(193)	20	<i>ye-wo</i>	80	<i>ye-wa</i>
	30	<i>ye-to</i>	90	<i>ye-siwo</i>
	40	<i>ye-vari</i>	100	<i>thangari</i>
	50	<i>ye-lima</i>	200	<i>sari-ye-wo</i>
	60	<i>ye-wona</i>	1000	<i>ho-sari-ye-ra</i>
	70	<i>ye-piri</i>	2000	<i>ho-sari-ye-wo</i>

The numeral classifiers are described in §3.4.3.3.1, followed by a discussion of cardinal (§3.4.3.3.2) and ordinal (§3.4.3.3.3) numbers.

3.4.3.3.1 Numeral classifiers

In order to count in Sudest, one needs to know what is being counted. There are at least 66 distinct classifier prefixes in Sudest. These classifiers can be divided into two groups: quality classifiers and repeaters. Quality classifiers refer to salient feature(s) of the counted item(s), such as gender, animacy, type of animal, shape, and substance. The repeaters ‘repeat’ the phonological form of the noun with which they occur (Bender & Beller 2006). Repeaters in Sudest only occur with the single noun they repeat or, occasionally, a second noun that is closely related semantically (e.g. *vari-* is the classifier used to count *vari* ‘stone(s)’). There are 34 attested numeral classifiers in the current data. Anderson and Anderson (1991: A1-5) list some of these, along with an additional 32 classifiers not found in the corpus, bringing the total identified Sudest numeral classifiers to 66. These divide nearly perfectly in half between quality classifiers and repeaters. Table 3.8 presents the quality classifiers (listed in approximate order of animacy).

classifier	count items
<i>theghe</i> -* [^]	men, people of unspecified gender, jaws, graves
<i>thejighe</i> -*	men
<i>theu(ni)</i> -* [^]	women, (NB: <i>eunda</i> ‘one’ is irregular)
<i>umbwa/umbo</i> -* [^]	sticks and stick-like items, trees, plants, many animals including fish (excluding birds and reptiles), single units of food, temporal units like weeks and months, years (e.g. 2004)
<i>man</i> -* [^]	birds, reef animals (excluding fish), insects, headlice, flying fox (not possum), prawns, beads (NB: <i>manda</i> ‘one’ is irregular)
<i>mara</i> -*	fish (ten or more)
<i>uye</i> -* [^]	giant clams, k.o. shark, banana bunches, banana seeds, banana bunch, areca nut bunches, betelnut bunches
<i>wabwi/wabu</i> -* [^]	groups of humans and birds, some groups of inanimate objects, e.g. coral, gravel
<i>nau</i> -* [^]	groups of animals such as birds, dogs, fish, and pigs (but not humans)
<i>tari</i> -* [^]	items with multiple, long parts. Includes plants such as sugarcane, stands of sago, pineapple, banana trees, mangroves, etc.
<i>the</i> -*	strings of items e.g. fish, flowers
<i>kiki/gigi</i> -* [^]	bodily extremities of both humans and animals, including legs, arms, fingers, toes, and claws
<i>we</i> -* [^]	sago bundles (as these are tied in pairs, <i>we-ra</i> ‘one’ denotes two bricks tied together, <i>we-to</i> ‘two’ denotes two bundles of two bricks, etc.)
<i>mbamba</i> -* [^]	bundles and bunches of things, books, packets of food (e.g. rice, sugar, food wrapped in a cover)
<i>mbun</i> -* [^]	axes, bush knives and knives, cutlery and eating implements (plates, mugs)
<i>mbwana</i> -*	floors/stories in a house, windows, levels of a verandah, tables of different heights
<i>nggamwa/nggawa</i> -* [^]	baskets (full or empty), bags, bilung
<i>tan</i> -* [^]	bagi, necklace, grass skirts, woven walls (NB: <i>tanda</i> ‘one’ is irregular)
<i>gethi</i> -* [^]	flat items including baked items, floorboards, and human/pig chests
<i>vale</i> -* [^]	round, flat items (e.g. baked sago, tapioca), wooden dishes, stingrays, computer screens
<i>vwara</i> -* [^]	round, flat items (e.g. pots, drums, containers, billycans)
<i>voghi</i> -* [^]	spherical objects (e.g. eyes, betelnut, coconut, mangos, guavas, pawpaw, eggs)
<i>(y)angga</i> -* [^]	branches, flat, flexible items such as leaves, money (only notes), paper, cloth and clothing, string, plastic, sails, mats
<i>du</i> - [^]	water and watery items (e.g. waters, puddles, creeks, rivers, pig wallows)
<i>ghe</i> -*	riches (money, greenstone axe, shell money), waves (of water)
<i>vo</i> -*	coconut (fruit)
<i>banggwara</i> - [^]	a half or part of something, e.g. part of a hand of bananas
<i>vunyi</i> -*	broken items
<i>vuvu</i> -* [^]	solid objects, broken sticks, pieces of cloth
<i>bubu</i> - [^]	sago loaves
<i>ghene</i> -*	nights
<i>mwathi</i> - [^]	only used to count <i>nogha</i> ‘k.o wooden dish’
<i>thara</i> -* [^]	hand of bananas

Table 3.8 *Quality numeral classifiers*, * indicates classifiers attested in the corpus or elicitation data, ^ indicates classifiers reported in Anderson and Anderson (1991: A1-4)

The remaining numeral classifiers are repeaters and take a shape which is identical to the item(s) they count. These are listed in Table 3.9 below.

classifier	count items	classifier	count items
<i>ida</i> -^	names	<i>ghabubu</i> -^	graves
<i>kavorere</i> -^	fingernails and toenails	<i>kamwathi</i> -^	paths, roads
<i>likeke</i> -^	fingers and toes	<i>njengge</i> -^	ditch drains
<i>mbonjiwo</i> -^	pus	<i>uma</i> -^	gardens
<i>ngganggara</i> -^	ribs	<i>walaghe</i> -^	footprints
<i>nggilenggile</i> -^	shoulders, front halves of carcasses	<i>nggolo</i> -*^	houses, cookhouses, etc.
<i>ghavwala</i> -*^	Y branches	<i>pwakau</i> -^	black paints
<i>lati</i> -^	narrow surface roots	<i>wangga</i> -*^	boats/transport
<i>vagaga</i> -^	plant stems	<i>mango</i> -^	low tides
<i>gogo</i> -^	holes	<i>manjamanjala</i> -^	lights
<i>gunugu</i> -^	valleys	<i>mundu</i> -^	smoke
<i>ragha</i> -^	reefs	<i>ghilolo</i> -^	dreams
<i>raurau</i> -^	islands	<i>goghaimba</i> -^	parables
<i>tholowo</i> -^	valleys	<i>mbanga</i> -*^	times (e.g. we did it four times)
<i>vari</i> -*^	stones	<i>mbaro</i> -^	for instructions, laws, rules
<i>wou</i> -^	mountains	<i>njiviya</i> -^	njiviya mortuary feasts

Table 3.9 *Repeater numeral classifiers*, * indicates classifiers attested in the corpus or elicitation data, ^ indicates classifiers reported in Anderson and Anderson (1991: A4-5)

3.4.3.3.2 Cardinal numbers

As noted earlier, cardinal numbers follow a decimal system and are morphologically complex. They are formed by combining a classifier prefix with a numeral base. They modify nouns, as in (194) and (195), or can function as the head of an NP as in (196) and (197). The numeral classifier *umbwa*- is used with a wide variety of entities. While it is presumably related to the noun *umbwa* ‘stick, tree’, it is not only used when counting many types of plants, sticks and stick-like entities, but is also for most animals (except for birds and reptiles) as well as units of food, as in (194).

- (194) *lolo=ma* *i=taga-ughi-ughi=ya* *ghaningga=ma* ***umbwa-ra***
 person=DET 3SG=by.striking-RED-smash=YA food=DET NUM.CLF-one
 ‘the person is smashing one piece of food’
 (cb_stimuli_051016_01 119, 1272.741 1276.930)

In contrast, the numeral classifier *vale*- is selected based on the shape of the entity, and is only used with round, flat entities. In (195) it is used in an NP that refers to a certain type of cassava cake that is wrapped in banana leaves and baked in a hot stone oven. The classifier is also used with other flat items like wooden plates, stingrays and even computer screens.

- (195) *wo=vakatha* *vwala-vwala=ma* ***vale-iwo=ma***
 1EXCL=make RED-hot.stone.baked.good=DET NUM.CLF-two=DET
 ‘we made two baked rounds (of cassava cake)’
 (stone_cooking_251015 114, 309.820 312.650)

The numeral classifier *mbamba-* is used with bundles and bunches of things wrapped in a cover, including books as in (196). The classifier (*th*)*euni-* only occurs with human women (197).

- (196) *lolo=ma* *i=langa=nggi=ya* *buks* *ko* ***mbamba-ra***
 person=DET 3SG=GET.PL.FLEX=3PL=YA books but NUM.CLF-one
i=do bu
 3SG=fall.down
 ‘the person holds (lit. gets) books but one falls down’
 (put_stimuli_231015 045-6, 368.990 375.008)

- (197) ***euni-wo=ko*** *ida-ida-nji*
 NUM.CLF-two=DIST RED-name-3PL.POSS
 ‘the two (girl)’s names’ (mandumbunga_02_181016 212, 537.102 538.683)

In some cases, the invariable numeral *regha* ‘one’ is used instead of a morphologically complex numeral with a numeral classifier and the numeral base *ra* ‘one’. It is generally used when introducing a new referent. In this context, it can be translated as ‘a/an’, with a comparable function to an indefinite article. For example, in (198), the speaker is beginning to tell a story and introduces the protagonist, a snake, for the first time.

- (198) *a=utu=nga* *mwata* ***regha***...
 1SG=speak-TR snake one
 ‘I (will) talk about a snake...’ (snake_story_101214 005, 22.310 24.640)

In contrast, morphologically complex forms for ‘one’ are generally used when there is an emphasis on the specific number of a particular referent involved in the event or situation. This is the case in (194) and (196) above. In (194), the speaker specifies that only one piece of food (a carrot) is smashed (although there are multiple carrots lying on the table in the stimulus video); in (196) it is only one book of many that falls onto the ground. However, in some instances in the data, *regha* is used where a number with a numeral classifier might be anticipated, as in (199). Here, the two protagonists are introduced in the first IU. Only after that is *regha* used when referring to them, instead of the (irregular) numeral *eunda* ‘one’ used with for human women.

- (199) *wanakau* *theuni-wo* *va* *ga-gamaina=nggi* ***regha***
 young.women NUM.CLF-two REM.PST RED-unmarried.girl=3PL one
va *numombwalambwala* ***regha*** *wadawada*
 REM.PST non.magical.person one witch
 ‘two young women were unmarried girls; one was a non-magical person and one a witch’
 (bush_betelnut_011115 002-4, 5.499 14.680)

Numbers above ten are additive. Numbers 11 to 19 are formed by adding numerals one to nine after the numeral ‘ten’ (200). For these larger numbers, the classifier repeats and occurs on each numeral. Such repetition of numeral classifiers in a single number is reported in at least one Papuan Tip language (Kilivila (Kiriwina)) (Lawton 1993: 155), although it is not discussed in crosslinguistic literature (e.g. Aikhenvald 2000; Owens et al. 2018).

- (200) *mbwana-yawora mbwana-ra*
 NUM.CLF-ten NUM.CLF-one
 ‘eleven (windows)’ (mandumbunga 02 181016 519, 1304.806 1306.969)

Multiples of ten (i.e. 20, 30, 40, etc.) are formed by inserting the prefix *ye-* between the classifier prefix and numeral root. Numbers between multiples of ten (i.e. 21, 22, 23 etc.), take the conjunction *na* ‘and’ and a numeral from one to nine, as in (201).

- (201) *njin* *tari-ye-wo* *na* *tari-to*
flower NUM.CLF-tens-two and NUM.CLF-three
'twenty-three flowers (attached to a plant) (e_161215)

Numbers from 100 to 199 are formed with *thangari* ‘one hundred’, as in (202) and (203):⁶⁷

- (202) ...*amba* *ne* *u=ranggi* *u=nggau=a* *morouma* ***mara-thangari***
 then FUT 2SG=go.out 2SG=spear=YA k.o.fish NUM.CLF-one.hundred
e *njighi*
 PREP sea
 ‘...then you will go out (and) spear 100 morouma fish in the sea’
(mandumbunga_061215_164-6, 470.459 475.604)

- (203) *bwadibwadi* *vo-thangari* *vo-yawaro* *na* *vo-piri*
 coconut NUM.CLF-one.hundred NUM.CLF-ten and NUM.CLF-seven
 ‘one hundred and seventeen coconuts’ (e 161215)

Numbers 200 and above take the prefixes *-sari* ‘hundreds’ and *-ye* ‘-tens’ like in (204) with the repeater numeral classifier *wangga*-.

- (204) *wangga-wangga* *wangga-sari-ye-to* *na* *wangga-lima*
RED-boat NUM.CLF-hundreds-tens-three and NUM.CLF-five
'three hundred and five boats' (e_161215)

Numbers 1000 and above are formed by adding the prefix *ho-* ‘thousands’ before the prefixes *sari-* ‘hundreds’ and *ye-* ‘tens’. Numbers in the thousands do not take a numeral classifier, but unless the number is exactly 1000, 2000, etc., the following numerals will contain a numeral classifier, like in (205).

⁶⁷ *Thangari* is also a quantifier meaning ‘all, every’ (see §3.4.3.2).

- [illegible]

3.4.3.3.3 Ordinal numerals

Ordinal numbers are formed through the addition of one of the specificity determiners (§3.4.2) to the cardinal form, as shown in (206) and (208).

- (206) *thaga theghe-wo=niye*
 feast NUM.CLF-two=SP
 ‘the second feast’ (funeral feasting_081015_01 123, 357.212 361.180)

- (207) *mbanga-wo=niye*
 NUM.CLF-two=SP
 ‘the second (time)’ (crab_girl 081115 065, 161.910 163.842)

The plural specificity enclitic =*ninji* only occurs in the single, elicited example presented in (208) and it is unclear if there is a functional difference between the use of the two enclitics in ordinals.

- (208) *bagodi=ko ghe-vari=ninji=ko*
 wave=DIST NUM.CLF-four=SP.PL=DIST
 ‘the fourth wave’ (e 161215)

3.4.4 Possession

There are two types of constructions for expressing possession in Sudest. They will be referred to as ‘direct’ and ‘indirect’ possession (cf. Lichtenberk 1985; Lynch et al 2002: 40). In direct possession, a possessive pronoun suffix occurs directly on the possessed noun. In indirect possession, the possessive pronoun is suffixed onto a possessive classifier which precedes the possessed noun. Directly possessed nouns are generally entities closely associated with the possessor (such as body parts and family), while all other nouns are indirectly possessed. Both possessive constructions involve the possessive pronominal suffixes already presented in §3.3.4. They are repeated below in Table 3.10. The suffix indicates the person and the number of the possessor.

	1INCL	1EXCL	2	3
SG		-nggu	-n, -Ø	-ye, -e, -Ø
PL	-nda	-ma	-mi	-nji

Table 3.10 Possessive pronominal suffixes

3.4.4.1 Direct possession

Entities considered to be intrinsically associated with a possessor occur in directly-possessed constructions. In these constructions, a possessive pronominal suffix attaches to the possessed noun (possessum). When a possessor noun is present, it precedes the possessum. This is a typical feature of western Melanesian Oceanic languages (Lynch et al. 2002: 41). Nouns that take direct possession, are obligatorily possessed and fall into semantic groups typical of inalienable possession in Oceanic languages (see Lynch et al. 2002: 41). In Sudest, most body-part and locative-part nouns, as well as consanguineal, kin terms occur in direct possessive constructions. A small number of affinal kin terms and abstract nouns also take direct possession. In the current data, there are 39 nouns that take direct possession marking.

Examples (209) and (210) show directly-possessed body-part nouns. As well as physical body parts, other ‘person parts’ like *ida* ‘name’, *yawali* ‘life’, *ghamba* ‘place’, and *nuwa* ‘desire’ take direct possession. In (211), both the possessor *ghamba* ‘place’ and the possessum *ida* ‘name’ are directly-possessed person-part nouns.

- (209) *a=ngggiya e nima-nggu*
 1SG=sew PREP hand-1SG.POSS
 ‘I sew by hand (lit. with my hand)’ (education_241214 020, 65.762 70.070)

- (210) *i=nga “ngingi-n=na i=bwadi”*
 3SG=say tooth/teeth-2SG.POSS=ADDR.RPOX 3SG=be.black
 ‘he said “your tooth is black”’ (child_and_giant_201015 103, 273.561 277.120)

- (211) *ghamba-nggu=ko ida-e Yeina*
 place-1SG.POSS=DIST name-3SG.POSS place.name
 ‘my place’s name is Yeina’ (family_ties_081115 003-4, 10.240 13.292)

There is an overlap between many locative-part nouns and body-part nouns. When they have an inanimate possessor, they function as locative-part nouns, as in (212) to (214).

- (212) *i=vutha e nggolo ghadidi-ye*
 3SG=arrive PREP house side-3SG.POSS
 ‘he arrives at the house’s side’ (skeleton_181015 024, 62.583 64.997)

- (213) *amba i=ruku=wo e gherei-nji*
 then 3SG=run=thither PREP behind-3PL.POSS
 ‘then it runs away behind them’ (frogstory_161214 122-3, 319.950 323.794)

- (214) *wevo=ma i=wo apel=ma e buk=ma*
 young.woman=DET 3SG=GET.SG.RIGD apple=DET PREP book=DET
vwata-nji
 back/top-3PL.POSS
 ‘the woman gets the apple from on top of/off the books’

(put_stimuli_201015_02 163, 982.360 985.110)

The examples in (215) and the second possessed noun in (216) show directly-possessed consanguineal kin terms, while the first directly-possessed noun in (216) and the possessed noun in (217) show two of only three attested affinal kin terms that take direct possession.⁶⁸

- (215) *lou-nda* *na* *ghagha-nda*
 opposite.sex.sibling-1INCL.POSS and same.sex.sibling-1INCL.POSS
 ‘our sister and brother/our brother and sister’ (kinship_071015 019, 61.480 66.720)

- (216) *mboriya-n=a* *umoru=ko* *i=vangu*
 opp.sex.in.law.gen.removed-2SG.POSS=YA young.man=DIST 3SG=lead/marry
yawarumbu-n=ko
 daughter-2SG.POSS=DIST
 ‘your son-in-law is the man married (to) your daughter’
 (kinship_071015 056, 148.144 151.316)

- (217) *umoru=ko* *ghendiya-e*
 young.man=DIST same.sex.in.law.gen.removed-3SG.POSS
 ‘that man’s father-in-law’ (fp_stimuli_191015_07 042, 104.980 107.770)

The noun *gha* ‘food’ also occurs in directly-possessed constructions, as in (218). This noun is possibly the historical source for the first possessive classifier *gha* (§3.4.4.2 below).

- (218) *methi=mbimbi* *gha-nji* *e* *thanggangali-nji=ke*
 3PL.IMM.PST=clutch food-3PL.POSS PREP armpit-3PL.POSS=SPKR.PROX
 ‘they clutched their food in their armpits (to warm it)’
 (mandumbunga_061215 035-6, 106.393 109.680)

See also §3.5.2.4 for discussion of the directly-possessed noun *valikaiwa* ‘possibility’ in non-verbal predicates.

3.4.4.2 Indirect possession

The majority of nouns occur in indirect possessive constructions. In this construction type, the possessive pronominal suffix attaches to a possessive classifier which precedes the possessed noun, and the possessed noun remains uninflected. There are two possessive classifiers: *gha* and *le*, which are labelled ‘classifier one’ and ‘classifier two’ respectively.

Classifier one, *gha* ‘POSS.CLF1’, occurs in possessive constructions with nouns denoting comestible and potable items, along with items related to their preparation and consumption. This

⁶⁸ The third noun is *mwane-nggu* ‘husband-1SG.POSS’, however, speakers say they prefer the indirectly possessed *lo umoru* ‘POSS.CLF2.1SG young man’ meaning ‘my husband’. *Mwane* does not occur in the corpus.

classifier also occurs with nouns for items considered to be intimately – although not intrinsically – related to the possessor, such as clothing, baskets and some abstract nouns, particularly those describing intimate qualities or habits. The classifier is presumably etymologically derived from or related to the directly possessed noun *gha* ‘food’ (see (218) above) and/or the verb *ghan* ‘to eat’. Table 3.11 presents the classifier in combination with the possessive pronominal suffixes. The first-person singular form *wo* is irregular both in the shape of the classifier and in that it does not take a pronominal suffix. The two third person singular forms appear to be in free variation.

	1INCL	1EXCL	2	3
SG		<i>wo</i>	<i>gha-n</i>	<i>gha-Ø, gh-e</i>
PL	<i>gha-nda</i>	<i>gha-ma</i>	<i>ghe-mi</i>	<i>gha-nji</i>

Table 3.11 The possessive classifier *gha* ‘classifier 1’

Examples (219) to (221) show food nouns and nouns for food storage and kitchenware heading indirectly-possessed constructions with *gha* ‘POSS.CLF1’.

- (219) *ela=ma* *i=wo-ranggi=ya* *gha-Ø* *bwagaran*
 woman=DET 3SG=GET.SG.RIGD-go.out=YA POSS.CLF1-3SG.POSS pawpaw
e *gha-Ø* *ghavo-ghavo=ma* *tine*
 PREP POSS.CLF1-3SG.POSS RED-cover=DET inside
 ‘the woman takes out her pawpaw from inside its wrapper’
 (put_stimuli_191015_02_02 039-41, 294.610 300.110)

- (220) *ndiya* *kero* *thi=ghan-vao* *wo* *ndiya* *Mei*
 mustard already 3PL=eat-COMPL POSS.CLF1.1SG mustard personal.name
 ‘mustard, they already finished eating my mustard, Mei’
 (c_031116 076, 151.390 154.281)

- (221) *lolo* *i=thin=a* *gha-Ø* *ndeghi*
 person 3SG=GET.SG.CNTR=YA POSS.CLF1-3SG.POSS cup
 ‘a person gets their (full) cup’ (put_stimuli_191015_01_02 063-4, 238.279 241.510)

In (222) and (223), clothing items occur in possessive constructions with *gha*. (224) shows the classifier with a less tangible entity *thanavu* ‘custom, habit’.

- (222) *gha-ma* *tabwayo*
 POSS.CLF1-1INCL.POSS headdress
 ‘their headdresses’ (traditional_dress_051214 056, 159.660 163.352)

- (223) *i=njimbo* *gh-e* *ri*
 3SG=put.on POSS.CLF1-3SG.POSS loincloth
 ‘he put on his loincloth’ (mandumbunga_02_181016 141 348.275 349.920)

- (224) *wo* *thanavu=ma* *i=thari*
 POSS.CLF1.1SG custom/habit=DET 3SG=be.bad
 ‘my ways/habits are bad/my bad habits’
 (fp_stimuli_191015_02 050, 125.030 126.896)

The possessive classifier *gha* also forms a complex phrase meaning ‘oneself’ with the particle *mbe* ‘still, yet’ and the numeral *regha* ‘one’:

- (225) *gha-∅* *mbe* *regha* *engge* *i=utu*
 POSS.CLF1-3SG.POSS still/yet one just 3SG=speak
 ‘just (to) himself, he spoke’ (child_and_giant_201015 063, 159.600 162.823)

- (226) *kaiwa-∅* *wo=njimbukiki=ya* *gha-ma* *mbe*
 reason-3SG.POSS 1EXCL-look.after=YA POSS.CLF1-1EXCL.POSS still/yet
regha
 one
 ‘because we look after ourselves’ (moving_291214 025, 43.646 45.774)

The second possessive classifier is *le* ‘POSS.CLF2’; it is used with all remaining nouns. Table 3.12 shows possessive classifier two with the possessive pronominal suffixes. The first person singular form of classifier two is irregular in form just like its classifier one counterpart discussed above and likewise does not take a possessive pronoun suffix. The first-person inclusive forms are also irregular. The classifier for first person inclusive does not take a pronominal suffix.

	1INCL	1EXCL	2	3
SG		<i>lo</i>	<i>le-n</i>	<i>le-∅</i>
PL	<i>la</i>	<i>la-ma</i>	<i>le-mi</i>	<i>le-nji</i>

Table 3.12 The possessive classifier *le* ‘classifier 2’

Examples of possessive constructions with classifier two are given in (227) to (231). Nearly all affinal kin nouns occur in indirectly possessed constructions with the classifier *le* ‘POSS.CLF2’. Examples (227) to (229) show examples with affinal kin nouns. The nouns *wevo* ‘young woman’ and *umoru* ‘young man’ mean ‘wife’ and ‘husband’ respectively when in a possessive construction with the classifier, as in (227) and (228). The possessive constructions *lo wevo* ‘my wife’ and *le wevo* ‘his wife’ (227) contract to *lovo* and *levo* respectively.

- (227) *levo=ma* *i=mare*
 POSS.CLF2:young.woman=DET 3SG=die
 ‘his wife dies’ (couples_story_101214 006, 25.150 27.920)

- (228) *lo* *umoru=ma* *i=ngginau=ya* *lo*
 POSS.CLF2.1SG.POSS young.man=DET 3SG=build=YA POSS.CLF2.1SG.POSS
nggolo
 house
 ‘my husband built my house’ (sweeping_011115 023, 51.040 54.059)

- (229) *i=dage* *we* *le-∅* *ghai*
 3SG=speak PREP POSS.CLF2-3SG.POSS maternal.uncle
 ‘he speaks to his maternal uncle’ (mandumbunga_02_181016 035, 104.989 107.540)

- (230) *ande e la-ma ghenonggu=re*
 NEG1 PREP POSS.CLF2-1EXCL.POSS dustpan=NEG2
 ‘we don’t have a dustpan (lit. our dustpan)’ (moving_291214 032, 60.966 62.646)
- (231) *le-∅ ghambi-ghambi ne i=vuyewo*
 POSS.CLF2-3SG.POSS RED-give.birth FUT 3SG=be.heavy
 ‘her labour will have problems’ (new_mother_251214 013-4, 35.740 40.563)

Some nouns occur in possessive constructions with either classifier. In these cases, the classifier specifies the intended use of the possessed item by the possessor, for example *wo mbwa* ‘my (drinking) water’ contrasts with *lo mbwa* ‘my (washing/watering) water’ and *wo kamkam* ‘my chicken (for eating)’ contrasts with *lo kamkam* ‘my chicken (for raising/gifting/etc.)’. The nouns *thegha* ‘youth’ can have the same two senses as its English counterpart. In (232), it takes classifier one *gha* and denotes young male individual(s) while in (233), with classifier two *le*, the noun refers to a particular period of a man’s life.

- (232) *i=dage we=nggi=ya gha-∅ thegha*
 3SG=speak PREP=3PL=YA POSS.CFL1-3SG.POSS youth
 ‘she speaks to the (lit. her) youths’ (chicken_story_181015 004-5, 15.680 18.800)
- (233) *e le-∅ thegha=ko tine kero i=ghe*
 PREP POSS.CLF2-3SG.POSS youth=DIST inside already 3SG=marry
 ‘in his youth, he already married’ (fp_stimuli_191015_05 020-1, 39.150 41.310)

3.4.5 Relative clauses

Relative clauses (RC) follow the noun. There is no dedicated relative marker in Sudest; relative clauses may be entirely unmarked. More frequently, the RC is marked by either a demonstrative or givenness determiner on the common argument (CA) which is repeated at the end of the RC.

Sudest relative clauses have not yet been investigated in great depth. However, the corpus shows that the CA has a range of functions, both in the main clause (MC) and RC. In (234), the CA is the S of the MC as well as the RC. The givenness determiner *=ma* marks both the CA and end of the RC. The CA is bolded in both the MC and the RC.

- (234) [***thovuye=niye=ma*** [*maa va i=nda=ma*]_{RC}]_{NP} *i=dage we=ya*
 good=SP=SP=DET NEG REM.PST 3SG=burn=DET 3SG=speak PREP=YA
rumbu-nji=ko
 grandparent/grandchild-3PL.POSS=DIST
 ‘the good (one), (who) was not burnt, spoke to her grandmother’
 (mandumbunga_02_181016 255-7, 651.994 657.479)

The CA in both (235) and (236) is the O of the MC and the S of the RC. In (235), the end of the RC does not take a determiner.

- (235) *gha=ma* *une* *va* *thi=rangi=ya*
 POSS.CLF1-1EXCL.POSS friend REM.PST 3PL=cry=YA
[la=ma *boda* *[va* *i=mare]*_{RC}_{NP}
 POSS.CLF2-1EXCL.POSS relative REM.PST 3SG=die
 ‘our friends mourned/cried for our relative (who) died’
 (pigs_251214 041-2, 104.560 109.347)
- (236) *thiye* *ne* *thi=tuthi-tuthi=ya* *[gharighari* *thegha=ko*
 3PL FUT 3PL=RED-select=YA people youth=DIST
*[thi=raka-vutha=ko]*_{RC}_{NP}
 3PL=go.PL-arrive=DIST
 ‘they will select the young men (who) are arriving’ (context: women select the most attractive men with the most magic to go trade with their neighbours)
 (funeral_feasting_081015_02 078, 203.420 207.120)

In (237) and (238), the CA is the O in both the MC and RC:

- (237) *ela=ma* *i=taga-ten=a* *[kwama=ma*
 woman=DET 3SG=by.striking-break=YA cloth=DET
*[methi=nggari=Ø=ma]*_{RC}_{NP}
 3PL.IMM.PST=tie=3SG=DET
 ‘the woman breaks the cloth (that) they tied’
 (cb_stimuli_101116 053, 669.719 673.674)
- (238) *u=thuwe* *[jin=ke* *[a=li-kitho=Ø=ke]*_{RC}_{NP}?
 2SG=see flower=SPKR.PROX 1SG=GET.SG.FLEX-hang=3SG=SPKR.PROX
 ‘you see the flower that I hung up?’
 (mandumbunga_02_181016 104, 260.916 262.969)

The CA in (239) is a temporal adjunct in the MC and S in the RC.

- (239) *lolo=ko* *iya=ko* *menda=va* *i=vutha* *[wik=ko*
 person=DIST DEM=DIST yesterday=REM.PST 3SG=arrive week=DIST
[va *ma* *i=wa=ko]*_{RC}_{NP}
 REM.PST already 3SG=go=DIST
 ‘that person arrived the week that already went’
 (e_251115_01)

3.5 Clauses

This section describes the basic features of verbal clauses (§3.5.1) and non-verbal clauses (§3.5.2).

3.5.1 Verbal clauses

Inflected verbs can, and frequently do, form complete clauses in Sudest. Each inflected verb takes an obligatory subject-index proclitic (240) and transitive verbs take an optional object-index enclitic (241).

- (240) *i=ghena*
 3SG=sleep
 ‘he sleeps’ (bwaindiya_151115 123, 314.231 317.410)

- (241) *i=vaidi=nggi*
 3SG=find=3PL
 ‘he finds them’ (fp_stimuli_191015_01 136, 514.655 515.680)

When lexical arguments do occur, the unmarked constituent order is SV for intransitive clauses (242) and AVO in transitive clauses (243). As in many Oceanic languages, there is no evidence of a verb phrase that includes lexical objects along with the verb (see also §4.1).

- (242) *umbaumbala i=vutha*
 giant 3SG=arrive
 ‘the giant arrives’ (child_and_giant_201015 032-3, 78.480 84.421)

- (243) *nggama=ma i=thuwe=ya diya=ko yangga-yangga*
 child=DET 3SG=see=YA deer=DIST RED-branch
 ‘the child sees deer antlers’ (frogstory_161214 082-3, 214.400 218.186)

Adjuncts generally follow the VC. They are marked by adpositions (244) with the exception of place names (245) and a small number of other locational nouns (see §3.3.6.1).

- (244) *wadawada=ma i=njogha e ghemba*
 witch=DET 3SG=go.back PREP village
 ‘the witch goes back to the village’ (bush_betelnut_011115 052, 122.120 124.400)

- (245) *wo=yaku Vuwo*
 1EXCL=stay place.name
 ‘we stay at Vuwo’ (moving_291214 008, 11.893 14.000)

As VCs and verbal clauses are the focus of this study, they are not discussed further here (see chapter 4 for further discussion of the VC and its slots). The occurrence of lexical arguments in verbal clauses is discussed further in §4.2.

3.5.2 Non-verbal clauses

A non-verbal clause consists of a non-verbal predicate and a subject (Dryer 2007).⁶⁹ There are a number of types of non-verbal clauses in Sudest. There is no copular in Sudest and non-verbal predicates express relations typical of verbless clauses crosslinguistically (see Dixon 2010) including: identity and attribution (§3.5.2.1), location (§3.5.2.2), and possession (§3.5.2.3). There are also non-verbal predicates that express possibility (§3.5.2.4) and desire/need (§3.5.2.5). When

⁶⁹ Dixon (2010) analyses verbless clauses as containing two arguments; a verbless clause subject and verbless clause complement with an empty predicate slot.

present, TAM particles (§3.3.7) precede the non-verbal predicate and the discontinuous negation markers (§3.7) surround it.

3.5.2.1 Identity and attribution clauses

Relations of identity and attribution are expressed by juxtaposition of a subject and non-verbal predicate. To express logical identity, the non-verbal predicate follows the subject, as in (246) and (247).

- (246) *mbombo va ighai-ye*
 pig REM.PST cousin-3SG.POSS
 ‘Pig was his cousin’ (pig_and_dugong_101214 009, 42.360 44.874)

- (247) *ida-e Njiviya*⁷⁰
 name-3SG.POSS k.o.feast
 ‘its name is Njiviya’ (funeral_feasting_081015_01 087-8, 254.080 260.380)

In the case of classification, the subject can precede the non-verbal predicate, as in (248), but more frequently in the corpus the order is reversed and the subject follows the non-verbal predicate, as in (249).

- (248) *ghino ra-ghambwe-ghambwera*
 1SG AG-RED-be.sick
 I am a sick person (with leprosy)’ (lizard_and_possum_121015 035-6, 97.18 100.820)

- (249) *lolo ghino*
 person 1SG
 ‘a person am I (not a ghost)’ (mandumbunga_02_181016 206, 519.214 521.915)

Examples (250) and (251) show non-verbal clauses with attributive relations, in which the inherently reduplicated roots *bwabwana* ‘(be) grown (up)’ and *boboma* ‘(be) forbidden, sacred’ function nominally. The morphemes also function as intransitive stative verbs (§3.3.2.1) and as postnominal modifiers (§3.4.3.1). However, here they are not functioning verbally, as they do not take a subject index, an obligatory element in all verbal clauses. They are also not modifying the preceding nouns (*nggama* ‘child’ and *bigi-bigi* ‘RED-thing’), as they are separated from them by TAM particles. TAM particles do not occur within NPs, but they do precede both verbal and non-verbal predicates.

⁷⁰ *Njiviya* is the first of three mortuary feasts that are traditionally held for a person. It occurs shortly after death. See Lepowsky (1993: 241 – 246) for an account of a *Njiviya* feast.

- (250) *nggama kero bwabwana*
 child already grow
 ‘the child is already grown’ (fp_stimuli_191015_02 201, 562.098 563.857)
- (251) *bigi-bigi ighanagha me boboma-nji e uma*
 RED-thing many IMM.PST forbidden/sacred-3PL.POSS PREP garden
tine
 inside
 ‘many things were sacred in the garden’ (menstruation_081015 030-1, 90.791 96.630)

3.5.2.2 Location clauses

Location clauses are headed by the directly-possessed noun *ina* ‘location’ followed by a locative predicate: most frequently, a PP with *e* ‘to, from, with’ (§3.3.6.1), the locative base *ghe* ‘here, there’ (§3.3.5.2), or a place name.⁷¹ In (252) and (253) the locative predicate is a PP with *e* ‘to, from, with’. Example (252) shows a token with a possessor NP *amala=ma* ‘man=DET’ preceding the subject, while in (253) the possessor of *ina* ‘location’ is only indicated by the possessive suffix *-nji* ‘3PL.POSS’.

- (252) *amala=ma mbe ina-Ø vara e wangga=ma vwata-Ø*
 man=DET still/yet location really PREP boat=DET top-3SG.POSS
 ‘the man was still in the canoe (lit. the man’s location is in the canoe)’
 (mandumbunga_02_181016 435, 1103.826 1106.173)
- (253) *mbe-ne ina-nji e ghemba*
 still/yet-FUT location-3PL.POSS PREP village
 ‘they are still in the village (their location is the village)’
 (fp_stimuli_191015_02 188, 521.933 523.670)

The following three examples show location clauses with different types of predicates including a place name (254), the locative base *ghe* ‘here, there’ (255), and the noun *bode* ‘below’ (256).

- (254) *iye kero ina-Ø Njira*
 3SG already location-3SG.POSS place.name
 ‘he was already in Njira (lit. his location is Njira)’
 (bwaindiya_151115 115, 296.628 298.586)
- (255) *tina-nji maa ina-Ø ghe=ke*
 mother-3PL.POSS NEG location-3SG.POSS LOC=SPKR.PROX
 ‘their mother is not here (lit. their mother’s location is not here)’
 (fp_stimuli_191015_01 036, 131.100 133.090)

⁷¹ Non-verbal locational clauses with adpositional predicates are quite widespread in Austronesian languages, e.g. Arosi (Lynch & Horoi 2002: 569), Taba (Bowden 2005: 777-8), and Indonesian (Sneddon et al. 2010: 246).

- (256) *kero ina-nda bode*
 already location-1INCL.POSS down/below
 ‘we are already below (lit. our location is already below)’
 (engginas_story_231016 037, 74.994 76.750)

3.5.2.3 Possession clauses ‘have’

Existential clauses for expressing predicate possession in Sudest, like some location clauses, also involve the preposition *e* ‘to, from, with’. In this construction, the preposition follows an optional NP denoting the possessor and precedes a possessive NP indicating the possessum. Examples (257) and (258) both have possessor NP preceding the PP. However, it is far more common for this to be omitted as in (259) when the possessor is easily retrievable from the discourse. In predicate possession clauses the preposition *e* ‘to, from, with’, can best be translated as ‘have’.⁷²

- (257) *thegha=nggi=ko iya=ko kero e le-nji*
 youth=3PL=DIST DEM=DIST already PREP POSS.CLF2-3PL.POSS
vurigheghe
 strength
 ‘those youths already had strength/powers (from participating in rituals for successful trading)’
 lit: ‘those youths already with their powers’
 (funeral_feasting_081015_02 097-8, 246.865 250.130)

- (258) *mwata regha ande e wala-walau-ye=re*
 snake one NEG1 PREP RED-tail-3SG.POSS=NEG2
 ‘a snake did not have (two) tails’
 lit: ‘a snake not with tails’ (snake_story_101214 005-6, 22.310 27.260)

- (259) “*e lo vighathi ida-e Peter*”
 PREP POSS.CLF2.1SG boy/girlfriend name-3SG.POSS pers.name
 ‘I have a boyfriend, his name is Peter’
 lit: “with my boyfriend, his name is Peter”

⁷² The Sudest ‘have’ construction appear to resemble locational possessive constructions, which are attested relatively widely crosslinguistically, including in a number of Polynesian languages (Stassen 2009). The Sudest construction, however, differs significantly from the locational possession which take the possessum as the grammatical subject, and from the possessor as an oblique encoded by case affixes or adpositions. The Sudest construction more closely corresponds in form to what Stassen (2009) labels ‘with-possessives’ (also known as ‘comitative possessives’ and ‘accompaniment possessives’), although they are semantically distinct from such constructions. These constructions are not as common crosslinguistically; Stassen (2009: 395) only finds them in one Oceanic language (Rotuman, Central Pacific linkage). With-possessive constructions take the possessor as the subject of the clause, with the possessum encoded by an oblique, usually marked for case or the object of an adposition and typically with associative or comitative semantics (Stassen 2009: 54). Often, but not always, both locational possessives and with-possessives also include a locative or existential predicate (Stassen 2009). In the case of Sudest, the preposition *e* does not have a comitative function; although it can be translated as ‘with’, it is only ever used to encode instruments. Accompaniment is specified by the preposition *wei*- ‘with’ (§3.3.6.4).

(fp_stimuli_191015_07 033, 86.400 88.996)

Some negated predicate possession clauses also have an existential interpretation, as in (260), which describes a man being kept in a lightless, doorless cell (see also §3.7).

- (260) *ande e le-Ø manjamanjala=re ande e*
 NEG1 PREP POSS.CLF2-3SG.POSS light=NEG2 NEG1 PREP
le-Ø dowo=re
 POSS.CLF2-3SG.POSS door=NEG2
 ‘there isn’t a light, there isn’t a door/he doesn’t have light, he doesn’t have a door (in his cell)’
 lit: ‘not with his light, not with his door’
 (fp_stimuli_191015_01 065, 246.687 249.050)

3.5.2.4 Possibility and ability clauses

Clauses of possibility and ability are expressed by the directly-possessed nouns *valikaiwa* and *bosowa* (both ‘possibility’).⁷³ In clauses expressing possibility, the possibility noun (*valikaiwa/bosowa*) takes an impersonal third person singular possessive pronoun suffix *-e* ‘3SG.POSS’ followed by a verbal complement clause specifying the possible situation. Clauses expressing ability differ from clauses expressing possibility in the possessive pronominal suffix occurring on the predicate; the suffix on *valikaiwa/bosowa* indicates the person and number of the referent whose ability is being spoken about (i.e. the subject of the complement clause). Examples (261) to (263) show clauses expressing possibility (or impossibility, in the case of (263)). *Valikaiwa* and *bosowa* ‘possibility’ are analysed as nominal predicates with a verbal complement rather than adverbials in a verbal clause due to the fact that in negated clauses, it is the noun that is negated and not the VC, as in (263).

- (261) *valikaiwa-e thi=ghan=a lolo=ko i=mare=ko une*
 possibility-3SG.POSS 3PL=eat=YA person=DIST 3SG=die=DIST spirit
 ‘it’s possible they eat the person who has died’s spirit’
 (funeral_feasting_081015_01 07, 216.866 220.245)
- (262) *bosowa-e u=nga thiyo=ko i=ma-ten o*
 possibility-3SG.POSS 2SG=say string=DIST 3SG=DETR-break or
i=vo-ten=a thiyo=ko
 3SG=by.spearing-break=YA string=DIST
 ‘it’s possible you can say the string breaks or s/he breaks the string (by spearing)’
 (cb_stimuli_051016_03 028, 108.317 112.427)

⁷³ *Bosowa* is borrowed from the Misima noun *bosowai* ‘able, ability’ which occurs in a comparable construction in Misima (S. Callister et al. 2005). In Sudest, *bosowa* is used interchangeably with *valikaiwa* ‘possibility’, although it occurs less frequently in the corpus (8 tokens and 24 tokens respectively).

- (263) [...] *ko ande valikaiwa-e=re wevo=ko iya=ko*
 but NEG1 possibility-3SG.POSS=NEG2 young.woman=DIST DEM=DIST
ne i=njogha
 FUT 3SG=go.back
 ‘it’s not possible that girl will go back’
 (funeral_feasting_081015_02 109-10, 274.120 279.120)

Clauses expressing ability are presented in (264) and (265), with clauses expressing inability presented in (266) and (267). In corpus tokens, the verbal complement clause is omitted as it is retrievable from the wider context, like (264) and (266). However, it is possible to include it, as shown in the examples taken from A&A and shown in (265) and (267).

- (264) *kero valikaiwa-nggu*
 already possibility-1SG.POSS
 ‘I am already able (to walk on land)’ (pig_and_dugong_101214 039, 133.010 134.900)

- (265) *bosowa-nggu ya=gae*
 possibility-1SG.POSS 1SG=swim
 ‘I can swim/I am able to swim’ (Anderson & Anderson 1991: 63)

- (266) *va thi=ro-vurigheghe maa valikaiwa-nji*
 REM.PST 3PL=stay.and-be.strong/hard NEG possibility-3PL.POSS
 ‘they struggled (but) were unable (to fly and save the girl)’
 (bush_betelnut_011115 102, 245.920 249.940)

- (267) *nande bosowa-me=re wo=vana bwadibwadi*
 NEG1 possibility-1EXCL.POSS=NEG2 1EXCL=climb coconut
 ‘we can’t climb coconut trees/ we are unable to climb coconut trees’
 (Anderson & Anderson 1991: 63)

3.5.2.5 Need and desire clauses

Need and desire are also expressed by a verbless clause. The clause takes a complex NP made of the directly-possessed noun *nuwa* ‘desire’ and the demonstrative pronoun *iya* ‘DEM’ (§3.3.5.1) as a predicate and a complement clause expressing the thing or situation that is needed or desired. Neighbouring Misima uses a similar construction to express desire and want with a cognate noun *nuwa* ‘desire’ (S. Callister et al. 2005). Ross et al. (2016: 595) report comparable constructions in a number of other Oceanic languages as well. The subject of the clause is the possessor of *nuwa* ‘desire’ and is typically not overtly expressed (as in (268)), but is sometimes included for clarity, particularly for non-SAPs, as in (269). Examples (268) and (269) show the construction with a NP object. In (270) and (271), the clauses take verbal complement clauses.

- (268) *nuwa-n* *iya* *gogomwau=niye=ke*
 desire-2SG.POSS DEM riches=SP=SPKR.PROX
 ‘you want those riches’
 lit: ‘your desire is that (for) those riches’ (family_ties_081115 022, 55.380 57.470)
- (269) *ghaningga=ke* *nuwa-e* *iya* *njighi* *laghiye*
 food=SPKR.PROX desire-3SG.POSS DEM sea/saltwater big
 ‘the food needs more salt’
 lit: ‘the food’s desire is that (for) big salt(water)’ (e_021115_02 120, 397.070 399.700)
- (270) *nuwa-nggu* *iya* *a=vangu=∅*
 desire-1SG.POSS DEM 1SG=lead=3SG
 ‘I want to marry him’
 lit: ‘my desire is that I lead him’ (fp_stimuli_191015_07 034, 88.996 90.900)
- (271) *nuwa-nji* *iya* *thi=tawoi-ranggi=ya* *gamoi-nji* *une*
 desire-3PL.POSS DEM 3PL=shit-go.out=YA stomach=3PL.POSS fruit
 ‘they want/need to purge the contents of their stomachs’
 lit: their desire is that they shit out the fruit of their stomachs’
 (kula_exchange_081215 027, 85.790 89.210)

3.6 Clause Combinations

This section presents a range of clause combinations. Coordination is presented in §3.6.1, followed by complement clauses in §3.6.2, and finally a variety of adverbial clauses in §3.6.3. There is little proof of grammatical dependency for complement and adverbial clauses and, therefore, little evidence for structural subordination. See §3.4.5 for discussion of relative clauses.

3.6.1 Coordination

The conjunctive coordinator *na* ‘and’ links phrases, as in (272), and clauses, as in (273) and (274). Clauses connected by *na* ‘and’ often describe a sequential series of events, although this is not always the case. Compare (273) and (274).

- (272) *noroke* *a=utu=nga* *mbombo* ***na*** *uthuwoghi*
 today 1SG=speak=TR pig **and** dugon
 ‘today I talk about Pig and Dugong’ (pig_and_dugong_101214 004, 19.900 29.510)
- (273) *wo=mban=a* *ndighe=ma* *unduunduye* ***na***
 1EXCL=GET.PL.RIGD=YA fire=DET firewood **and**
wo=rumbo *gherum*
 1EXCL=make(fire) stone.baking.fire
 ‘we get the firewood and we light the stone baking/mumu fire’
 (stone_cooking_251015 051-2, 132.831)

- (274) *yenggiyenggi va i=yaku vali imba na wondeya*
 monitor.lizard REM.PST 3SG=live/stay side tidal.river and possum
va i=yaku vali imba
 REM.PST 3SG=live/stay side tidal.river
 ‘Monitor Lizard lived on one side of the river and Possum lived on one side of the river’
 (lizard_and_possum_121015 008, 22.706 26.863)

Adversative clause coordination is indicated by the coordinator *ko* ‘but’ (276).

- (275) *sori maa toto ko butu*
 sorry NEG message but feast.invitation
 ‘sorry, not “message” but “feast invitation”’
 (kula_exchange_081215 101, 290.380 293.810)

- (276) *i=gaga gha-e gha-Ø mbe regha ko*
 3SG=cook food-3SG.POSS POSS.CLF1-3SG.POSS still one but
ande mbe ne i=wa=re=engge e ghemba than
 NEG1 still FUT 3SG=go=NEG2=just PREP village other
 ‘she cooks her food herself but she still cannot leave the village’
 (funeral_feasting_081015_01 119-20, 346.666 352.160)

The coordinator *ko* can also function conjunctively with clauses to mean ‘and’, typically when it is followed by the sequential coordinator *amba*. *ko amba* occurs 29 times in the corpus, compared with three tokens of *na amba*.

- (277) *thi=tawoi-vao=Ø i=ko ko amba ma thi=thithu*
 3PL=shit-COMPL=3SG 3SG=finish but then already 3PL=bathe
 ‘they finish shitting and then they bathe’
 (funeral_feasting_081015_02 072-3, 189.430 195.310)

Asyndetic coordination is also common in Sudest. Lists of nouns frequently do not have an explicit conjoiner (278) and both same-subject (279) and switch-subject clauses (280) also occur without coordination.

- (278) *i=tamwe=ya bigi thangari=ke ghaningga mbombo tobotobo*
 1SG=look.for=YA thing every=SPKR.PROX food pig greenstone.axe
 ‘she looks for every, food, pigs, greenstone axes’
 (funeral_feasting_081015_01 141-2, 402.322)

- (279) *umoru=ma i=wo sledgehama=ma i=riri=ten=a*
 young.man=DET 3SG=GET.SG.RIGD sledgehammer=DET 3SG=by.striking=break=YA
kwama=ma
 cloth=DET
 ‘the man gets the sledgehammer (and) breaks the cloth by striking’
 (cb_stimuli_051016_01 129, 1407.310 1412.740)

- (280) *thi=raka-itete=Ø mbe i=ro-ghena-ghena ghe=ko*
 3PL=go.PL-leave=3SG still/yet 3SG=stay.and-RED-sleep LOC=DIST
 ‘they all left him (and) he stays sleeping there’

(child_and_giant_201015 020, 55.180 57.032)

The disjunction *o* ‘or’ conjoins phrases (281) and clauses (282).

- (281) *wevo o ela i=li=ya kwama na*
 young.woman or woman 3SG=GET.SG.FLEX=YA cloth and
i=mwana=thatha=Ø
 3SG=w.hands-tear=3SG
 ‘a young girl or a woman gets a cloth and tears it with her hands’
 (put_stimuli_191015_01_01 048-9, 184.585 190.239)

- (282) *ko amba ma thegha=ko thi=ghan=a bwarogi o thi=ghan=a*
 but then already youth=DIST 3PL=eat=3SG fish or 3PL=eat=YA
mbombo
 pig
 ‘...and then they eat fish or they eat pig’
 (funeral_feasting_081015_02 115-6, 288.515 293.210)

The sequential coordinator *amba* ‘then’ links clauses (283). As mentioned above, *amba* frequently occurs with the coordinator *ko* ‘but’ to mean ‘and then’ (284) (see also (277) above).

- (283) *ra=nggari=nggi amba ra=vaona=Ø*
 1INCL=tie=3PL then 1INCL=count/read=3SG
 ‘we count them (sago bundles) and count them (lit. it)’
 (sago_101214 052, 136.667 139.140)
- (284) *nggama=ke i=bwabwana na i=ghe ko amba ma*
 child=SPKR.PROX 3SG=grow.up and 3SG=marry but then already
u=thin-ve=Ø nambo=ke
 2SG=GET.SG.CNTR-give=3SG basket=SPKR.PROX
 ‘the child grows up and marries and then you give (the child) the basket (with precious items for the child)’
 (marriage_111015 056-7, 173.806 176.623)

The coordinator *amba* ‘then’ combines with the adverbial *muyai* ‘after’ to mean ‘later’ or ‘then after’, as in (285).

- (285) *a=thavwi kwaliko amba muyai a=wa e uma tine*
 1SG=wash clothing then after 1SG=go PREP garden inside
 ‘I wash the clothes then later I go to the garden’
 (womens_work_221214 024-6, 60.035 68.348)

3.6.2 Complement clauses

Complement clauses in Sudest can take the form of ‘sentence-like’ or ‘nominalised’ complements (following Noonan 2007). Sentence-like complements are more common than nominalised complements (which are limited to verbs that can be nominalised). Sentence-like complement clauses fill the same postverbal position as lexical object arguments. They have no formal indication

of subordination and have the same structure as main clauses. Example of sentence-like and nominalised complement clauses with *ravu* ‘know’ are presented in (286) and (287) respectively.

- (286) *u=ravu ngingi-n=na va i=ma-bebe?*
 2SG=know tooth/teeth-2GS.POSS=ADDR.PROX REM.PST 3SG=DETR-break
 ‘you know your tooth was broken?’
 (dem_quest_201015 021, 62.052 66.017)
- (287) *maa va thi=ravu Peter le-∅ vakatha*
 NEG REM.PST 3PL=know pers.name POSS.CLF2-3SG.POSS do/make
 ‘they didn’t know (about) Peter’s actions’
 (fp_stimuli_191015_07 053-4, 137.260 140.880)

Examples (288) to (294) show further examples of sentence-like complement clauses with a range of predicates. All the complement clauses shown in the examples below, as well as the one above in (286), could theoretically function as main clauses. As shown in (288), direct speech is always introduced by the utterance predicate *nga* ‘say’.

- (288) *i=dage* *we=∅* *levo* *i=nga*
3SG=speak PREP=3SG POSS.CLF2:young.woman 3SG=say
“*u=vathinggu* *nggama=na*”
2SG=wash child=ADDR.PROX
‘he told his wife, he said “(you) wash the child”’
(marriage_111015 034-5, 108.950 115.470)
- (289) *i=renuwanga* *va* *thi=nggari=∅* *ina-∅* *e* *sel=ko*
3SG=think.about REM.PST 3PL=tie=3SG location-3SG.POSS PREP cell=DIST
tine
inside
‘he thought about (when) they tied him in the cell’
(fp_stimuli_191015_02 044-5, 109.782 113.590)
- (290) *rama-e* *me=nde-ghathi* *i=thuwe=ya*
father-3SG.POSS 3SG.IMM.PST=stand.and-tight? 3SG=see=YA
ghendiya-e *i=unigha* *yawarumbu-ye*
in.law.gen.removed-3SG.POSS 3SG=hit daughter-3SG.POSS
‘her father stands and watches his son in law hit his daughter’
(fp_stimuli_191015_02 102-4, 255.810 260.780)
- (291) *lolo=ko* *i=mje* *i=ki-ten=a* *waranisi* *i=nggile*
person=DIST 3SG=try 3SG=by.cutting=break=YA orange 3SG=break
nima-e
hand-3SG
‘the person tried to cut an orange, she cuts her hand’
(cb_stimuli_051016_02_01 162, 870.231 873.629)
- (292) *va* *i=mararu* *nggama=ko* *ne* *i=ghan=∅*
REM.PST 3SG=be.afraid child=DIST FUT 3SG=eat=3SG
‘he was afraid the child would eat him’

(child_and_giant_201015 121, 324.286 328.585)

- (293) *me=telipuna* *i=ngge=∅* *e* *toutou*
 3SG.IMM.PST=start 3SG=hit=3SG PREP floorboard
 ‘she started to hit her (daughter) upstairs (lit. on the floorboards)’
 (crab_girl_081115 087, 215.394 217.622)

- (294) *ra=roro* *thela* *i=njimbukiki=∅*
 1INCL=not.know who 3SG=look.after=3SG
 ‘we don’t know who (will) look after it (a baby)’
 (dating_081015 057, 147.910 149.944)

The nominal predicates that express possibility/ability, need and desire/want also take complement clause arguments. These are discussed in (§3.5.2.4) and (§3.5.2.5).

3.6.3 Adverbial clauses

This section describes time (§3.6.3.1), reason and result (§3.6.3.2), and conditional (§3.6.3.3) clauses. Adverbial clauses are introduced by a number of nouns and conjunctions. Like complement clauses, the adverbial clauses show no formal sign of structural subordination and can function as main clauses.

3.6.3.1 Time clauses with *mbanga* ‘time’

The noun *mbanga* ‘time’ functions as a temporal subordinator meaning ‘when’. It introduces the event of the subordinate clause as temporally coincidental (295) or contiguous to the main clause (296). The subordinate clause always precedes the main clause.

- (295) ***mbanga*** *vethi=vutha* *ghelethi=ko* *va* *i=rau*
 time 3PL.INT=arrive betelnut=DIST REM.PST 3SG=fruit
 ‘when they arrived, the betelnut tree was fruiting’
 (bush_betelnut_011115 016-7, 40.210 42.923)

- (296) ***mbanga*** *me=nda-wogiyawe* *i=wo-ru=wo=∅*
 time 3SG.IMM.PST=burn-properly 3SG=GET.SG.RIGD-go.out=thither=3SG
 ‘when he was properly cooked, she took him out (of the fire)’
 (crab_girl_081115 038-9, 94.327 99.430)

3.6.3.2 Reason and result clauses with *kaiwa* ‘reason’

Reason clauses are introduced by the noun *kaiwa* ‘reason’ (see §3.3.6.3 for discussion of the related benefactive-purposive adposition *kaiwa*). The subordinator is a directly-possessed noun and in its subordinating function it takes a third person singular possessive suffix (either *-e* or *-∅*). The reason clause follows the main clause. Examples (297) and (298) show verbal subordinate clauses, while the reason clause in (299) has a nominal predicate.

- (297) *a=mbele bwebwe kaiwa-∅ o-rama-e thi=mena*
 1SG=follow dad reason-3SG.POSS PL-father-3SG.POSS 3PL=come
Vanatina-e
 place.name-3SG.POSS
 ‘I follow dad because his forefathers came from Vanatinae’
 (family_ties_081115 009-12, 28.210 35.590)

- (298) *ande mbe ne thi=ghena wei-nji=ya=ngg=ya*
 NEG1 still FUT 3PL=sleep PREP-3PL.POSS=YA=3PL=YA
le-nji wevo kaiwa-e ne thi=vakowana
 POSS.CLF2-3PL.POSS young.woman reason-3SG.POSS FUT 3PL=spoil
le-nji bigi-bigi=ko
 POSS.CLF2-3PL.POSS RED-thing=DIST
 ‘they still cannot sleep with their wives because they will spoil their things (i.e. the magic spells they have performed to ensure successful trade)’
 (kula_exchange_081215 076-8, 225.000 233.250)

- (299) *wondeya i=dage we=ya ighai-ye yenggiyenggi “maa*
 possum 3SG=speak PREP=YA cousin-3SG.POSS monitor.lizard NEG
valikaiwa-e kaiwa-∅ ghino ra-ghambwe-ghambwera
 possibility-3SG.POSS reason-3SG.POSS 1SG AG-RED-be.sick
 ‘Possum spoke to his cousin Monitor Lizard “it’s not possible (for me to go fishing), because I’m a sick person”’
 (lizard_and_possum_121015 034-5, 94.192 100.820)

Result clauses are introduced by the verbless predicate clause *iya kaiwa-e* (lit. DEM reason-3SG.POSS) ‘that is its/the reason’.⁷⁴ The subordinate result clause always follows the clause(s) describing the reason(s):

- (300) *i=divwara uvwa-uvwa iya kaiwa-e noroke mankwathi maa*
 3SG=break RED-testicle DEM reason-3SG.POSS today bush.fowl NEG
ma i=yo na i=wa bwagabwaga
 already 3SG=fly and 3SG=go far.away
 ‘he broke his testicles, that is why today bush fowl cannot fly or (and) go far’
 (bush_betelnut_011115 123-6, 296.489 303.390)

⁷⁴ Alternatively, *iya kaiwa-e* could be analysed as a possessive phrase with *iya* as a lexical possessor ‘that [thing]’s reason’. It is analysed as a non-verbal predicate clause because *iya* + noun is a common pattern for nominal predicate clauses meaning ‘this is/was X’, and because most speakers translate the construction to ‘that is why’ in English.

- (301) *boda mbe thi=longwe-longwe=engge utu=niye iya kaiwa-Ø*
 people still 3PL=RED-hear=just story=SP DEM reason-3SG.POSS
nuwa-nji iya thi=thuwe=Ø
 desire-3PL.POSS DEM 3PL=see=3SG
 ‘the people were hearing the story/news (about his good looks), that’s why they wanted to see him’
 (feast_of_the_fish_271015 067-8, 161.477 165.650)

3.6.3.3 Conditional clauses with *thonggo* and *posi* ‘if’

The protasis in all conditional sentences is introduced by *thonggo* (302) or *posi* (303) both meaning ‘if’.⁷⁵ The protasis tends to precede the apodosis.

- (302) *thonggo wo=thaga wo=raka Saisai=ko wo=raka*
 if 1EXCL=feast 1EXCL=go.PL place.name=DIST 1EXCL=go.PL
Panaeati wo=raka Misima wo=raka Rogha
 place.name 1EXCL=go.PL place.name 1EXCL=go.PL place.name
 ‘if we feast, we go to the Calvados Chain, we go to Panaeati, we go to Misima, we go to Rossel (to trade)’
 (kula_exchange_101214 067-71, 199.680 208.749)
- (303) *i=nga “posi nggonggo” i=nga “iya=ko ne i=kakalava”*
 3SG=say if mist 3SG=say DEM=DIST FUT 3SG=be.white”
 ‘she says “if (there is) mist”, she says “that (the mist) will be white”’
 (mandumbunga_02_181016 040-1, 117.755 122.295)

In counterfactual conditionals, the apodosis is introduced by the obligation particle *mbala* ‘OBL’ (§3.3.7.6):

- (304) *thonggo maa va thi=yeghe=Ø na i=voro e malavuta*
 if NEG REM.PST 3PL=cut=3SG and 3SG=go.up PREP shallow.water
ko e mbwa=ko tine mbala ghinda noroke
 but PREP water=DIST inside OBL 1INCL today
ra=mbimbi gha-nda
 1INCL=clutch/hold(underarm) food-1INCL
 ‘if they hadn’t cut it (the tree) and it went up into the shallows but down into the water, today we would hold our food underarm (to heat it)’
 (mandumbunga_061215 106-7, 300.063 310.830)

3.7 Negation

3.7.1 Prohibitions

Prohibitions are indicated by the particle *thava* or the shortened variant *tha* both translatable as ‘don’t’. The two forms are used interchangeably, except when the prohibitive marker is functioning

⁷⁵ According to speakers, *posi* derives from English *possible* and is a relatively old borrowing going back multiple generations. It only occurs eight times in the corpus compared with 66 occurrences of *thonggo*.

as a complete sentence meaning ‘don’t!’. In such cases, only the long version, *thava*, may occur. The prohibitive marker always occurs clause-initially, as in the following two examples:

- (305) *thava* *u=mararu=ime*
 PROH 2SG=be.afraid=1EXCL
 ‘don’t be afraid of us!’ (couples_story_101214 052, 139.690 141.947)
- (306) *i=nga* *‘tha* *hu=longga-kubaro’*
 3SG=say PROH 2PL=walk-hide
 ‘she said “don’t keep quiet when you walk (lit. walk-hide)”’
 (mandumbunga_061215 060, 170.640 172.180)

The prohibitive particle is also used to mark negative obligation, as in (307).

- (307) *nggama* *gha-Ø* *vethe* *kure* *tha*
 child POSS.CLF1-3SG.POSS k.o.basket leftover.food PROH
i=kwarra-kwara
 3SG=RED-not.have=Ø
 ‘the child’s food basket must not be empty (lit. must not not be having)’
 (small_child_051214 050-1, 118.540 122.410)

See §3.3.7.6 for discussion of the obligation particle *mbala* ‘should’ and §4.3.1 and §4.3.2 for the modal directives and dehortatives inside the VC.

3.7.2 Denial

Expressions of denial vary between the different dialects of Sudest. There are at least three different particles used around the island, *nandere*, *maaruwo* and *ningiye*, which are all the equivalent of ‘no’ and ‘nothing’. The latter, *ningiye*, is used by speakers to the south-east of Vuwo and is (most probably) cognate with the Misima particle *nigeya* ‘no’. *Nandere* is traditionally used by central dialect speakers and *maaruwo* by the speakers in the northwest. Both *nandere* and *maaruwo* are attested in the current corpus with similar frequencies (9 and 11 tokens respectively), and individual speakers are attested using both. This is unsurprising given that Vuwo is situated at the edge of the central dialect region and some speakers in the corpus originally come from areas where the northern dialect is spoken. Example (308) contains the negator *maaruwo* in response to a polar question:

- (308) *i=nga* *“mbwata ne hu=ghan=nggo?”* *theuni-wo=ko* *thi=nga*
 3SG=say maybe FUT 2PL=eat=1SG NUM.CLF-two=DIST 3PL=say
“maaruwo” *i=nga* *“mbwata ne u=ghan=ime*
 NEG 3SG=say maybe FUT 2SG=eat=1EXCL
 ‘he said “maybe you will eat me?” the two (girls) said “no!” she said “maybe you will eat us”’
 (mandumbunga_02_181016 202-, 507.846)

The negative particles can also mean ‘nothing’. In (309), the speaker is describing how menstruating women today may carry out everyday tasks without any restrictions compared to earlier times when certain activities were restricted.

- (309) *wo=ghaningga* *amba* *muyai* *wo=raka* *e* *uma*
 1EXCL=eat.PROG then later 1EXCL=go.PL PREP garden
tine *me=viva=ko* ***nandere***
 inside 3SG.IMM.PST=go.first=DIST NEG
 ‘we (women) eat then later go to the garden, in the past nothing (lit. first nothing, i.e. women in the past didn’t work in the garden while menstruating)’
 (menstruation_081015 020-1, 61.600 69.861)

In (310), *nandere* ‘no, nothing’ is used for emphasis after a clause with negative polarity:

- (310) *ande* *me* *ne* *thi=ghe=re=va* *kero* ***nandere***
 NEG1 IMM.PST FUT 3PL=marry=NEG2=REP already NEG
 ‘they will not be married anymore, (it’s) already nothing’
 (divorce_111015 031, 74.420 77.609)

3.7.2.1 Verbal predicate negation

Multifunctionality of negatives is common in the Oceanic languages (Mosel 1999: 16-17) and forms related to the two negation particles *nandere* and *maaruwo* are used as negation markers for both verbal and non-verbal predicates. The two negative markers are the discontinuous negative marker *(n)ande...=re* and the negative particle *maa*. Discontinuous negation is a parallel innovation among numerous Oceanic languages (Lynch et al. 2002: 51-52). Speakers use *(n)ande...=re* and *maa* interchangeably and find their use equally grammatical, although their relative frequency in the corpus differs somewhat, with 121 tokens of *(n)ande...=re* and 65 of *maa*. The first half of the discontinuous marker *(n)ande* and the negative marker *maa* are in a paradigmatic relationship and precede the predicate and any TAM particles. As a subject conominal can occur between the negative particles *(n)ande* and *maa* and a verbal predicate (see further below), they are considered outside the VC.

Examples of the two negation markers with verbal predicates are presented in (311) to (313). The second half of the discontinuous negative marker *(n)ande...=re* cliticises onto the VC following the directional adverbials and demonstratives, and, in the case of transitive verbs, following the object index when one is present, as in (311) (see §4.4. for the relative position of the postverbal elements in the VC). When a lexical object is present, it is outside of the VC and follows the negative clitic, as in (312).

- (311) *ande* *u=tamwe=nggi=re*
 NEG1 2SG=look.for=3PL=NEG2
 ‘you don’t look for them’ (organising_021015 017, 42.750, 44.780)
- (312) *ande mbe ne i=ghan=re bwarogi*
 NEG1 still FUT 3SG=eat=NEG2 fish
 ‘she still will not eat fish’ (new_mother_251214 088, 209.850 212.610)
- (313) *maa va thi=ravu Peter le-Ø vakatha*
 NEG REM.PST 3PL=know pers.name POSS do
 ‘they did not know (about) Peter’s actions’
 (fp_stimuli_191015_07 053-4, 137.260 140.880)

There are seven tokens in the corpus in which *maa* and the second half of the discontinuous negation marker *=re* ‘NEG2’ cooccur, an example of this is given in (314). While speakers do not find this combination ungrammatical, it does appear to be a peripheral construction type; it is only used by two male speakers in their early- to mid-twenties in the corpus.

- (314) *yenggiyenggi maa va i=ghambwera=re*
 monitor.lizard NEG REM.PST 3SG=be.sick=NEG2
 Monitor lizard was not sick’ (lizard_and_possum_121015 007, 20.197, 22.706)

The negative markers hold rightward scope. Consider the position of the temporal adverbial *mbanga regha* ‘one time’ (lit. ‘time one’) in (315) and (316). When the adverbial is outside of the scope of negation, it specifies that it is only one time that the activity encoded by the VC did not occur, as in (315). However, when *mbanga regha* ‘one time’ follows the negative particle and is inside the scope of negation, it specifies that the activity encoded by the VC ‘never’ occurs/occurred (i.e. ‘X does not occur one time’), as in (316).

- (315) *mbanga regha wevo=ma ande me=ge=re*
 time one young.woman=DET NEG1 3SG.IMM.PST=cook=NEG
 ‘one time the woman didn’t cook’ (e_101016_01)
- (316) *gha-Ø kure ande mbanga regha i=ko-ko=re*
 POSS.CLF1-3SG.POSS leftovers NEG1 time one 3SG=RED-finish=NEG2
 ‘(the babies) leftovers (basket) is never finishing’
 (small_child_051214 012, 26.370 29.530)

The majority of tokens in the corpus, like the ones above in (311) to (313), do not include a subject conominal, i.e. a lexical NP expressing the subject argument. When a subject conominal is present, it most frequently precedes the negative marker (SNeg, 36 tokens). However, it can also follow the negative marker (NegS, 8 tokens). Like the examples above in (315) and (316) with the temporal adverbial, the relative position of the subject conominal in relation to the negative marker appears to relate to scope and predicate negation vs. sentence negation. Consider the example in (317), in

which the conominal precedes the negative particle *ande*, and the example in (318), in which the conominal follows the negative particle.

- (317) *Ebeutu ande i=go-njogha=re le-Ø*
 pers.name NEG1 3SG=by.speaking-go.back=NEG2 POSS.CLF2-3SG.POSS
tina-e utu=ko gha-Ø rumwaru
 mother-3SG.POSS word=DIST POSS.CLF1-3SG.POSS straight
 ‘Ebeutu didn’t answer her mother’s clear words’
 (crab_girl_081115 071-3, 172.850 180.790)

- (318) *ande ne dage ghalinga-nda i=laghiye=re e ghemba=ko*
 NEG1 FUT word voice-1INCL.POSS 3SG=be.big=NEG2 PREP village=DIST
tine
 inside
 ‘no (word’s) voices will be big in the village (there will be no big noises in the village)’
 (funeral_feasting_081015_01 032-33, 100.580 106.260)

The limited data suggest a categorical-thetic distinction (cf. Kuroda 1972). Categorical statements have a subject-predicate judgement structure that involves naming an entity then affirming or denying a statement about the entity, while thematic statements are internally unstructured, affirm or deny a situation, and do not have a ‘subject’ in the logical sense (see Kuroda 1972; Sasse 1987). Such a correlation is not unique to Sudest. Margetts (1999b) observes an identical correlation between the variation in the ordering of subject and negative marker and categorical-thetic judgements in Saliba, a Suaic Papuan Tip language.

Further examples of SNeg (categorical) tokens are given in (319) to (321) and tokens of NegS (thetic) clauses are presented in (322) to (324). The two sets of examples show typical characteristics of categorical vs. thematic utterances also attested in Saliba (Margetts 1999b: 24-6). The NegS examples in (319) to (321) and above in in (314) and (317) are referential: their subjects are presupposed, while the predicate is denied. The utterances in (314), (317), and (319) involve specific protagonists from narratives, often marked by demonstrative enclitics or proper names. Example (320) is talking about Sudest culture itself, while (321) describes a specific protagonist and event depicted in a stimulus video.

- (319) *kamkam maa i=vaidi=ya karitau iya=ma engge*
 chicken NEG 3SG=find=YA tridacna.clam DEM=DET just
i=vuri-mban=Ø karitau e ghae-ye [...]
 3SG=w.feet-GET.PL.RIGD=3SG tridacna.clam PREP mouth-3SG.POSS
gha-Ø une maa thi=ravu=Ø
 POSS.CLF1-3SG.POSS friends NEG 3PL=know=3SG
 ‘the chicken didn’t see (lit. find) the clam just put it (her foot) in the clam’s mouth [...]
 her friends didn’t know (about chicken’s accident)’
 (chicken_story_181015 013-, 35.280)

- (320) *la-ma* *mumuga* **ande** *ne* *i=ko=re*
 POSS.CLF2-1EXCL.POSS tradition NEG1 FUT 3SG=finish=NEG2
 ‘our tradition(s) will not end’ (kula_exchange_101214 076-7, 219.460 222.740)
- (321) *wevo=ke* **ande** *i=thuwe=re* *buket=ke*
 young.woman=SPKR.PROX NEG1 3SG=see=NEG2 bucket=SPKR.PROX
i=la-ngge-thavwi=∅
 3SG=and.go-hit.SG-by.mistake=3SG
 ‘the young woman didn’t see the bucket (and) she accidentally kicked it over and kept walking’
 (put_stimuli_201015_02 126-7, 729.669 735.726)

Examples (322) to (324) and (318) above show NegSthetic utterances. These all come from procedural texts and explain situations that should not occur in general, rather than specific subjects that are not engaging in X or Y practice. The NegS tokens are non-referential and unspecific, with subject NPs unmarked by determiners, as (318), (322), and (323) show. Example (324) does include a demonstrative in the possessive NP subject. However, the statement is unspecific insofar as it is describing the general practice forbidding fathers of newborn infants from sleeping with their wives.

- (322) *buwo* **maa** *wevo* *i=vakatha=∅* *mbe* *umo-umoru=engge*
 courting.gift NEG young.woman 3SG=do/make=3SG still RED-young.man=just
iya *thi=giya* *buwo*
 DEM 3PL=give courting.gift
 ‘a courting gift, no young woman does it, it’s still just young men, they give courting gifts’
 (dating_081015 079, 214.520 219.746)
- (323) *umo-umoru* *meththi=ya-yaku* **ande** *ne* *wanakau*
 RED-young.man 3PL.IMM.PST-all-stay/sit NEG1 FUT girl
thi=thin-yere=re *madibe* *e* *yamwa-nji*
 3PL=GET.SG.CNTR-walk.past=NEG2 blood PREP forehead/front-3PL.POSS
 (when) young men were all sitting, no young women will walk/take the (menstrual) blood in front of them’
 (menstruation_081015 061-3, 179.070 186.540)
- (324) **ande** *ne* *nggama=ko* *rama-e* *i=yo-njolanga=re*
 NEG1 FUT child=DIST father-3SG.POSS 3SG=fly-go.across =NEG2
nggama=ko *tina-e* *gheghe*
 child=DIST mother-3SG.POSS leg/foot
 ‘no child’s father will go across a child’s mother’s legs (i.e. engage in intercourse)’
 (new_mother_251214 109-10, 269.310 277.160)

3.7.2.2 Non-verbal predicate negation

In non-verbal predicates, the negative markers precede the predicate and the second part of the discontinuous marker follows the predicate. This is illustrated in examples (325) to (329) that show negated tokens of each of the non-verbal predicates described in §3.5.

- (325) *iya=na* **ande** *ghamba-e=re*
 DEM=ADDR.PROX NEG1 place-3SG.POSS=NEG2
 ‘that is not the (right) place’ (fp_stimuli_191015_03 383, 907.541 908.950)
- (326) *tina-nji* **maa** *ina-Ø* *ghe=ke*
 mother-3PL.POSS NEG location-3SG.POSS LC=SPKR.PROX
 ‘their mother isn’t here’ (fp_stimuli_191015_01 036, 131.100 133.090)
- (327) *nggorongga* *amala=ko* **maa** *e* *mbunmbunmani-ye?*
 how man=DIST NEG PREP flesh-3SG.POSS
 ‘why doesn’t that man have flesh?’ (skeleton_181015 017, 47.860 50.437)
- (328) **ande** *ma* *nuwa-nggu* *iya=re=va* *te-mbe*
 NEG1 already desire-1SG.POSS DEM=NEG2=REP more-still
i=munimu=Ø
 3SG=drink.PROG=3SG
 ‘I don’t want to be drinking it (beer) anymore’
 (fp_stimuli_191015_07 135, 326.550 330.920)
- (329) [...] *ko* **ande** *valikaiwa-e=re* *wevo=ko* *iya=ko*
 but NEG1 possibility-3SG.POSS=NEG2 young.woman=DIST DEM=DIST
ne i=njogha
 FUT 3SG=go.back
 ‘it’s not possible that girl will go back’
 (funeral_feasting_081015_02 109-10, 274.120 279.120)

There are far fewer tokens of non-verbal predicate negation in the corpus than verbal predicate negation, and no instances of NegS non-verbal predicates. However, subject-negation (SNeg) examples like those above in (325) to (327) do display a categorical reading with presupposed subjects and elicited pairs. The two sentences presented in (330) further support a categorical-thetic interpretation for non-verbal predicates. In the SNeg utterance in (330a), there are women who are not in the house, but in the NegS utterance in (330b) there are no women in the house.

- (330)a. *ela-ela=ma* **maa** *ina-nji* *e* *nggolo*
 RED-woman=DET NEG location-3PL.POSS PREP house
 ‘the women are not in the house’ (e_041116)
- b. **ande** *ela-ela* *ina-nji=re* *e* *nggolo*
 NEG1 RED-woman location-3PL.POSS=NEG2 PREP house
 ‘there are no women in the house’ (e_131016_01)

3.7.2.3 Negative verbs

There are two negative verbs in Sudest *botewa* ‘not want’ and *roro* ‘not know’. Examples of *botewa* ‘not want’ are presented in (331) and (332). Note that the negative verb may be negated itself by the discontinuous negation marker, as in (332).

- (331) *kero i=botewa munimu*
 already 3SG=not.want drink
 ‘he doesn’t want the alcohol (lit. drink)’
 (fp_stimuli_191015_05 362, 848.329 850.180)

- (332) *ande i=botewa=re regha*
 NEG1 3SG=not.want=NEG2 one
 ‘she doesn’t reject one (type of recording) (lit. she doesn’t not want one)’
 (c_031116 037, 80.640 82.680)

An example of *roro* ‘not know’ is given in (333) (see (292) for a further example). Example (334) presents a token of the particle *koghai*, which means ‘I don’t know’ and is only used in response to a question.

- (333) *kero vethi=roro le=ko ida-e*
 already 3PL.INT=not.know person=DIST name-3SG.POSS
 ‘they don’t know the person’s name’
 (mandumbunga_02_181016 227, 578.051 581.408)

- (334) *thi=vato=Ø “naka gha-n u=ma?” i=nga*
 3PL=ask=3SG what.about POSS.CLF1-2SG.POSS friend=DET 3SG=say
 “*koghai*”
 I.do.not.know
 ‘they asked “what about your friend?”, she said “I don’t know”’
 (bush_betelnut_011115 053-5, 124.400 130.505)

4 The verb complex

4.1 Introduction

This chapter analyses and describes the composition of the verb complex (VC) in Sudest. It is intended to provide a detailed background to the analyses presented in the following chapters. The description of the VC presented in this chapter is based on corpus and stimuli data, with supplementary elicitation data. Previous descriptions of the VC by A&R and A&A served as a valuable point of entry into the study of one of the most complex areas of the language. The current analysis builds and refines the previous descriptions, retaining A&R's nomenclature where appropriate.

It has become widely accepted to use the term 'verb complex' over 'verb phrase' when describing a structure which includes the verb and closely related grammatical elements in Oceanic languages (e.g. Lichtenberk 1983, 2008; Thieberger 2006; Palmer 2009; Guérin 2011⁷⁶; Schnell 2011; Frostad 2012; Vaa 2013, Lacrampe 2014).⁷⁷ As Pawley (2003) highlights, what is often referred to as the 'verb phrase' in transformational treatments is distinct from the constructions described by that label in Oceanic languages (see e.g. Crowley 1982:118). In the former, it is a strictly syntactic unit, excluding subjects but including direct objects expressed by lexical NPs. The latter, on the other hand, typically includes subject and object indexes marked on the verb but excludes lexical expressions of both subject and object, as there are typically no tests that demonstrate that the object NP forms a constituent together with the VC in Oceanic languages.

The Sudest VC can constitute a complete sentence by itself and is minimally composed of subject index and verb stem(s). Like many other Oceanic languages, the Sudest VC is also one of the areas of greatest complexity, with over 20 possible pre- and postverbal slots. The maximal VC is presented in Figure 4.1 It should be noted, however, that the longest attested VCs tend to have no more than half a dozen slots filled. In some cases, the exact limits of co-occurrence and exclusivity remain to be further tested and explored; future data may indicate minor ordering differences.

⁷⁶ Guérin uses the term 'verbal complex'.

⁷⁷ An early use of the term comes from Hockett, describing a construction with 'a verb or a close-knit phrase with a verb at its center' (1948: 139) in the Algonquian language Potawatomi/Bode'wadmi.

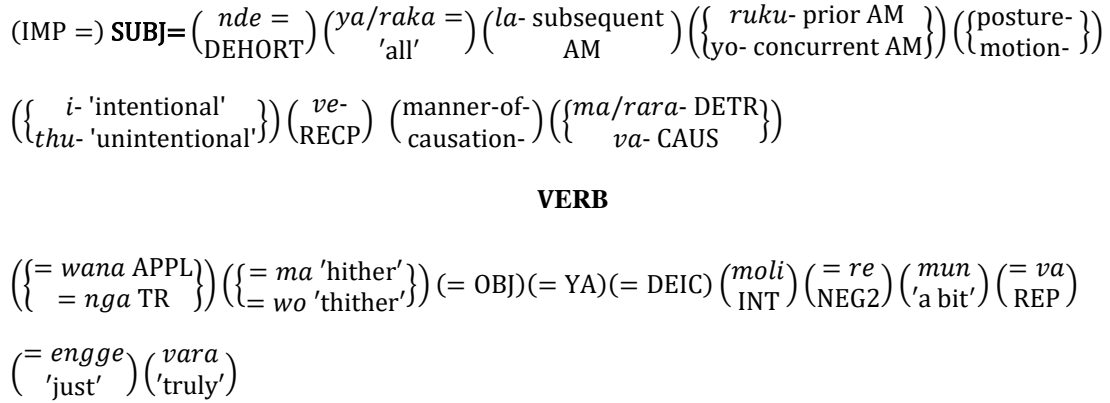


Figure 4.1 The verb complex

The VC is defined based on the following two criteria: a) no phrase can intervene between the components of the VC; and b) the VC components have a fixed order. The VC is also never divided/broken up across intonation units. TAM particles and the first part of the discontinuous negation marker *ande* 'NEG1' (or the alternate negator *maa* 'NEG') precede the VC, but are not considered part of the VC. This is because subject NPs, fronted object NPs, and temporal adverbials can separate them from the VC (see §3.3.7 and §3.7.3 for TAM and negation respectively).⁷⁸

Before continuing to the description of the VC, a note on the distinction between affixes and clitics is in order. The two previous descriptions of Sudest treat the bound pre- and postverbal morphemes differently without explicitly outlining criteria for their analyses. There is a vast literature, both formal and descriptive, on clitics and their properties, particularly in relation to affixes.⁷⁹ Nevertheless, distinguishing the two types of bound morphemes from one another in one language - much less cross-linguistically - is notoriously difficult. Haspelmath (2011) even contends that there are no satisfactory criteria to distinguish clitics from affixes cross-linguistically. In the Sudest VC, some of the bound elements display more canonical clitic-like behaviour – for example, the demonstrative morphemes display 'promiscuity' (Spencer & Luis 2012b, see §3.3.5, §3.4.2, and §4.4.4) – but this is not true for the majority of bound forms in the VC. Another oft-cited criterion of clitics is their lack of prosodic prominence (e.g. stress, tone), whereas affixes may have prosodic prominence (Spencer & Luis 2012a; Dixon 2010a). Study of a reasonable sample of bound VC morphemes from the corpus using the Praat software package⁸⁰ indicates that they show variation in stress patterning as well. Some bound morphemes are never stressed, e.g. object indexes (§4.2.2), however, others can be, e.g. the transitive and applicative morphemes *=nga* and *=wana* (§4.5.1).

⁷⁸ This differs from A&R's description that includes TAM particles and NEG1 in the VC.

⁷⁹ A full or even partial treatment of the literature is beyond the scope of this study. Zwicky (1977) and Zwicky and Pullum (1983) are classic works on the topic with the latter providing six criteria for identifying clitics. Nevis et al. (1994) is a bibliography of works on clitics up to 1991. See Anderson (2005) and Spencer and Luis (2012a) and the references therein for more recent treatments of the topic and also Spencer and Luis (2012b) who propose a number of characteristic form and distributional properties of the 'canonical' clitic.

⁸⁰ http://www.fon.hum.uva.nl/paat/download_win.html

Stress on the verb stem(s) also shifts depending on which bound morphemes are present. The current data, particularly phonetic evidence, indicate that distinguishing affixes from clitics in the VC is a complex problem in need of further investigation. Due to the lack of explicit defining criteria, previous analyses of the language are also opaque.

In light of these considerations, the current analysis largely follows the affix-clitic distinctions outlined in A&R, albeit with the caveat that these distinctions are currently placeholder labels until a more complete analysis is carried out. Following A&R, both subject and object indexes – as well as all bound postverbal morphemes – are marked as clitics (indicated by ‘=’), while derivational preverbal elements – the positional and motion morphemes, reciprocal morpheme, universal quantifiers, manner-of-causation morphemes and (un)intentionality morphemes – are labelled as affixes (indicated by ‘-’). Morphemes that have grammaticalised from verb stems are also labelled as affixes. These include the quantifier *raka-* ‘all’ and the subsequent and prior associated motion prefixes *la-* ‘and go’ and *ruku-* ‘go and’. All remaining bound morphemes are labelled as clitics.

The chapter is divided into three parts. The argument indexes – the bound subject and person forms – are discussed in §4.2, as is as their co-occurrence with nominal arguments. Section 4.3 outlines each of the preverbal elements in turn. Section 4.4 describes the postverbal slots, also in the order in which they occur.

4.2 Bound subject and object pronouns

Core arguments can be indexed on the verb by way of bound subject and object indexes in clauses with verbal predicates. Subject indexes are obligatory, and are frequently the only expression of the subject in clauses with verbal predicates. A lexical NP, which may be an independent pronoun, can also precede the VC. Sudest can be categorised as a primary object language (Dryer 1986). In primary object languages, the single object of a monotransitive verb and the argument with the role of goal/beneficiary of the ditransitive verb are treated in the same way, while the other argument of the ditransitive verb (with the role of theme/patient) is treated differently (see also §7.2 and §7.4.1 for discussion of the three ditransitive verbs in Sudest). The primary object of transitive verbs is indicated by an object index, a lexical NP, or both. The subject and object indexes make the same distinctions for person and number as the independent pronouns and the possessive pronoun suffixes (§3.3.4). They distinguish between first, second and third person singular and plural, with first person plural pronouns also making a distinction for clusivity. Like other Oceanic languages, the bound person forms do not distinguish gender.

There is an extensive literature addressing the status of bound person forms, particularly those bound person forms that can co-occur with a coreferential lexical NP with the same reference and

role as the bound person form (e.g. Jelinek 1984; Mithun 1986; Bresnan & Mchombo 1987; Austin & Bresnan 1996; Lichtenberk 1997; Corbett 2003; 2006; Siewierska 2004; Kibrik 2011; Hengeveld 2012; Haspelmath 2013). The often-tacit assumption in many analyses is that a verbal argument can only be expressed once in the clause (see Kibrik 2011: Ch. 3 & 6 for extended discussion). A consequence of this assumption is that bound person forms have been analysed as agreement or ‘cross-reference’ markers, with the NP instantiating the ‘real’ argument (e.g. Baker 1996; Evans 2002; Bickel & Nichols 2007), or as bound pronouns that index the argument with an “adjunct” NP (e.g. Jelinek 1984). A third view proposes that the bound person forms sometimes function as a pronoun and sometimes as an agreement marker depending on the context: if a nominal is present, it is an agreement marker, and if it is absent, the bound person form is a pronoun (e.g. Bresnan & Mchombo 1987; Van Valin & LaPolla 1997; Lichtenberk 1997).

The Eurocentric nature of ‘agreement’ analyses has been pointed out many times (Mithun 2003; Kibrik 2011; Haspelmath 2013). Such analyses are influenced by the sort of ‘grammatical agreement’ attested in German and English, which is cross-linguistically extremely rare; Siewierska (1999) finds it in just two languages of a 272-language sample (or less than 1%). Although not an original critique, recent work challenges the assumptions relating to the uniqueness of the argument expression, pointing out that it is common for languages to distribute the expression of meaning across a clause (Kibrik 2011; Haspelmath 2013).⁸¹ For example, independent pronouns are frequently assumed to be in complementary distribution with lexical NPs (e.g. English) however, this does not hold cross-linguistically; independent pronouns occur in clauses with coreferential NPs in some languages (e.g. Hausa and Spanish) (Kibrik 2011).

The current analysis of Sudest adopts Haspelmath’s (2013) conceptualisation of argument indexes. He argues that bound person forms (both affixes and clitics) should be treated as a phenomenon *sui generis*. Following Haspelmath’s terminology, bound person markers in Sudest are described as subject and object *indexes*, and NPs with the same reference and role as the index are referred to as *conominals*. In this view, both the index and a conominal ‘jointly constitute’ an argument (Haspelmath 2013: 212). Haspelmath identifies three canonic types of indexes situated on a continuum. The Sudest bound person paradigms can be analysed as near-canonic cross-indexes: they may co-occur with a conominal, but a conominal is not obligatory. First and second person objects are an exception to this; they may only be expressed by either an object index or an

⁸¹ See Steele (1989) and Mithun (2003) for earlier critiques. Dixon (2010: 40-1) also questions the usefulness of the agreement vs. pronoun discussion for linguistic description.

independent pronoun but not both. Therefore, they more closely resemble pro-indexes (which may not occur with a conominal).⁸²

The remainder of §4.2 is organised in the following manner: the three subject marking paradigms are discussed in turn in §4.2.1, and the object markers and patterns of object expression are described in §4.2.2.

4.2.1 Subject indexes

There are three sets of subject indexes: ‘basic’ or ‘unmarked’ subject proclitics, immediate past subject proclitics, and intentional subject proclitics. The latter two paradigms combine the basic subject indexes with immediate past and intentional morphemes. Such forms are common among the Oceanic languages of Melanesia, although the semantic distinctions made vary (Lynch et al. 2002).

The subject indexes, along with the verb stem(s) (as previously stated), are the only obligatory elements of the VC. A subject marker is the first element of the VC, except in imperative clauses (although not dehortative clauses). Note that only the basic subject indexes can occur with imperative proclitics.

4.2.1.1 Basic subject indexes

The basic subject index paradigm is presented in Table 3.3, and repeated in Table 4.1 below.

	1INCL	1EXCL	2	3
SG		(y)a=	u=	i=
PL	ra=	wo=	hu=	thi=

Table 4.1 Basic subject indexes

The basic subject markers specify the person and number of the argument. A subject conominal typically only occurs when (re)introducing, when specifying a subject referent, or for emphasis. A clause with a basic subject marker can have any temporal reference, which can either be specified by context, or overtly marked by a TAM particle (§3.5) or temporal adverbial. Examples (1) and (2) have a present temporal reference at the time of utterance. In (1) time of reference is inferred from context, while in (2) the time of reference is indicated by the temporal noun *noroke* ‘today’.

⁸² Gramm-indexes are the third type of index; they obligatorily occur with a conominal, and are cross-linguistically rare. German and English bound person forms are examples of gramm-indexes; they fall under the category of ‘agreement marker’ in much of the literature.

- (1) *gha-nda* *u=ma* *i=ringe*
 POSS.CLF1-1INCL.POSS friend=DET 3SG=be.exhausted
 ‘our friend is exhausted’ (c_031116 041, 87.450 89.440)

- (2) *noroke* *a=utu-nga* *mbombo* *na* *uthuwoghi*
 today 1SG=speak-TR pig and dugong
 ‘Today I talk about Pig and Dugong’ (pig_and_dugong_101214 004-5, 19.900 29.510)

In (3), the basic subject index *a*= ‘1SG’ occurs in a clause with near future temporal reference, indicated by the temporal adverbial *mbanga=ke* ‘time=SPKR.PROX’ meaning ‘now’ and the future particle *ne*. The remote past particle *va* in (4) specifies that the action described by the verb took place at least a day prior to the time of reference.

- (3) *mbanga=ke* *ne* *a=vaona* *lolo* *riwa-e* *ghaghadi*
 time=SPKR.PROX FUT 1SG=count/read person body-3SG.POSS until
umbali-ye=ke *ndamwa-ndamwa* *na* *gheghe* *like-likeke*
 head-3SG.POSS=SPKR.PROX RED-leaf and leg RED-finger/toe
 ‘today I will list (lit. count) a person’s body (parts) from their head hair to their toes’
 (body_parts_251015 001-5, 1.821 12.905)
- (4) *va* *ya=ghe*
 REM.PST 1SG=marry
 ‘I married’ (sweeping_011115 022, 48.270 51.040)

4.2.1.2 Immediate past subject indexes

The immediate past subject indexes combine the basic subject markers and the immediate past particle *me* (§3.3.7.1). The immediate past subject marker paradigm is presented in Table 4.2.

	1INCL	1EXCL	2	3
SG		<i>ma=-</i>	<i>mo=</i>	<i>me=</i>
PL	<i>mara=</i>	<i>moo=</i>	<i>mou=</i>	<i>methi=</i>

Table 4.2 Immediate past subject indexes

As discussed in §3.3.7.1, the immediate past subject indexes have a number of functions. As the name suggests, they can indicate that the event or state referred to occurred in the near past – either the same day or the night prior to the time of utterance/reference point. They are also used when describing past, habitual events. Examples (5) and (6) show the immediate past function of the indexes; the speakers are describing events from earlier that same day and the night before respectively.

- (5) *ma=ghena-thuweiru* *i=yuva* *moli* *ma=wa* *e* *kamwathi*
 1SG.IMM.PST=sleep-be.awake 3SG=go.first INTS 1SG=go PREP path
 I got up, first I went to the toilet (lit. go to the path)’
 (cooking_111015 004-5, 19.270 22.733)

- (6) *ande ma=ghena=re gougou*
 NEG 1SG.IMM.PST=sleep=NEG night
 ‘I didn’t sleep (last) night’ (last_night_181214 001, 0.780 4.730)

Examples of the habitual use of the immediate past subject indexes are presented in (7) and (8). Example (7) describes traditional courting and dating practices, while the example presented in (8) outlines traditional trade networks of the region and practices surrounding trade.

- (7) *e le-nji vighathi=ko iya=ko ande*
 PREP POSS.CLF2-3PL.POSS relationship=DIST DEM=DIST NEG1
me=yere=re e thuwo-thuwole mbe me=yere
 3SG.IMM.PST=move=NEG2 PREP RED-hide still 3SG.IMM.PST=move
vara e manja-manjala wevo=ko tina-e na
 truly PREP RED-light young.woman=DIST mother-3SG.POSS and
rama-e methi=ravu=Ø
 father-3SG.POSS 3PL.IMM.PST=know=3SG
 ‘during their relationship, it was not hidden, it was public (lit. moved in the light), the young woman’s mother and father knew (about) it [...]’
 (dating_081015 037-42, 94.070 111.480)

- (8) *methi=wa Saisai=ko methi=yo-bigi=ya*
 3PL.IMM.PST=go place.name=DIST 3PL.IMM.PST=while.going-GET.PL.CNTR=YA
yambiya tobotobo mbombo vethi=wo umo Sabali
 sago greenstone.axehead pig 3PL.INT=GET.SG.RIGD lime place.name
une we=nggi
 friends PREP=3PL
 ‘they went to the Calvados chain, they took sago, greenstone axes (and) pigs to get (caustic) lime from their Sabara friends’
 (kula_exchange_101214 021-8,65.130 90.390)

4.2.1.3 Intentional subject indexes

In the intentional subject index paradigm presented in Table 4.3, the indexes combine the basic subject indexes with the morpheme *v(V)-*. Unlike the immediate past marker, the intentional morpheme does not occur outside of the subject index paradigm; any full form it may have had is not identifiable in the language today.

	1INCL	1EXCL	2	3
SG		<i>va=</i>	<i>vo=</i>	<i>ve=</i>
PL	<i>vara=</i>	<i>voo=</i>	<i>vohu=</i>	<i>vethi=</i>

Table 4.3 Intentional subject indexes

The intentional subject indexes are used when the event expressed by the verb is anticipated or intended to occur in the near future and in this context is accompanied by the future particle *ne*, as in (9) and (10). Clauses with an intentional marker are generally preceded by a grounding expression – typically a VC with a motion verb or a temporal adjunct

- (9) *“thela ne i=yo na ve=wo-njogha vara*
 who FUT 3SG=fly and 3SG.INT=GET.SG.RIGD-go.back truly
la-ma?”
 POSS.CLF2-1EXCL.POSS
 “who will fly and bring back our relative?”
 (bush_betelnut_011115 098, 236.819 239.740)
- (10) *“ne ya=wa va=thuwe=nggi”*
 FUT 1SG=go 1SG.INT=see=3PL
 “I will go to see them” (mandumbunga_02_181016 061, 171.285 174.846)

The intentional subject indexes do not always occur in clauses expressing intended, future events. In many cases, they are used to describe events with past temporal reference that took place rather than were just intended to occur. The following examples in (11) to (15) show the intentional subject indexes in VCs describing events that have already occurred.

- (11) *ma=wa e kesin va=bigi=ya ghaningga*
 1SG.IMM.PST=go PREP kitchen 1SG.INT=GET.PL.CNTR=YA food
 ‘I went to the kitchen to get food’ (cooking_111015 010, 37.590 40.130)
- (12) *va i=wa ve=ghe Mbumbunari*
 REM.PST 3SG=go 3SG.INT=marry place.name
 ‘she went to marry in Mbumbunari’ (marriage_111015 004, 13.010 16.340)
- In (13), there is no explicit temporal reference, but it can be inferred from the context, given that the speaker is discussing her educational history.
- (13) *a=nja-wo=ko va=vutha Sideia va=sikulu*
 1SG=go.down-thither=DIST 1SG.INT=arrive place.name 1SG.INT=attend.school
 ‘I went down (i.e. west) to arrive at Sideia to go to school’
 (education_241214 008-9, 24.626 35.257)
- (14) *amba me ve=ruku-ru nunggo mbowo*
 then IMM.PST 3SG.INT-run-go.in maybe still
ve=la-yawe=va lolo o koghai
 3SG.INT=and.go-swing=REP person or I.do.not.know
 ‘then she ran in to maybe swing the baby again (before coming back) or I don’t know’
 (c_031116 043-4, 91.160 95.940)
- (15) *mbanga regha vethi=gudu mbwa Tamwero e mbwa=ko*
 time one 3PL.INT=fetch water place.name PREP water=DIST
tine
 inside
 ‘one time, they fetch water at Tamwero, at the water’
 (mandumbunga_061215 055-7, 158.028 163.985)

4.2.2 Object Indexes

The object indexes are presented in Table 3.3 in chapter 3 and repeated below in Table 4.4. The third person singular object marker is a zero morpheme.

	1INCL	1EXCL	2	3
SG		=nggo	=ngge	=∅
PL	=nda	=me	=mi	=nggi

Table 4.4 Object indexes

As can be observed in Table 4.4, the third person singular object is unmarked on the verb by an index. The zero marker =∅ is used in examples throughout the thesis when there is no overt indication of the object argument by a lexical NP. When there is an object NP present, the zero marker is omitted from the VC. The use of the zero marker is to clearly indicate the valence of the verb and its argument structure, and does not presuppose that a zero marker is actually present.⁸³

Examples (16) and (17) show the object indexes occurring with a monotransitive and ditransitive verb stem respectively. As noted above, Sudest can be classified as a primary object language (Dryer 1986) and the semantic goal in (17) is expressed by the object index just like the single object of the monotransitive verb in (16).

- (16) “*ah, a=mararu=ngga*”
 yes 1SG=be.afraid=2PL
 ‘yes, I’m scared of you’ (couples_story_101214 049, 131.544 133.980)
- (17) *amalisari i=vaghare=inda la*
 old.man 3SG=teach=1INCL POSS.CLF2.1INCL
mumuga=ke
 custom/tradition=SPKR.PROX
 ‘old man teaches us our customs’ (e_261016)

The object indexes may fill the third postverbal slot, following the transitive (18) and applicative enclitics (19) (§4.4.1) and the directional enclitics (20) (§4.4.2).

- (18) *mbaro i=va-ndeghathi=ga=nggi*
 law 3SG=CAUS-stand=TR=3PL
 ‘the law gets them (lit. the law makes them stand)’
 (ft_stimuli_191015_01 088, 343.468 345.280)
- (19) *bubu va i=gaihi=wana=nggo wanji baya*⁸⁴
 grandparent/child REM.PST 3SG=be.angry=APPL=1SG sweeping reason
 ‘my grandmother scolded me for/because of the sweeping’

⁸³ This annotation decision becomes an issue if there are any labile verbs in the language. At the time of writing, there is no evidence to suggest the existence of a class of labile verbs, although completely ruling out such a group is difficult precisely because third personal singular is expressed by zero (see §3.3.2 for discussion of verb types).

⁸⁴ *Baya* ‘for, because’ is Nimowa and equivalent to the Sudest benefactive and purposive postposition *kaiwa* ‘for’ (§3.3.5.3).

(sweeping_011115 002, 4.470 10.850)

- (20) *thi=vanggu-ru=wo=nggi=ya giya-giya o bwabwari*
 3PL=lead-go.in=thither=3PL=YA RED-big.man or guest
 ‘they welcome (lit. lead in) the big men or guests’
 (e_251115_01 037-9, 125.834 130.719)

The object indexes occur in two places outside of the VC. They cliticise onto the ambiposition *we* ‘to, from’ (§3.3.6.2), indicating the person and number of the object of the PP (21). The use of the third person plural object index *=nggi* also appears to have extended; it can function as a general plural marker in NPs as in (22) (see §3.4.1.4).

- (21) *i=njogha we=nggi tina-e na rama-e*
 3SG=go.back PREP=3PL mother-3SG.POSS and father-3SG.POSS
 ‘she returns to her mother and father’ (bush_betelnut_011115 137, 323.950 326.120)
- (22) *rumbu-nji i=ro-mban=a le-nji*
 grandparent/child=3SG.POSS 3SG=sit.and-GET.PL.RIGD=YA POSS.CLF2-3SG.POSS
kabura=nggi=ma
 sago.share=3PL=DET
 ‘their grandmother stayed back and got their shares of sago’
 (snake_passage_061215 018-20, 43.802 50.960)

As mentioned above, primary objects may be expressed in three ways: (a) by an object index; (b) by a nominal object; (c) by an object index and conominal. The sentence presented in (23), as well as examples above in (16) to (19) show the first type of construction, in which the object index is the only expression of the object.

- (23) *thi=thalavu=ime e gha-ma kaiwo=ko*
 3PL=help=1EXCL PREP POSS.CLF-1EXCL.POSS work-DEM
 ‘they help us with our work’ (pigs_251214 030-1, 76.182 78.660)

The second way in which the object may be expressed is by a nominal object with no object index, as in (24) and (25).

- (24) *a=thavwi=va bigi-bigi*
 1SG=wash=REP RED-thing
 ‘I wash my things again’ (womens_work_221214 022, 54.264 58.005)
- (25) *“nggama=ko ne i=ghan ghino*
 child=DIST FUT 3SG=eat 1SG
 “the child will eat me” (child_and_giant_201015 110, 292.980 294.400)

The example in (25) is the only corpus token with an independent pronoun as a lexical object. In elicitation, some speakers found clauses with independent pronoun objects (such as the one in (26)) ungrammatical, while others found them grammatical, but still preferred object indexes over independent pronouns.

- (26) *?ela=ko me=vaito ghino*
 woman=DIST 3SG.IMM.PST=ask 1SG
 intended: ‘the woman questions me’ (e_041116; e_211116_02)

The third way in which the object may be expressed is by an object index and conominal, as in (27) and (28). Double expression of the object is only grammatical for third person plural arguments; first and second person arguments can only be expressed by either an object index or a lexical object.

- (27) *i=warari=nga=nggi le nggama-nggama*
 3SG=be.happy=TR=3PL POSS.CLF2.1SG RED-child
 ‘he is happy for his children’ (ft_stimuli_201015_01 250, 940.370 942.496)

- (28) *ne thi=mban=nggi=ya thegha*
 FUT 3PL=GET.PL.RIGD=3PL=YA youth
 ‘they will get the youths’ (funeral_feasting_081015 020, 55.576 57.820)

Given that third person singular objects are unmarked on the verb, the only overt expression of third person singular objects is by way of a lexical object as in (29).

- (29) *i=vakatha uma togha*
 3SG=make garden new
 ‘he makes a new garden’ (garden_planning_021015 002, 4.110 9.473)

See also the classificatory verbs in §5.3.

4.3 Preverbal elements

There are 11 possible preverbal slots in the VC. The preverbal elements are listed in Figure 4.1 along with the postverbal elements and repeated below in Figure 4.2. This section of the chapter presents each of the preverbal elements in turn, excluding the subject indexes already discussed in §4.2.1 and the manner-of-causation prefixes which are analysed in more detail in §5.2 in the next chapter.

1	2	3	4	5	6	7
(IMP =)	SUBJ=	(<i>nde</i> =)	(<i>ya/raka</i> =)	(<i>la-</i> subsequent)	(<i>ruku-</i> prior AM)	(<i>posture-</i>)
		(DEHORT)	(<i>'all'</i>)	(AM)	(<i>yo-</i> concurrent AM)	(<i>motion-</i>)
	8	9	10	11		
	(<i>i-</i> 'intentional')	(<i>ve-</i>)	(<i>manner-of-</i>)	(<i>ma/rara-</i> DETR)		
	(<i>thu-</i> 'unintentional')	(RECP)	(<i>causation-</i>)	(<i>va-</i> CAUS)		

Figure 4.2 Preverbal slots of the verb complex

As was mentioned in the introduction of the chapter, the current description adopts the nomenclature used in A&R where appropriate. I also explicitly note instances where the current data suggest an analysis substantially different from previous descriptions.

4.3.1 Imperatives

The first slot of the VC, preceding the subject marker, may be filled by one of the three imperatives: the imperative *ko=*, admonitive *no=* and hortative *wo=*. The imperatives only occur with the basic subject indexes. For other directives, see also §4.3.2 for discussion of the preverbal dehortative affix *nde=* and §3.7.2 for the prohibitive particles *tha* and *thava*.

4.3.1.1 *ko=* imperative

The imperative *ko=* is used to give direct commands to a second person (Bybee et al. 1994: 179), and thus takes only second person subjects:

- (30) *ko=u=tamwe=ya* *ghamba-nji* *ghe=na!*
 IMP=2SG=look.for=YA place-3PL.POSS LOC=ADDR.PROX
 ‘look for their place there (near addressee)!’
 (ft_stimuli_191015_03 164, 435.962 437.820)

- (31) *iya=na* *ko=u=utu* *le=ko* *le-Ø*
 DEM=ADDR.PROX IMP=2SG=speak person=DIST POSS.CLF2=3SG.POSS
utu-utu *maa* *i=thari!*
 RED-story NEG 3SG=be.bad
 ‘that’s it, say (to her), the person’s story isn’t bad!’ (c_031116 024, 54.820
 58.190)

The imperative is typically used when commanding children, but can also be used between adults with a close relationship. This is the case in the two examples above, which are conversations between two close friends of the same age and a husband and wife respectively. The examples below come from elicitation, although such commands can frequently be heard around the village.

- (32) *ko=u=mena* *ghe=ke!*
 IMP=2SG=come LOC=SPKR.PROX
 ‘come here!’ (e_091215)

- (33) *ko=hu=raka-wa!*
 IMP=2PL=all-go
 ‘all of you go away!’ (e_091215)

There are limited tokens of the imperative in the corpus. This can partially be attributed to the text types and speaker demographics⁸⁵ in the corpus as, well as the fact that the hortative *wo=* is used

⁸⁵ The corpus contains no data from anyone under 18 years of age at the time of recording.

far more frequently when issuing directives, particularly between adults (§4.3.1.3). An imperative can also be expressed by a VC with no imperative proclitic, in (34) and (35).

- (34) *wadawada=ma va i=dage we=ya gh-e*
 witch=DET REM.PST 3SG=speak PREP=YA POSS.CLF1-3SG.POSS
u=ko numobwalabwala=ma i=nga “u=vana!”
 friend=DIST non.magical.person=DET 3SG=say 2SG=climb
 ‘the witch said to her friend the woman without magic, she said “you climb!”’
 (bush_betelnut_011115 018, 42.923 47.301)
- (35) *i=nga “hu=njogha=wo vohu=vangu=ma=Ø ra=thuwe=Ø”*
 3SG=say 2SG=go.back-thither 2PL.INT=lead=hither=3SG 1INCL=see=3SG
 ‘she said “go back thither to bring (lit. lead) him hither (and) we (can) see him”’
 (mandumbunga_02_181016 273, 686.632 691.112)

4.3.1.2 *no= admonitive*

The admonitive indicates that the speaker is issuing a warning (Bybee et al. 1994: 179).⁸⁶ Like with the imperative, the admonitive proclitic only occurs with second person subjects. VCs with the admonitive typically warn the addressee from performing an action with an undesirable consequence:

- (36) *thonggo ande ghamna-n i=wara-warari=re maa*
 if NEG feeling-2SG.POSS 3SG=RED-be.happy=NEG2 NEG
no=u=nggau morouma e njighi
 ADM=2SG=spear k.o.fish PREP sea
 ‘if you aren’t feeling happy, don’t (try to) spear morouma fish in the sea (because you won’t catch any)’
 (mandumbunga_061215 168-9, 476.633
 481.187)
- (37) *no=u=ki-ten(-thavwi)=ya nima-n!*
 ADM=2SG=by.cutting-break(-by.mistake)=YA hand-2SG.POSS
 ‘don’t cut your hand (by mistake)!’ (e_091215)
- (38) *u=lawe=ya marun no=u=doibu!*
 2SG=catch=YA banister ADM=2SG=fall
 ‘hold the banister, don’t fall!’ (e_091215)

The admonitive, like the imperative, is typically directed at children. Possibly for this reason there is only the single token of it in the corpus, given in (36). See also the dehortative *nde=* (§4.3.2) and prohibitive particle *tha(va)* ‘don’t’ (§3.7.2) for further negative directives.

⁸⁶ Anderson and Ross (p. 336) label the admonitive a ‘caution’ particle.

4.3.1.3 *wo*= hortative

The hortative *wo*= is used by the speaker to encourage or incite someone to action (Bybee et al. 1994: 179). Unlike the imperative and admonitive morphemes, the hortative is not restricted to second person subjects (39) but can be self-directed (40) or directed at a group including the speaker (41) as well. They also occur in VCs directed at third person subjects, as in (42) and (43).

- (39) *le=∅* *ghai* *le=ko* *i=nga*
 POSS.CLF2=3SG.POSS maternal.uncle person=DIST 3SG=day
 “*wo=u=thuwe-wogiyawe=∅*”
 HORT-2SG=see-be.good=3SG
 ‘his maternal uncle said “look at it carefully”’
 (mandumbunga_02_181016 039, 114.877 117.755)
- (40) *wo=a=wa* *e* *kamwathi*
 HORT=1SG=go PREP path
 ‘I’m going to the toilet (lit. I go to the path)’ (c_031116 109, 210.434 211.940)
- (41) *ok wo=ra=utu-vao* *vara*
 ok HORT=1INCL-speak-COMPL truly
 ‘ok, let’s finish talking’ (c_031116 276, 510.950 512.880)
- (42) *wo=i=ru=va* *ghe=ke*
 HORT=3SG-go.in=REP LOC=SPKR.PROX
 ‘it goes in here’ (ft_stimuli_191015_03 264, 649.700 651.040)
- (43) *i=nga* “*thenjighe-wo wo=thi=njogha thi=ro-thuwe=∅*”
 3SG=say NUM.CLF-two HORT=3PL=go.back 3PL=sit.and-see=3SG
 ‘he said “(let) two boys go back and check on her”’
 (chicken_story_181015 036, 82.093 84.440)

Anderson and Ross (p. 336) classify *wo*= as a necessity modality meaning ‘must’, however, the corpus and elicitation data better fit a hortative analysis. Bybee et al (1994: 177) classify necessity modals as indicating the existence of ‘physical conditions compelling an agent to complete the predicate action, as in [...] “I **need** to hear a good loud alarm in the morning to wake up”’ (emphasis in original). Such necessity is not evident in typical tokens in the corpus with the proclitic; speakers even report that the hortative is less forceful than the imperative proclitic (§4.3.1.1). Consider the sentence presented in (44), where the hortative follows the request *tab vaikaiwae* ‘is it possible’.

- (44) *thi=nga* “*tab valikaiwa-e wo=u=nja=ma?*”
 3PL=say Q be.possible-3SG.POSS HORT=2SG-go.down=hither
 ‘they said “is it possible (for) you to come down?”’
 (mandumbunga_02_181016 208, 525.677 528.663)

4.3.2 *nde*= dehortative

The proclitic *nde*= may fill the third preverbal slot of the VC, immediately following the subject index. The proclitic has two related functions. The first is as a dehortative (45) – for which the morpheme is also named – and the second is as an additional, emphatic negative marker (46), in conjunction with one of the regular negative markers (§3.7.3.1.1). The dehortative function will be considered first before describing the emphatic negation function.

- (45) *i=nga* “*ne* *hu=nde=yeghe=∅*
 3SG=say FUT 2PL=DEHORT=cut=3SG
 ‘you shouldn’t cut it’ (mandumbunga_061215 084-85, 237.651 239.170)

- (46) *ande mbe i=nde=renguwanga=re mun gha=∅*
 NEG1 still 3SG=DEHORT=think.about=NEG2 a.bit POSS.CLF1=3SG.POSS
thari=ko thovuye=ko
 bad=DIST good=DIST
 ‘he still didn’t think of his badness/mistakes or his goodness/success at all’
 (ft_stimuli_201015_01 226, 846.999 850.500)

In its dehortative function, the proclitic is used to urge the hearer to not do something (often translated as ‘should not’) and is less forceful than VCs with the admonitive proclitic (§4.3.1.2) or prohibition particles (§3.7.2). It is homophonous with the sixth ranked prefix *nde*- ‘stand and’ (§4.3.5.3). The two preverbal elements likely have a shared origin but today fill separate slots in the VC.⁸⁷ In its dehortative function, the proclitic obligatorily occurs with the future particle *ne*. If no future particle is present, *nde*= is interpreted as the positional prefix *nde*- ‘stand and’. Compare the two sentences presented below:

- (47)a. *ne u=nde=dage*
 FUT 2SG=DEHORT=speak
 ‘you shouldn’t speak’ (171215_01)
- b. *u=nde-dage*
 2SG=stand.and-speak
 ‘stand and speak’ (171215_01)

The dehortative does not hold scope over all elements in the VC. In VCs with both the dehortative and the subsequent associated motion prefix *la*- ‘and go’ (§4.3.4.1), the dehortative only urges the agent against undertaking the proposition of the verb stem but not against the action denoted by *la*-. In (48), the speaker is only urging the addressee against getting the speaker’s chewing basket, but not against the addressee leaving. The speaker in (49) is likewise urging the hearers not to eat the shellfish before they leave.

⁸⁷ There is one token that appears to be an exception to this in the corpus in which the dehortative prefix occurs in a slot closer to the verb than would be anticipated; this is discussed further below.

- (48) *ne u=nde=la-thin lo vethe*
 FUT 2SG=DEHORT=and.go-GET.SG.CNTR POSS.CLF2.1SG k.o.basket
gha-ghawi=na
 RED-chew=ADDR.PROX
 ‘don’t get my chewing basket (before) going/leaving’ (e_171116_03)

- (49) *ne hu=nde=la-ghan=a soka=na*
 FUT 2PL=DEHORT=and.go-eat=YA k.o.mollusc=ADDR.PROX
 ‘don’t eat the shellfish (before) going/leaving’ (e_141116_01)

The second function of the dehortative is in negative statements. In this construction, the dehortative clitic obligatorily co-occurs with the negative polarity particle *mun* ‘a bit’ which occurs in a postverbal slot and adds the sense ‘not a bit’, ‘not at all’ or ‘never’ to already negated VCs (§4.4.6). Example (50) as well as (46) above show a VC with the discontinuous negative marker *ande...re*, while (51) shows the negative marker *maa* with the dehortative and negative polarity particle.

- (50) *ande i=nde=thin-njogha=Ø=re mun we=Ø*
 NEG1 3SG=DEHORT=GET.SG.CNTR-go.back=3SG=NEG2 a.bit PREP=3SG
 ‘he never returned it (the spear) to him (his cousin)’
 (eagle_story_081115 046, 127.630 131.900)

- (51) *i=nga “maa i=nde=go-ghembe=nggo mun”*
 3SG=say NEG 3SG=DEHORT=by.speaking-go.towards=1SG a.bit
 ‘she said “he didn’t speak to me a bit/at all”’
 (mandumbunga_02_181016 423, 1074.122 1076.918)

There is one token in the corpus in which the order of the dehortative proclitic and the subsequent associated motion prefix is reversed. Compare the ordering of the dehortative and subsequent motion morphemes in (52) with the examples presented above in (48) and (49).

- (52) *maa i=la-nde=utu-thai=ngge-mun=re*
 NEG 3SG=and.go-DEHORT=speak-be.close=2SG-a.bit=NEG2
 ‘he doesn’t talk and be close to you a bit’
 (mandumbunga_02_181016 392, 986.071 988.673)

The reason for the reversed ordering is unclear. It is possible that there is some dialect or idiolectal variation at play.⁸⁸ It could also be the case that the emphatic negative function is not a function of the dehortative but rather the positional prefix. Further data would be necessary to further explore and pinpoint the cause for such variation.

⁸⁸ The speaker is originally from Pamela on the central south coast, unlike the majority of speakers in the corpus who are from the central north coast. Speakers from Pamela, however, reportedly speak a nearly identical variety of Sudest to speakers from Vuwo and surrounds. In addition, the data on which A&R is based was recorded in Pamela and they also report that the dehortative precedes *la-* ‘and go’. Idiolectal variation cannot be ruled out, the speaker has some unusual negation usage which combines the negative marker *maa* ‘and the second half of the discontinuous marker =re (see §3.7.3.1). Indeed, the order =re and *mun* is also reversed in (52).

Anderson and Ross (p. 337) note the dehortative function of the proclitic, labelling it as ‘shouldn’t’. They do not specify the obligatory use of the future in conjunction with the dehortative function and there is not mention of the emphatic negative function with the negative polarity morpheme *mun* ‘a bit’.

4.3.3 Universal quantifiers *ya-* and *raka-* ‘all’

The two morphemes *ya-* and *raka-* are universal quantifiers meaning ‘all’. They occur with plural subject referents and specify that all potential members of a group are agents of the event or action of the verb. The current data and analysis align with that set out in A&R. The prefix *raka-* ‘all’ comes from the intransitive motion verb *raka* ‘go (PL)’, which can likewise only occur with plural subjects.⁸⁹

- (53) *menda* *wo=ya-ghena* *varae=ke* *kaiwa-e*
yesterday 1EXCL=all-sleep sun=SPKR.PROX reason-3SG.POSS
‘yesterday we all slept because of the (hot) sun’
(stone_cooking_251015 007, 19.730 24.120)

- (54) *va* *thi=ya-ri-nggau=∅*
REM.PST 3PL=all-w.teeth-spear=3SG
‘they all speared him with their teeth’
(feast_of_the_fish_271015 152, 393.270 394.560)

- (55) *bwarogi=ma* *kero* *methi=raka-ru* *e* *le-nji*
fish=DET already 3PL=all-go.in PREP POSS.CLF2-3PL.POSS
doda=ma
hole-DET
‘all the fish had already gone into their holes’
(mandumbunga_061215 065-6, 180.890 185.645)

- (56) *gha-∅* *une* *thi=raka-iteten=∅* *mbe*
POSS.CLF1-3SG.POSS friends 3PL=all-leave=3SG still
i=ro-ghena-ghena *ghe=ko*
3SG=sit.and-RED-sleep LOC=DIST
‘all his friends all left him still staying and sleeping there’
(child_and_giant_201015 019-20, 54.12057.032)

The prefixes appear to be in complementary distribution and each occur with different sets of verb stems. The verb stems they are attested to occur with are listed in Table 4.5. The main observable tendency from the available sample is that *raka-* nearly exclusively occurs with motion verbs while

⁸⁹ There is also a homonymous transitive verb *raka* ‘clear (land), destroy, tear down’.

ya- occurs with a broader range of event types. The verb *raka* ‘go (PL)’ occurs with *ya-* presumably to avoid ambiguity.

<i>raka-</i>			<i>ya-</i>		
verb	gloss	valence	verb	gloss	valence
<i>njogha</i>	‘go back’	INTR	<i>ghena</i>	‘sleep’	INTR
<i>ranggi</i>	‘go out’	INTR	<i>longga</i>	‘walk’	INTR
<i>ru</i>	‘go in’	INTR	<i>raka</i>	‘go (PL)’	INTR
<i>thuweiru</i>	‘wake up/get up’	INTR	<i>thavi</i>	‘beat (sago)’	INTR
<i>voro</i>	‘go up’	INTR	<i>vo</i>	‘flee’	INTR
<i>vutha</i>	‘arrive’	INTR	<i>wareri</i>	‘leave’	INTR
<i>wa</i>	‘go’	INTR	<i>yaku</i>	‘stay’	INTR
<i>iteten</i>	‘leave’	TR	<i>ghan</i>	‘eat’	TR
<i>mbele</i>	‘follow’	TR	<i>mun</i>	‘drink’	TR
			<i>nggau</i>	‘spear’	TR

Table 4.5 Verb stems attested with the universal quantifiers

The prefix *ya-* ‘all’ occurs preceding both the positional prefixes, as in (57), and the manner-of-causation prefixes (see (54) above).

- (57) *thi=ya-ro-kururu*
 3PL=all-sit.and-bend.down(head)
 ‘they all sit with bent heads/pray’ (e_040318)

On the other hand, *raka-* is not attested with any other preverbal elements. It is possible that it does not fill the same preverbal slot as the other universal quantifier and may even be a V_1 stem in a multi-verb construction. They are grouped together due to their identical function as universal quantifiers and their complementary distribution in terms of the verbs they occur with.⁹⁰

4.3.4 Associated motion prefixes

The fifth and sixth slots in the VC may be filled by associated motion prefixes. The category of associated motion was first identified by Koch (1984) in Kaytej/Kaytetye (Parma-Nyungan, Australia). In recent years, there has been a growing body of research produced describing associated motion morphemes not just in Australian languages but also in languages in the Americas, particularly in Amazonia as well as in Africa and parts of Asia (see Guillaume 2016; Guillaume & Koch 2017). Associated motion morphemes introduce a motion sub-event to the VC they occur in, in addition to the event or activity denoted by the verb stem(s). The morphemes typically also specify whether the motion sub-event occurs prior to (go and V), concurrently (V

⁹⁰ The order of at least *ya=* in relation to the associated motion prefixes is not identifiable from the current data. In lieu of concrete evidence, here the universal quantifiers are listed as the fourth rank elements in the VC following A&R.

while going) or subsequent to (V and go) the event of the verb (Koch 1984; Wilkins 1991; Guillaume 2016).

Associated motion morphemes commonly grammaticalise from motion verbs in multi-verb constructions⁹¹ cross-linguistically (Guillaume & Koch 2017). Multi-verb constructions, often labelled as ‘sequential’ constructions, are common in the Oceanic languages (Lynch et al. 2002: 47). The V₁ slot in these sequential constructions is typically restricted to verbs of motion with an unrestricted V₂; such constructions effectively mirror functions of associated motion morphemes attested in other languages, with the V₁ expressing a motion event that temporally precedes the event of the V₂ (Cleary-Kemp 2015: 134). A possible candidate for a grammaticalised prior associated motion affix in an Oceanic language come from Vatlongos (previously Southeast Ambrym, Central Vanuatu linkage, Vanuatu). Crowley (2002) describes a prefix *ha-* ‘motion’ that precedes the subject prefix in the VP and indicates ‘that an action takes place as a result of going somewhere in order to perform it’ (p. 666). The Vatlongos prefix is the only attested potential grammaticalised associated motion marker in an Oceanic language that I am aware of (cf. D. Ross 2017).

In Sudest, three motion verbs have further developed into associated motion prefixes. The subsequent associated motion prefix *la-* (§4.3.4.1) occurs in the fifth slot of the VC and the prior *ruku-* (§4.3.4.1) and concurrent associated motion *yo-* (§4.3.5.1) fill the sixth slot.

The earlier description of the language by A&R identifies subsequent and concurrent associated motion prefixes as preverbal morphemes in the VC, but does not mention the prior associated motion prefix. Their analysis also differs somewhat from the one presented here: they suggest that the subsequent motion prefix indicates ‘movement or the intention to move’ (p. 337), but they only describe the adverbial function of the concurrent motion prefix.

4.3.4.1 *la-* ‘and go’

The single prefix *la-* ‘(V) and go’ fills the fifth slot of the VC. It adds a subsequent motion subevent to the VC and specifies movement away from the location where the event or action denoted by the verb stem takes place. The prefix likely is derived from the Proto-Papuan Tip verb **laqo* ‘to walk’ (Schlossberg 2012: 119). Assuming this is the origin of the prefix, it is unusual that the resulting construction has come to mean ‘(V) and go’ rather than a purposive ‘go and (V)’ which is a type of serial verb construction in many Oceanic language.⁹² It is possible that *la-* developed subsequent

⁹¹ I use ‘multi-verb construction’ as an umbrella term to include not just those constructions analysed as serial verbs but also compound verbs and other constructions with more than one verb stem.

⁹² For example, Saliba, another Papuan Tip language, has just type of purposive core-layer serial verbs which often takes the cognate verb *lao* ‘go’ in the V₁ slot (Margetts 2004b:75).

motion semantics rather than a subsequent motion/purposive meaning because the prefix *ruku-* ‘and go’ (§4.3.4.2) already served this function (as do the intentional subject indexes to a certain degree). Alternatively, *la-* may have originally had a subsequent/purposive meaning but *ruku-* came into competition with it and it then developed subsequent semantics. Consider the examples presented in (58) and (59); the motion component added by the prefix is particularly clear as the verbs stems they occur with do not have a motion component.⁹³

- (58) *i=la-vuri-linggi-thavwi=∅*
 3SG=and.go-w.feet-pour-by.mistake=3SG
 ‘she accidentally kicked it (a bucket) over and kept walking’
 (put_stimuli_231015 053, 408.314 409.712)

- (59) *tina-e na rama-e mbe me gougou ma*
 mother3SG.POSS and father-3SG.POSS still IMM.PST night already
thi=la-dage we=∅
 3PL=and.go-speak PREP=3SG
 ‘her mother and father, when it was still night/dark, spoke to her before leaving’
 (crab_girl_081115 007-8, 21.120 25.150)

Some tokens with *la-* ‘and go’ are followed by a second VC that specifies the subsequent motion indicated by *la-*, as in the following three examples presented in (60) to (62):

- (60) *mbanga va i=ghiviya thi=la-vakatha=va ghaningga*
 time REM.PST 3SG=be.morning 3PL=and.go-make=REP food
thi=ya-wareri
 3PL=all-leave
 ‘when it was early morning, they prepared the food (and/before) they all left’
 (mandumbunga_02_181016-7 539, 1352.295 1357.693)

- (61) *a=la-thavwi=ya amba muyai a=wa e uma tine*
 1SG=and.go-wash=YA then later 1SG=go PREP garden inside
 ‘I wash the clothes then later I go to the garden’
 (womens_work_221214 024-6, 60.035 68.348)

The subsequent associated motion prefix is not in complementary distribution with at least the concurrent associated motion prefix *yo-* ‘while going’ (§4.3.5.1) and the two associated motion prefixes may co-occur as shown in (62):

- (62) *thi=la-yo-vaviri i=nja=ma=ko*
 3PL=and.go-while.going-laugh 3SG=go.down=hither=DIST
 ‘they laughed while walking (before) they went down there (to the water hole)’
 (mandumbunga_02_181016 159, 391.316 394.500)

⁹³ Such examples with ‘non-motion’ semantics are ‘good’ diagnostic examples for identifying associated motion morphemes, according to Guillaume (2016).

4.3.4.2 *ruku-* ‘go and’

The associated motion prefix *ruku-* ‘go and (V)’ indicates prior motion to the activity or event denoted by the verb stem, often with an implied purposive interpretation ‘go (to) X’. Examples (63) to (66) illustrate the use of the prefix.

- (63) *wo=i=ruku-rori* *iya=na*
 IMP=3SG=go.and-write DEM=ADDR.PROX
 ‘she goes to write that’ (c_031116 241, 437.721 439.161)

- (64) “*wo=vara=ruku-thuwe=nggi* *le-n* *boda-boda*”
 HORT=1INCL.INT=go.and-see=3PL POSS.CLF2-2SG.POSS RED-relative
 ‘we go/are going to see your relatives’ (marriage_111015 070, 212.180 216.154)

- (65) *umoru=ma* *i=ruku-tag-a-bebe=ya* *umbwa=ma*
 man=DET 3SG=go.and-by.striking-break=YA tree/stick=DET
 ‘the man goes to break the stick’ (e_230218)

- (66) *nggora* *utowo* *va* *i=ruku-wo* *kin*
 like stingray REM.PST 3SG-go.and-GET.SG.RIGD spear
 ‘like Stingray, he went to get the spear’
 (feast_of_the_fish_271015 149, 378.040 381.170)

The prior motion prefix *ruku-* ‘go and’ is derived from the intransitive manner-of-motion verb *ruku* ‘run’. The prefix does not retain the manner-of-motion semantics of the verb stem and fills a preverbal slot preceding the positional prefixes, as demonstrated by the example presented in (67).⁹⁴

- (67) *u=ruku-re-yaku* *ghe=ko*
 2SG=go.and-sit.and-stay LOC=DIST
 ‘you go and stay there (for a while)’ (e_161116_01)

The associated motion prefix does not always signal physical motion. The example in (68) involves metaphorical motion of a sickness towards a child if their mother does not follow a specific postpartum diet.

- (68) *gido* *nasiye* *i=ruku-vutha* *ghambwera* *kero* *i=gan*
 sickness small 3SG=run-arrive sickness already 3SG=exist
 ‘a small illness is going to arrive (or) the sickness already exists’
 (new_mother_251214 099, 238.660 242.510)

⁹⁴ It is currently unclear whether the prior associated motion prefix shares the fifth slot with *la-* ‘and go’ or is in complementary distribution with *yo-* ‘while going’ in the sixth slot. Until further data are collected to verify its relative distribution, the prior associated motion prefix is grouped with the concurrent associated motion prefix in the sixth slot.

4.3.5 Posture and motion prefixes

The posture and motion prefixes fill the seventh slot in the VC. Posture verbs cross-linguistically - specifically ‘sit’, ‘stand’, ‘lie’, or some combination of the three - tend to take on existential and/or locational functions and, in some cases, then develop grammaticalised aspectual meanings (Kuteva 1999; 2001; Heine & Kuteva 2002; Lichtenberk 2002).

In the case of Sudest, the postural prefixes *ro-* ‘sit and, stay and’ (§4.3.5.2) and *nde-* ‘stand and’ (§4.3.5.3) have not developed aspectual semantics, but have grammaticalised into prefixes. The prefix *ro-* also has a second, locational sense in addition to its posture sense. The analysis of the posture prefixes agrees with description presented previously by A&R.⁹⁵ The motion prefix *di-* ‘fall and’ (§4.3.5.4) introduces a causational falling event to the verb it occurs with. This analysis contrasts with A&R’s description, in which it is given the gloss ‘move and’ with associated motion semantics.

4.3.5.1 *yo-* ‘while going’

The associated motion prefix *yo-* ‘(V) while going’ expresses a motion subevent that occurs concurrently with the event encoded by the verb stem. The prefix fills the sixth slot of the VC and directly follows the subsequent associated motion prefix *la-* when present (see example (62) above and discussion in §4.3.4.1). Like the other associated motion prefixes, *yo-* ‘while going’ is derived from a motion verb, in this case the verb *yo* ‘fly’. Examples of the prefix occurring with non-motion event verbs are presented in (69) to (72).

- (69) “*hu=yo-utu-utu hu=nja=wo=na*”
 2PL=while.going-RED-speak 2PL=go.down=thither=ADDR.PROX
 “talk while you walk (when) you go down there”
 (mandumbunga_061215 059, 167.540 170.640)
- (70) *umoru=ma i=yo-vuri-vewo bal=ma*
 young.man=DET 3SG=while.going-w.feet-push ball=DET
 ‘the man kicked the ball with his feed while moving/dribbling’ (e 040318)

The combination of the prefix with a classificatory verb (§4.3) produces a VC meaning ‘carry, take (to somewhere/someone) lit. ‘get/hold while going’):

- (71) *amba=ma i=yo-tako=nggi e mbwa=ko tine*
 then=DET 3PL=while.going-GET.PL.GNRL=3PL PREP water=DIST inside
 ‘then he takes them to the water’ (funeral feasting 081015 02 068, 175.083 177.980)

⁹⁵ They label the prefixes ‘positional’ prefixes. ‘Posture’ prefix is used here as it is the more recognisable and common term in the descriptive and typological literature.

- (72) *i=yo-thin=Ø* *na* *ve=ngamwe=Ø*
 3SG=while.going-GET=3SG and 3SG.INT=feed=3SG
 ‘she takes it (sago pudding) and feeds her (the snake)’
 (snake_passage_061215 048-9, 113.762 118.866)

When the morpheme *yo* occurs with a verb with motion semantics, it has an adverbial reading of ‘quickly’, as in (73) to (75). From the current data, it is unclear whether these examples are instances of metaphorical usage of the verb *yo* ‘fly’ or of the prefix.⁹⁶

- (73) *nggama=ma* *i=yo-ruku*
 child=DET 3SG=fly/while.going-run
 ‘the child runs quickly’ (e_221116_01)
- (74) *nima-n* *tha* *i=vuyowo* *u=yo-ruku!*
 hand-2SG.POSS PROH 3SG=be.heavy 2SG=fly/while.going-run
 ‘don’t have a heavy hand, be quick! (lit. run quickly)’
 (ft_stimuli_201015_02 090-1, 303.540 308.608)
- (75) *va* *thi=yo-vangu=Ø* *angga=niye=ke*
 REM.PST 3PL=fly/while.going-lead=3SG where=DET=SPKR.PROX
 ‘where did they quickly lead him?’ (ft_stimuli_201215_04 028, 76.323 80.340)

4.3.5.2 *ro-* ‘sit and, stay and’

The prefix *ro-* has two functions: to indicate the posture of the subject as sitting ‘sit and’, as in (76) and (77), and to specify that the subject stays back or remains somewhere while undertaking the action denoted by the verb, as in (78) and (79). The ‘stay and’ sense carries an implication that the subject remains somewhere while others leave; this is often explicitly stated, as in (78). Note that the prefix has an allomorph *re-* that only occurs with the verb *yaku* ‘stay, live, sit’ (79).

- (76) *amala=ma* *ma* *i=ro-kururu*
 man=DET already 3SG=sit.and-bend.head.down
 ‘the man sat bent over’ (couples_story_101214 038, 107.866
 110.530)
- (77) *i=ro-itete* *tebol=ma*
 3SG=sit.and-leave table=DET
 ‘she pushed out from the table while seated (on a chair) (lit. sitting she left the table)’
 (cb_stimuli_051016_03 119, 440.245 442.740)

⁹⁶ A test to verify the status of *yo* in such instances would be to see if other preverbal elements (e.g. the posture, motion, reciprocal, manner-of-causation prefixes) could come between it and the (other) verb stem in the VC. The sense ‘quickly’, from a diachronic perspective, likely represents an intermediate stage in the grammaticalisation from *yo* ‘fly’ to *yo-* ‘while going’.

- (78) *thi=raka-iteten=Ø mbe i=ro-ghena-ghena ghe=ko*
 3PL=all=leave=3SG still 3SG=sit.and-RED-sleep LOC=DIST
 ‘they all left him, (and) he still stayed sleeping’
 (child_and_giant_201015 020, 55.180 57.032)

- (79) *thi=nga “u=re-yaku wei-n” lou=ke*
 3PL=say 2SG=sit.and-stay PREP-2SG.POSS sibling.opp.sex=SPKR.PROX
 ‘they said “you stay/remain with your brother”
 (crab_girl_081115 009-10, 25.150 28.470)

The prefix is derived from a verb *ro* ‘sit, stay’. The verb today has been replaced by *yaku* ‘stay, live, sit’, and is only retained in the idiomatic expression *ro e ghembe* ‘stay in the village’ which means ‘be menstruating’:

- (80) *i=ro e ghemba*
 3SG=sit/stay PREP village
 ‘she is menstruating (lit. she sits/stays in the village)’
 (menstruation_081015 003, 12.365 17.740)

The interpretation of the prefix as ‘sit and’ or ‘stay and’ is not always predictable and can be context-dependent. The directional verbs are an exception to this, as the prefix always specifies the posture of the subject as ‘sitting’. In VCs headed by a directional verb with *ro-*, the directional verb loses its motion sense/component. In these cases, the verb (only) indicates the directional orientation of the subject in relation to other entities in the surrounding environment. Such VCs describe the static state rather than a dynamic sitting event. Thus, in (81), *ro-nja* ‘sit and-go down’ describes an event in which the subject is already sitting down.

- (81) *wevo regha i=ro-nja i=ri-thinge*
 young.woman one 3SG=sit.and=go.down 3SG=w.teeth-get(w.teeth)
gha-Ø ndeghi
 1POSS.CLF-3SG.POSS cup
 ‘a girl is sitting down (and) gets a cup with her teeth’
 (put_stimuli_191015_01_02 189-91, 734.469 740.5620)

The VCs with directional verbs and *ro-* in (82) to (84) likewise describe static states. In (82), *vuvu* ‘go first’ specifies that the subject is located in front of his wife while seated in a canoe; in (83), *mbele* ‘follow, go after’ describes the reverse situation, in which the subjects are seated after or behind someone.

- (82) *le=ko Ilaghi=ko va i=ro-vuva*
 person=DIST pers.name=DIST REM.PST 3SG=sit.and-go.first
 ‘the person Ilaghi was seated in front (of his wife in a canoe)
 (mandumbunga_02_181016 407, 1031.755 1033.908)

- (83) *yeghiyeghi=na* *kero* *mbe* *thi=ro-mbele-mbele* *vara*
 late.afternoon=ADDR.PROX already still 3PL-sit.and-RED-follow truly
elisari=ko
 old.woman=DIST
 ‘in the late afternoon they were still seated following the old woman (i.e. with the old woman in front)’ (mandumbunga_02_181016 307-8, 769.744775.945)

Unlike the subjects in the previous examples, the subject in (84) is inanimate. The speaker is discussing how to order a series of pictures, and decides that some of them should ‘sit back’ in their current position while rearranging the rest.

- (84) *iya=ko* *thi=ro-njogha*
 DEM=DIST 3PL=sit.and-go.back
 ‘those (pictures) sit/remain back’ (ft_stimuli_191015_05 018, 35.160 36.584)

In some cases, the combination of verb and prefix produces relatively unpredictable, idiomatic VCs. The prefix combines with *ten* ‘break’ to derive a verb meaning ‘block (while seated)’ (85), and *sike* ‘hop’ combines with the prefix to mean ‘kneel’ (86).

- (85) *i=wa* *ma* *ve=ro-ten=nggi* *vara* *e* *ranggi=ko*
 3SG=go already 3SG.INT=sit.and-break=3PL truly PREP exit=DIST
 ‘she went to block them (while seated)’ (mandumbunga_061215 154, 447.900 450.475)
- (86) *ma* *i=ro-sike-sike* *vara*
 already 3SG=sit.and-RED-hop really
 ‘he is already kneeling’ (bwaindiya_151115 076, 221.111 224.380)

4.3.5.3 *nde-* ‘stand and’

The prefix *nde-* specifies the posture of the subject as standing ‘stand and’. It is homonymous with the dehortative proclitic *nde=* (see §4.3.2 above). It is unknown whether the prefix historically developed from a verb meaning ‘stand’ or similar, although cross-linguistic data suggest that this is likely (cf. Lichtenberk 2002). Examples of the prefix are presented in (87) to (91). The meaning of VCs with the prefix is for the most part predictable, as is the case in (87). However, this is not always the case. Compare the examples presented in (88) and (89). The posture prefix combining with the manner-of-causation prefix *mwana-* ‘by hand’ and *ten* ‘break’ means ‘stand and break by hand’, while the combination of just the posture prefix with *ten* ‘break’ without the manner-of-causation prefix has the meaning ‘block while standing’ (see also (85) above with *ro-* ‘sit and’).

- (87) *wevo=ma* *i=nde-thingingi*
 young.woman=DET 3SG=stand.and-smile
 ‘the young woman stands and smiles’ (put_stimuli_231015 033, 283.065 285.665)

- (88) *a=nde-mwana-ten=a* *thiyo=ke*
 1SG=stand.and-w.hands-break=YA string/rope=SPKR.PROX
 ‘I stood/was standing and broke the string with my hands’ (e_181116_02)
- (89) *thi=nga=engge* *ne* *vethi=la-nde-ten* *le=ko*
 3PL=say=just FUT 3PL.INT=and.go-stand.and-break person=DIST
thi=wo *ghena=ko* *na* *thi=wo-njogha* *we=∅*
 3PL=GET.SG.RIGD lime.stick=DIST and 3PL=GET.SG.RIGD-go.back PREP=3SG
 ‘they just think (lit say) they will block the person while standing (and) get the
 limestick and return it to him (the big man)’
 (bwaindiya_151115 107-9, 282.540 288.064)

Like the other posture prefix, *nde-* may occur in locative VCs with inanimate subject referents that are ‘standing’ or otherwise vertical:

- (90) *umbwa=ke* *i=nde-vadede* *e* *dumodumo=ko*
 stick/tree=SPKR.PROX 3SG=stand.and-lean PREP wall=DIST
 ‘the stick leans against the wall’ (e_041215)

There is no single verb in Sudest that means ‘stand’, to express that a subject is simply standing the posture prefix combines with the verb *ghathi* ‘touch’:

- (91) *i=nde-ghathi* *na* *i=mwana-bebe=ya* *umbwa*
 3SG=stand.and-touch and 3SG=w.hands-break=YA stick/tree
 ‘she is standing and breaks the stick with her hands’
 (cb_stimuli_051016_02_01 167, 895.522 897.990)

When the prefix occurs with a directional verb, the resulting VC can either specify the orientation of the subject in relation to other physical entities in the environment or motion while standing. In (92), the prefix combines with *viva/vuva* ‘go first’ to mean ‘stand in front (of s.o./s.th.)’.⁹⁷ This mirrors the examples in the corpus in which the other posture prefix *ro-* ‘sit and’ occurs with directional verbs. In contrast, when *nde-* ‘stand and’ combines with *njogha* ‘go back’, as in (93), it means ‘step back’.

- (92) *va* *tagaithi=nggi* *thi=nde-vuva* *e* *gaithi=ko*
 REM.PST angry.person=3PL 3PL=stand.and-go.first PREP fight=DIST
 ‘the angry ones [...] stand at the front of the fight’
 (feast_of_the_fish_271015 093-4, 233.670 235.603 238.480)

⁹⁷ *Viva* and *vuva*, both ‘go first’, appear to be used interchangeably by speakers and in similar frequencies in the corpus (27 and 24 tokens respectively).

- (93) *i=mena* *i=thin-ru-wo=∅* *e* *ghamba=ma* *na*
 3SG=come 3SG=GET.SG.CNTR-go.in-thither=3SG PREP place=DET and
i=nde-njogha=va
 3SG=stand.and-go.back=REP
 ‘he comes, puts it (a box) in its place and steps back again’
 (put_stimuli_231015 057-8, 455.900 462.281)

The combination of the prefix with a classificatory verb has lexicalised to mean ‘hold’ and does not specify the posture of the subject. Consider the examples presented in (94) and (95), both from stimuli data. The first example describes a situation in which a woman is standing and holding a stick, while the second example describes a clip in which a woman is holding a cup containing counters while clearly sitting on the ground. Note that the singular CLFV *thin* is used in (95) with the plural object referent *kountas*. This is because the container-and-contents CLFVs are used when referring to full containers, but also when referring to specific content(s). The singular and plural distinction of the CLFV refers to the number of containers, not whether the contents are plural or singular (see §5.3.2.3).

- (94) *wevo=ma* *i=nde-wo* *umbwa=ma*
 young.woman=DET 3SG=stand.and-GET.SG.RIGD stick/stree=DET
 ‘the woman holds the stick’ (cb_stimuli_051016_01 186, 2045.316 2047.968)
- (95) *elisari=ma* *i=nde-thin=a* *kountas=ma* *e*
 old.woman=DET 3SG=stand.and-GET.SG.CNTR=YA counters=DET PREP
kap=ma *tine*
 cup=DET inside
 ‘the old woman holds the counters in a cup’
 (put_stimuli_231015 015-6, 144.930 151.194)

4.3.5.4 *di-* ‘fall and’

The motion prefix *di-* ‘fall and’ shares a cause-effect relationship with the event described by the verb. The event encoded by the verb is a consequence of the subject falling and is often involuntary. There is only one token of the prefix in the corpus, shown in (96), which describes how the bush fowl lost the ability to fly after landing poorly and breaking his testicles. The remaining examples presented in (97) to (99) are taken from elicitation data.

- (96) *i=di-vwara* *uvwa-uvwa*
 3SG=fall.and-crack RED-testicle
 ‘he fell and cracked his testicles’ (bush_betelnut_011115 123, 296.489 298.690)
- (97) *a=di-linggi=∅*
 1SG=fall.and-pour=3SG
 ‘I fall and pour/tip them out (e.g. items in a basket)’ (e_231116_01)

- (98) *amala=ma i=di-nggila umbwa=ma*
 man=DET 3SG=fall.and-break stick/tree=DET
 ‘the man falls and breaks the stick’ (e_211116_02)

The prefix can also occur with *voro* ‘go up’, for example to describe the movement of water ‘falling up’ from a spring or rock fissure:

- (99) *mbwa=ko i=di-voro*
 water=DIST 3SG=fall.and-go.up
 ‘the water flows up/bubbles up (e.g. from a spring)’ (e_221116_01)

Anderson and Ross (p. 333) describe the prefix as meaning ‘move (and)’. However, this analysis is not borne out in the current data. Additionally, the translations A&A provide to accompany their examples appear to further support a ‘fall and’ analysis.⁹⁸ Consider (100) and (101).

- (100) *ma=di-yaku*
 1SG.IMM.PST-fall.and-stay
 ‘I fell and sat down’ (Anderson & Anderson 1991: 26)
- (101) *umbwa=ko me=di-gana kamwathi*
 tree=DIST 3SG.IMM.PST=fall.and-fence path
 ‘the tree fell and blocked the road’ (Anderson & Anderson 1991: 26)

4.3.6 *thu-* ‘unintentionality’ and *i-* ‘intentionality’

The eighth preverbal slot may be filled by the unintentional prefix *thu-* and the prefix *i-*. Anderson and Ross (p. 333) describe *i-* as indicating deliberateness or intentionality. However, current data do not necessarily support such an analysis, as the prefix’s use is highly restricted (see below for further discussion).

The prefix *thu-* specifies that the agent unintentionally performs the action or event expressed by the verb. Example (102) shows the prefix with the verb *vai* ‘drop’.

- (102) *amala regha i=bigi-mena buku na*
 man one 3SG=GET.PL.CNTR-come book and
i=thu-vai=Ø e vwata-e=ko na i=do bu bode
 3SG=UNINTENT-drop=3SG PREP top-3SG=DIST and 3SG=fall.down down(there)
 ‘a man brings books and he unintentionally drops (a book) from the top and it falls down’
 (put_stimuli_191015_01_01 181-3, 758.826 764.749)

The unintentional prefix can be used interchangeably with the more common verb stem *thavwi* ‘accidentally’ (§6.3.8.3). Consider the sentences presented in (103), all describing the same stimulus video in which a woman walks past a bucket and accidentally tips it over. The sentences

⁹⁸ Anderson and Ross do not provide any examples with the prefix.

in (103a) and (103b) use the prefix to specify the that bucket is only poured out (*linggi*) or bumped (*tuva*) unintentionally while in (103c) and (103d) the verb stem *thavwi* ‘accidentally’ is used to convey the same information. The prefix and verb stem are used interchangeably by both younger and older speakers.

- (103)a. *ela=ma* *i=longga* *na* *i=la=tuva* *buket* *na*
 woman=DET 3SG=walk and 3SG=and.go=bump bucket and
i=thu-linggi=∅
 3SG=UNINTENT=pour=3SG
 ‘the woman walks and bumps a bucket (before/and going) and she accidentally tips/pours it out’
 (put_stimuli_191015_01_02 173-6, 649.191 655.101)
- b. *ela=ma* *i=la=thu-tuva=∅*
 woman=DET 3SG=and.go=UNINTENT-bump=3SG
 ‘the woman accidentally bumps it (a bucket) and keeps going’
 (put_stimuli_191015_02_02 019, 147.584 153.082)
- c. *wevo=ke* *ande* *i=thuwe=re* *buket=ma*
 young.woman=SPKR.PROX NEG1 3SG=see=NEG2 bucket=DET
i=la=ngge-thavwi=∅
 3SG=and.go=hit-accidentally=3SG
 ‘the girl doesn’t see the bucket (and) she accidentally hits it and keeps going’
 (put_stimuli_201015_02 126-8, 729.669 735.726)
- d. *i=la=vuri-linggi-thavwi=∅*
 3SG=and.go=w.feet-accidentally=3SG
 ‘she accidentally kicked it over and kept walking’
 (put_stimuli_231015 053, 408.314 409.712)

The intentional prefix *i-* described by A&R does not occur in the corpus. Speakers did accept a VC with *ghawe* ‘be lost’ and the prefix *i-*. In this construction, the stative verb requires both an (un)intentional and causative prefix to be judged grammatical. All other attempts to elicit *i-* ‘intentional’ were deemed ungrammatical by speakers, including with other verbs such as *vai* ‘drop’ and *tuva* ‘bump’. In the elicited tokens with *va-ghare* ‘CAUS-be lost’, the unintentional prefix *thu-* appeared to suggest a more permanent loss, while the ‘intentional’ prefix *i-* indicated a more temporary misplacement:

- (104)a. *a=thu-va-ghawe* *lo* *nambo*
 1SG=UNINTENT-CAUS-be.lost POSS.CLF2.1SG basket
 ‘I lost my basket (for good)’
- b. *a=i-va-ghawe* *lo* *nambo*
 1SG=INTENT?-CAUS-be.lost POSS.CLF2.1SG basket
 ‘I forgot/misplaced my basket (somewhere)’
 (e_091215)

The distinction between the two prefixes appears to be more complicated when the object referent is animate, as in (105). Speakers again suggested that *thu-* ‘unintentionally’ indicated a more lasting

loss, potentially resulting from the theft or premature death of the dog, while *i-* would be more appropriate in situations where the animal may have run away or escaped and could still return. Such examples, however, also raise questions surrounding the function of the causative prefix in such contexts.

- (105)a. *A=thu-va-ghawe* *lo* *mbugha*
 1SG=UNINTENT-CAUS-be.lost POSS.CLF1.1SG dog
 ‘I lost my dog (maybe it was stolen or killed)’ (e_161215)
- b. *A=i-va-ghawe* *lo* *mbugha*
 1SG=INTENT?-CAUS-be.lost POSS.CLF1.1SG dog
 ‘I lost my dog (maybe it ran away/escaped)’ (e_091215)

Further data are needed to more fully understand the function(s) of these two preverbal morphemes. The current data overall support the ‘unintentional’ sense of *thu-*, but do not necessarily support the ‘intentional’ function of *i-*.

4.3.7 *ve-* reciprocal

The ninth slot in the VC contains the reciprocal prefix *ve-*. The prefix may occur with transitive verbs to indicate a mutual relationship between the subject and primary object in which they perform the same action on one another. The valence in reciprocal VCs is identical to the valence in non-reciprocal VCs, as evidenced by the object indexes in examples (106) to (108) and the lexical object in (109) (which agree in number and person with the subject).

- (106) *ra=ve-vaito=inda*
 1INCL=RECP-ask=1INCL
 ‘we ask each other’ (ft_stimuli_201015_01 006, 68.901 70.850)
- (107) *gha-nji=ma* *gha* *nggila-nggila* *thi=ve-ngge=nggi*
 food-3PL.POSS=DET POSS.CLF1 RED-shell.spoon 3PL=RECP-hit=3PL
 ‘their food’s spoons hit each other’ [context: the child and giant are eating from the same pot at the same time and keep clashing their eating utensils]
 (child_and_giant_201015 080-2, 204.610 212.180)
- (108) *ra=ve-li-ve=inda* *kwama=ma*
 1INCL=RECP-GET.SG.FLEX-give=1INCL clothing=DET
 ‘we give/exchange our clothes with each other’ (e_261016)
- (109) *mbanga=va* *thi=ghena* *va* *thi=ve-wo-giya*
 time=REM.PST 3PL=sleep REM.PST 3PL=RECP-GET.SG.RIGD-give
wokini-nji
 back-3PL.POSS
 ‘when they slept, they were back to back (lit. they gave each other their backs)’
 (mandumbunga_02_181016 345-6, 866.734 871.244)

4.3.8 Valence changing and rearranging prefixes

The slot immediately preceding the verb stem may be filled by one of the detransitivising prefixes or by the causative prefix. The detransitivisers are discussed first in §4.3.8.1 and derivational causatives are outlined in §4.3.8.2. An overview of the derivational processes is given in Table 4.6.

derivational morpheme	meaning	process
<i>ma-</i> , <i>rara-</i>	detransitive	type 1: $O \rightarrow S$, $A \rightarrow \emptyset$
<i>va-</i>	causative	type 2: $S \rightarrow O$, $\emptyset \rightarrow A$, or type 3: $A \rightarrow$ primary OBJ, $O \rightarrow$ secondary OBJ, $\emptyset \rightarrow A$ type 4: $S \rightarrow$ adjunct, $\emptyset \rightarrow A$, $\emptyset \rightarrow O$ type 5: $A \rightarrow O$, $O \rightarrow$ adjunct, $\emptyset \rightarrow A$ type 6: $A \rightarrow O$, $O \rightarrow A$ ⁹⁹
<i>va-...=nga</i>	causative and transitive	type 7: $S \rightarrow O$, $\emptyset \rightarrow A$ type 8: $S \rightarrow A$, $\emptyset \rightarrow O$

Table 4.6 Valence changing and rearranging prefixes

4.3.8.1 *ma-* and *rara-* detransitivisers

There are two detransitivising prefixes: *ma-* and *rara-*. They are used interchangeably, albeit with differing frequencies; there are 56 tokens of *ma-* to 16 tokens of *rara-*. The sentences presented in (110) and (111) describe stimuli videos in which a tree branch and piece of cloth break spontaneously. The examples illustrate the interchangeability of the two prefixes.

- (110)a. *umbwa=ko* *ghavwala* *i=ma-bebe*
 stick/tree=DIST forked.branch 3SG=DETR-break
 ‘the forked tree branch breaks’ (cb_stimuli_051016_02_01 143, 783.180 784.940)
- b. *umbwa=ma* *yangga* *i=rara-bebe*
 stick/tree=DET branch 3SG=DETR-break
 ‘the tree branch breaks’ (cb_stimuli_051016_01 089, 996.413 999.750)
- (111)a. *kwama=ma* *i=ma-thatha* *na* *vuvu-iwo*
 cloth=DET 3SG=DETR-tear and NUM.CLF-two
 ‘the cloth tears in two’ (cb_stimuli_071116 025, 258.409 260.580)
- b. *i=rara-thatha*
 3SG=DETR-tear
 ‘it (a cloth) tears’ (cb_stimuli_051016_01 053, 545.370 546.510)

⁹⁹ There are also two semantically causative stems that take the prefix. In these cases, there is no argument transfer and seemingly no semantic difference between the underived and derived forms.

In POc, the anti-causative prefix **ma-* derived intransitive verbs from transitive verbs that could be used statively or dynamically. Ross (1998: 25) reports that most modern reflexes of the POc prefix reflect this and are used to derive stative verbs, e.g. Arosi (Southeast Solomonic, Solomon Islands) *ma-hita* ‘be split, broken’ from *hita* ‘split, hit, strike (s.th.)’. However, in North New Guinea and Papuan Tip languages, including Misima, reflexes of **ma-* derive dynamic intransitive verbs. This is also the case for Sudest, as shown in the examples above (i.e. ‘the stick breaks’ and not ‘the stick is broken’).

Derived verbs with the detransitive prefix like in (112), as well as the sentences above in (110) and (111), express states of affairs that do not involve an external agent; that is, events that were never transitive, and for which the formal mechanism of the prefixes is needed to express this.¹⁰⁰

- (112) *thiyo=ma* *i=rara-ten* *i=ma-ten*
 rope/string=DET 3SG=DETR-break 3SG=DETR-break
 ‘the string breaks, it breaks’ (cb_stimuli_101116 066-9, 866.240 878.541)

Detransitivised VCs with *ma-* and *rara-* can also be used to describe states of affairs in which an external agent is known, but it is the undergoer of the event that is foregrounded, as in (113) and (114).

- (113) *amala=ma* *i=mwana-vairi* *ndeghi,* *mbwa* *i=ma-linggi* *e*
 man=DET 3SG=w.hands-lift cup water 3SG=DETR-pour PREP
tebol=ma *vwata*
 table=DET on.top
 ‘the man picks up the cup, the water spills on the table’
 (put_stimuli_191015_02_02 092, 643.505 647.823)

- (114) *wevo=ko* *i=wo* *sledgehama* *na* *i=ngge*
 young.woman=DIST 3SG=GET.SG.RIGD sledgehammer and 3SG=hit
umbwa=ma *na* *i=rara-bebe*
 stick/tree=DET and 3SG=DETR-break
 ‘the young woman gets a sledgehammer and hits the stick and it (the stick) breaks’
 (cb_stimuli_051016_01 150-1, 1700.477 1713.099)

The prefix *rara-* is not described in either A&R or A&A, while *ma-* is labelled as a ‘stativiser’. However, neither *ma-* nor *rara-* function as a stativiser in any corpus tokens. In elicitation, speakers sometimes proposed a possible stative interpretation of VCs with one of the prefixes, although a dynamic reading was also always possible depending on context, as in (115). Whether the detransitivisers are more widely used to derive stative verbs is unclear.

- (115) *thinba* *i=ma-vu*
 door 3SG=DETR-open
 ‘the door opens/the door is open’ (e_041215)

¹⁰⁰ Sentences in (110) to (112) all describe stimuli videos involving spontaneous breaking.

4.3.8.2 *va-* causativiser

There are two operations which produce a derived causative VC.¹⁰¹ The first derives a causative VC through the addition of the causative prefix *va-*, while the second derives a causative through the addition of both causative prefix and the transitive suffix *-nga*. The first type of causatives will be considered here before discussing the causatives with both derivational affixes in §4.3.8.2.1.

For the majority of attested derived verbs with the causative prefix, the S of the intransitive verb becomes the O of the derived transitive verb. At the same time, a new subject (A) with the semantic role of causer is introduced, thereby increasing the valence from one to two – or two to three if the underived verb is monotransitive. A small subset of verbs, however, undergo one of four different derivational processes with *va-* to derive a causative VC, two of which rearrange the VC and its arguments, but do not increase the valence.¹⁰² Verbs stems attested with the causative are listed in Table 4.7.

verb	underived meaning	derived meaning	underived valence	derived valence
<i>ghawe</i> [^]	‘be lost’	‘lose s.th.’	INTR	TR
<i>kote</i> *	‘be hanging, hang’	‘hang s.th.’	INTR	TR
<i>kware</i> *	‘be hanging, hang’	‘hang s.th.’	INTR	TR
<i>loghe</i>	‘be fatty; sweet’	‘make s.o. happy (lit. fatty/sweet)’	INTR	TR
<i>nginjinginji</i>	‘be white’	‘make s.th. white’	INTR	TR
<i>thu</i>	‘be breastfed’	‘breastfeed s.o.’	INTR	TR
<i>ghe</i>	‘marry’	‘make s.o. marry’	INTR	TR
<i>mare</i> [^]	‘die’	‘kill’	INTR	TR
<i>nggela</i>	‘turn over’	‘turn s.th over’	INTR	TR
<i>ravu</i>	‘know’	‘teach’	TR	DITR
<i>mara</i> *	‘look’	‘show s.th. (to s.o.)’	INTR	TR
<i>mararu</i>	‘be frightened of’	‘frighten s.o.’	TR	TR
<i>mun</i>	‘drink’	‘make s.o. drink’	TR	TR
<i>ngwamwe</i>	‘feed’	‘feed’	TR	TR
<i>yaro</i>	‘fool, trick’	‘fool, trick’	TR	TR

Table 4.7 Verbs attested with the causative prefix *va-*. *derived causative obligatorily occurs in a complex verb with a CLFV, [^]derived causative obligatorily occurs with a manner-of-causation prefix/(un)intentional prefix

Most frequently, as stated above, the causative prefix derives monotransitive verbs from intransitive verbs (both stative and active), in which S becomes O and a new causer A is introduced. Verbs of this type include *ghe* ‘marry’, *loghe* ‘be fatty; be sweet’, *nggela* ‘turn over’, *nginjinginji* ‘be black’,

¹⁰¹ Any verb with a morphological causative can also form a periphrastic causative, although no such tokens occur in the text corpus and were only the result of elicitation and/or contact with English. Periphrastic causatives are biclausal constructions with *vakatha* ‘make’ in the first VC followed by a second VC that describes the caused event.

¹⁰² Anderson and Ross (p. 333) only describe the most common type of derived causatives.

thu ‘be breastfed’, *kote* and *kware* both ‘hang’ and *mare* ‘die’. Examples (116) and (117) show underived and derived tokens with *ghe* ‘marry’:

- (116) *ne thi=ghe*
FUT 3PL=marry
‘they will marry’ (dating_081015 022, 58.530 59.950)
- (117) *mbwata thi=va-ghe=nggi*
maybe 3PL=CAUS-marry=3PL
‘maybe they made them marry/married them’
(ft_stimuli_191015_05 176, 388.570 390.527)

A subset of these causativised forms require additional elements to be grammatical. This is the case for the verb *ghawe* ‘be lost’. As discussed above in §4.3.6, causativised verbs also obligatorily take an (un)intentional prefix (see examples (104) and (105)). The intransitive verb *mare* ‘die’ may only be causativised to mean ‘kill’ in combination with a manner-of-causation prefix (§4.1) in addition to the causative prefix:

- (118) *levo=ma i=mare*
POSS.CLF2:young.woman=DET 3SG=die
‘his wife died’ (couples_story_101214 006, 25.150 27.920)
- (119) *amala=ma i=mwana-va-mare umoru=ma*
man=DET 3SG=w.hands-CAUS-die young.man=DET
‘the man kills the youth with by strangling/choking’ (e_041215)

A further subset of the intransitive verbs may only be causativised in conjunction with a classificatory verb in a multi-verb construction (see also §5.3 and §6.3.4). The derived transitive VCs with *kote* and *kware*, both meaning ‘hang’, have the same argument structure as those already presented with an introduced causer as A; S becomes O but the VC requires a classificatory verb in V₁ position to be grammatical. Examples (118) and (119) show the underived and derived VCs with *kote* ‘hang’.

- (120) *kero ina e ighathi=ma i=kote-kote*
already be.located PREP trap=DET 3SG=RED-hang
‘he’s already hanging in the trap’ (lizard_and_possum_121015 030)
- (121) *i=li-va=kote=ya towel e umbwa yangga*
3SG=GET.SG.FLEX-CAUS-hang=YA towel PREP tree/stick branch
‘she hangs the towel from the tree branch’ (e_300915_01 135)

A single monotransitive verb *ravu* ‘know’ derives a ditransitive causative meaning ‘teach’. As with the intransitive verbs that derive monotransitive verbs, the causativised VC introduces an A with the semantic role of causer, while the subject of the underived verb – in this case A – becomes the primary object of the verb (i.e. the object expressed by object index). The single object of the

underived verb becomes a secondary object in the derived construction, expressed by a lexical NP, illustrated by the underived and derived examples in (122) and (123).

- (122) *wevo=ko* *i=ravu* *vanga* *lumo*
 young.woman=DIST 3SG=know language white.person
 ‘the young woman knows/learns English’ (e_041215)

- (123) *elisari=ma* *i=va-ravu=nggo* *nangge-nangge*
 old.woman=DET 3SG=CAUS-know=3SG RED-weave
 ‘the old woman teaches me weaving’ (e_051217)

The second kind of causative attested introduces an A with the semantic role of causer as well as an O with the semantic role of theme; the underived S is no longer an argument of the verb, and can only occur as an adjunct. *Mara* ‘look’ is the only verb of this type attested in the corpus. Like the two verbs meaning ‘hang’, the causativised verb *mara* ‘look’ is only grammatical as part of a multi-verb construction with a CLFV. Consider the two examples presented in (124) and (125).

- (124) ...*ko* *amba* *thi=mara-voro* *e* *umbwa=ko* *ndamwa*
 CNJ then 3PL=look-go.up PREP tree/stick=DIST leaf
 ‘...so then they look up into the tree’s leaves’
 (mandumbunga_02_181016 194, 483.115 486.193)

- (125) *thi=la-thin-va-mara* *bia* *we=Ø*
 3PL=and.go=GET.SG.CNTR-CAUS-look beer PREP=3SG
 ‘they showed (made look) the beer to him as they went past’
 (ft_stimuli_191015_07 130-1, 315.990)

There are three types of derived causatives with *va-* that do not increase the valence of the VC. In the first type, the monotransitive verb *mun* ‘drink’ is causativised, but the resulting verb remains monotransitive. The derived VC introduces a causer as A; A and O of the underived clause become O and adjunct respectively of the derived verb. Compare the underived sentence in (126) with derived one in (127).

- (126) *i=mun=a* *mbwa* *e* *nggolo*
 3SG=drink=YA water PREP house
 ‘she drank water in the house’ (feast_of_the_fish_271015 079, 191.503 196.343)

- (127) *thi=va-mun=nggi* *e* *yee*
 3PL=CAUS-drink=3PL PREP herbs
 ‘they make them drink the herbs’ (funeral_feasting_081015 021)

In the second type of construction, the A of the underived verb becomes the O of the causative construction and the A of the derived construction is not a new argument but rather the O of the underived verb. The only verb of this type attested in *mararu* ‘be afraid’ which becomes *va-mararu* ‘cause s.o. to be afraid’ or ‘frighten s.o.’:

- (128) *rama ne i=mararu=inda*
 father FUT 3SG=be.afraid=1INCL
 ‘father will be afraid of us’ (couples_story_101214 031, 94.380 96.680)

- (129) *Mary i=va-mararu John*
 Mary 3SG=CAUS-be.afraid John
 ‘Mary frightens John’ (e_191015)

The final two transitive verbs attested with *va-* also do not increase in valence when causativised. The underived verbs, however, are already semantic causatives (*ngamwe* ‘feed’ and *yaro* ‘trick’), and the derived verbs are unchanged in both argument structure and semantically. Compare the underived and derived pairs given in (130) and (131) and (132) and (133).

- (130) *ela=ma i=ngamwe=nggo e bwarogi*
 woman=DET 3SG=feed=1SG PREP fish
 ‘the woman feeds me with fish’ (e_261016)

- (131) *i=va-ngamwe=nggo e bwarogi*
 3SG=CAUS-feed=1SG PREP fish
 ‘he feeds me with fish’ (e_251115_01)

- (132) *i=yaro=nggi*
 3SG=trick=3PL
 ‘she tricks them’ (bush_betelnut_011115 057, 133.110 135.510)

- (133) *i=va-yaro=ya diya na i=ruku-vo*
 3SG=CAUS-trick=YA deer and 3SG=run-flee
 ‘he tricked the deer and it ran away’ (frogstory_161214 117-8, 307.520 313.834)

4.3.8.2.1 Causative *va-* with the transitive *=nga*

Some verbs take both the causative prefix *va-* and the transitive enclitic *=nga* (§4.4.1.1).¹⁰³ The attested verbs of this type are listed in Table 4.8 and are all intransitive – both active and stative – deriving monotransitive verbs through the addition of the valence-changing morphology. Most of the attested verbs derive causative constructions, in which a causer A is introduced and the intransitive S becomes O of the derived construction. Three verbs pattern like verbs with just the transitive enclitic, with S becoming A and a new argument introduced as O.

¹⁰³ Such causatives with two derivational affixes are attested in other Oceanic languages, e.g. North-East Ambae (Northern Vanuatu Linkage, Vanuatu, Hyslop 2001: 336) and Kwaio (Longgu/Malaita/Makira family, Solomon Islands, Keesing 1985: 55).

verb	underived meaning	derived meaning	underived valence	derived valence
<i>bithabitha</i>	‘be decorated’	‘decorate s.th.’	INTR	TR
<i>boboma</i>	‘be forbidden, sacred’	‘make s.th forbidden, sacred’	INTR	TR
<i>gaithi</i>	‘be angry’	‘make s.o. angry, anger’	INTR	TR
<i>giri</i>	‘be decorated (w. lime)’	‘decorate s.th./s.o. (w lime)’	INTR	TR
<i>uu</i>	‘be bruised’	‘bruise s.o./s.th.’	INTR	TR
<i>vurigheghe</i>	‘be strong, hard’	‘make ‘strong, encourage’	INTR	TR
<i>warari</i>	‘be happy’	‘make s.o. happy’	INTR	TR
<i>dubwara</i>	‘look (for sexual partner)’	‘make s.o. look (for a sexual partner)’	INTR	TR
<i>ghavatha</i>	‘dress (traditionally)’	‘dress s.o. (traditionally)’	INTR	TR
<i>kaiwo</i>	‘work’	‘use s.th. (i.e. cause s.th. to work)’	INTR	TR
<i>kubaro</i>	‘hide’	‘hide s.th.’	INTR	TR
<i>mbuthu</i>	‘grow’	‘make s.th. grow’	INTR	TR
<i>ruku</i>	‘run’	run/plan s.th.’	INTR	TR
<i>utu</i>	‘speak’	‘question (make s.o. to speak)’	INTR	TR
<i>voro</i>	‘move, walk up’	‘take/bring up s.th.’	INTR	TR
<i>yaku</i>	‘live, stay, sit’	‘make s.o. sit’	INTR	TR
<i>market</i>	‘go to/attend market (as a vendor)’	‘market s.th., sell at market’	INTR	TR
<i>mbaro</i>	‘advise’	‘govern, manage s.th./s.o.’	INTR	TR
<i>mwadiwo</i>	‘play’	‘play with s.th.’	INTR	TR

 Table 4.8 Verbs attested with the causative prefix *va-* and the transitive enclitic *=nga*

The examples presented below with the stative verbs *vurigheghe* ‘be strong’ and *gaithi* ‘be angry’ compare tokens of the underived verbs with their causativised counterparts:

- (134) *thonggo wambwi i=vurigheghe le kaiwo ne i=maiya*
 if widow 3SG=be.strong POSS.CFL2 work FUT 3SG=be.light
 ‘if a widow is strong, her work will be light/easy’
 (widow_251015 036-7, 111.800 116.351)

- (135) *thi=ghan=∅ na i=va-vurigheghe-nga riwa-nji=ko*
 3PL=eat=3SG and 3SG=CAUS-be.strong-TR body-3PL.POSS=DIST
 ‘they eat it (hot food) and it makes their bodies strong/strengthens their bodies’
 (hunting_261214 019-20, 40.430 44.870)

- (136) *amala=ke i=gaithi we=ya levo*
 man=SPKR.PROX 3SG=be.angry PREP=YA POSS.CLF2:young.woman
 ‘the man is angry with his wife’ (ft_stimuli_201015_01 157, 617.406 619.590)

- (137) *Mary i=va-gaithi-nga John*
 Mary 3SG=CAUS-be.angry-TR John
 ‘Mary makes John angry/angers John’ (e_191015 051)

The examples from (138) to (141) present underived and derived tokens with the active intransitive verbs *utu* ‘speak’ and *mbuthu* ‘grow’. As with the stative verbs presented above, S becomes O and a new causer A is introduced.

- (138) *kero wevo i=utu we=ya rama-e*
 already young.woman 3SG=speak PREP=YA father-3SG.POSS
 ‘the young woman speaks with her father’
 (ft_stimuli_191015_05 392, 913.748 916.880)

- (139) *thi=va-utu-nga wevo=ke*
 3PL=CAUS-speak-TR young.woman=SPKR.PROX
 ‘they question (lit. make talk) the young woman’
 (ft_stimuli_191015_05 425-6, 965.550 967.650)

- (140) *uu i=mbuthu*
 clan 3SG=grow
 ‘the clan grows’
 (family_251015 016, 63.813 65.844)

- (141) *noroke tari i=va-mbuthu-nga ghemba regha*
 today family 3SG=CAUS-grow-TR village one
 ‘today, a family makes the village grow’
 (family_251015 007-10, 31.190 46.770)

With three verbs (*market* ‘(attend) market (as a vendor)’, *mbaro* ‘advise’ and *mwadiwo* ‘play’) the addition of *va-...=nga* does not produce a causative verb, instead functioning like those verbs with only the transitive enclitic in which S becomes A and a new O is introduced (§4.4.1.1). Consider the example pairs in (142) and (143) with *market* ‘(attend) market (as a vendor)’. In these examples, the derived verb takes a new object with the semantic role of theme (this is also the case for the verb *mbaro* ‘advise’).

- (142) *thi=wa vethi=market*
 3PL=go 3PL.INT=attend.market
 they go to (attend) market (as vendors)’
 (ft_stimuli_201015_04 088, 266.027 267.492)

- (143) *a=va-marketi-nga yambiya we=nggi*
 1SG=CAUS-attend.market-APPL sago PREP=3PL
 ‘I sell (market) the sago to them’
 (e_261116_02)

Example (144) shows first an intransitive and then a transitivised token with *mwadiwo* ‘play’. The derived form takes an O with the semantic role of instrument, although there is no surface realisation of that in this specific example.

- (144) *amala i=mwadiwo e bal [...]* *amala i=wo bal na*
 man 3SG=plays PREP ball man 3SG=GET.SG.RIGD ball and
i=va-mwadiwo=nga=Ø
 3SG=CAUS-plays=TR=3SG
 ‘the man plays with a ball [...] the man gets the ball and plays (with) it’
 (put_stimuli_191015_01_01 015-27, 55.053 86.275)

Patterning emerges when comparing the derived verbs that take *va-*, *=nga* and *va-...=nga* in the corpus.¹⁰⁴ All verbs with *va-...=nga* and *=nga* increase the valence of the verb from one to two, while verbs occurring with *va-* do not always have their valence increased and do not all have an intransitive base form. Over a third of the verbs that take *-nga* overlap with those occurring with *va-...=nga*, while no verb that has a derived causative form with just *va-* occurs with other valence increasing or rearranging morphemes. It is currently no data available showing whether all verbs that take the transitive enclitic may also be causativised with *va-...=nga* and vice versa. The patterning, however, does suggest there may be an A-type and O-type verb distinction (Dixon 1988). With A-type verbs, the S of the intransitive verb corresponds to the A of the transitive verb and a new O is introduced, while for O-type verbs it is the opposite: S becomes O with an introduced A. In such an analysis, verbs that take *va-* are nearly exclusively O-type verbs and those that take *=nga* are A-type verbs, with some or all of the A-type verbs being able to function as O-type verbs through the addition of *va-* to derived forms with the transitivity enclitic *=nga*.

4.4 Postverbal elements

There are 11 postverbal slots in the VC. The attested order of the slots is re-presented in Figure 4.3. Only the enclitics in the first and second postverbal slots occur exclusively in the VC. The morphemes that occur in the remaining nine slots also occur in other phrase types. In general, the further from the verb stem, the less tightly bound the element is. The remainder of the chapter describes each of the postverbal slots in turn, excluding the object indexes (which are discussed earlier in the chapter (§4.2.2)), and the second half of the discontinuous negation marker *=re* (which is discussed in the section on negation in chapter 3 (§3.7.3.1.1)).

¹⁰⁴ Anderson and Ross (p. 333) describe the same distribution of the two morphemes and their cooccurrence in some causative VCs, but cannot identify a differentiating factor.

1	2	3	4	5	6	7	8	9
((= <i>wana</i> APPL))	((= <i>ma</i> 'hither'))	((= <i>ma</i> 'hither'))	((= <i>ma</i> 'hither'))	((= <i>ma</i> 'hither'))	((= <i>ma</i> 'hither'))	((= <i>ma</i> 'hither'))	((= <i>ma</i> 'hither'))	((= <i>ma</i> 'hither'))
((= <i>nga</i> TR))	((= <i>ma</i> 'hither'))	((= <i>ma</i> 'hither'))	((= <i>ma</i> 'hither'))	((= <i>ma</i> 'hither'))	((= <i>ma</i> 'hither'))	((= <i>ma</i> 'hither'))	((= <i>ma</i> 'hither'))	((= <i>ma</i> 'hither'))
					((<i>moli</i>))	((= <i>re</i>))	((<i>mun</i>))	((= <i>va</i>))
					(INT)	(NEG2)	('a bit')	(REP)
10	11							
((= <i>engge</i>))	((<i>vara</i>))							
('just')	('really')							

Figure 4.3 Postverbal slots of the verb complex

4.4.1 Valence changing and rearranging enclitics

The first postverbal slot can be filled by either the transitivising enclitic *=nga* or the applicativising enclitic *=wana*, discussed further in §4.4.1.1 and §4.4.1.2 respectively. Table 4.9 outlines the enclitics and their respective derivational processes.

derivation	marking	argument transfer
transitive	<i>=nga</i>	$S \rightarrow A, \emptyset \rightarrow O$ $S \rightarrow O, \emptyset \rightarrow A$
applicative	<i>=wana</i>	$S \rightarrow A, \emptyset \rightarrow O$, or $S \rightarrow A, O \rightarrow O$ ($O = \text{theme} \rightarrow \text{stimulus}$)

Table 4.9 Verbal derivations: enclitics

4.4.1.1 *=nga* transitiviser

The transitivising enclitic *=nga* derives monotransitive verbs from stative and active intransitive verbs. For the majority of verbs with the enclitic occurring in the corpus, the S of the underived verb becomes the A of the derived verb, which also introduces an argument as O. A small number of the verbs that occur with *=nga* form causative constructions in conjunction with classificatory verbs or manner-of-causation prefixes, in which S becomes O of the derived transitive verb and a causer A is introduced. The verbs attested with the transitivising enclitic are listed in Table 4.10. This enclitic also derives transitive verbs from intransitive verbs, in combination with the causative prefix *va-* (see §4.3.8.2.1).

verb	underived meaning	derived meaning	underived valence	derived valence
<i>nemo</i>	‘be happy’	‘be happy with s.o./s.th.’	INTR	TR
<i>warari</i>	‘be happy’	‘be happy about s.th.’	INTR	TR
<i>longga</i>	‘walk’	‘walk to/look for’	INTR	TR
<i>ruku(-voro)</i>	‘run (up)’	‘run (up) to’	INTR	TR
<i>njogha</i>	‘go back’	‘go backwards to’	INTR	TR
<i>yaku</i>	‘stay; live; sit’	‘live s.wh.’	INTR	TR
<i>dubwara</i>	‘look (for sexual partner)’	‘look for s.o. (sexual/romantic partner)’	INTR	TR
<i>ghayawo</i>	‘look’	‘look at s.th.’	INTR	TR
<i>kaiwo</i>	‘work’	‘work on s.th.’	INTR	TR
<i>loyau</i>	‘exchange’	‘exchange for s.th.’	INTR	TR
<i>mbaro</i>	‘advise’	‘govern, manage s.th./s.o.’	INTR	TR
<i>tarawe</i>	‘praise’	‘praise s.o.’	INTR	TR
<i>thaga</i>	‘feast’	‘feast on s.th.’	INTR	TR
<i>utu</i>	‘talk’	‘talk about s.th.’	INTR	TR
<i>vana</i>	‘climb’	‘climb s.th.’	INTR	TR
<i>vivatha</i>	‘prepare’	‘prepare (for) s.th.’	INTR	TR
<i>wareri</i>	‘leave’	‘leave s.o./s.th.’	INTR	TR
<i>voro</i> [^] *	‘go up’	‘lift up’	INTR	TR
<i>njo</i> [^]	‘go down’	‘put s.th. up’	INTR	TR

Table 4.10 Verbs attested with the transitivity enclitic =nga. Derived transitive obligatorily occurs in multi-stem verb with a CLFV, ^derived causative obligatorily occurs with a manner-of-causation prefix

The majority of derived verbs with =nga add an O with the semantic role of theme/patient. However, a small number of derived verbs add a goal, source, location, or stimulus object. Examples (145) and (146) show tokens of the verb *vana* ‘climb’. When transitivised, as in (146), *vana* takes a theme as its object.

- (145) *numombwalmbwala i=vana*
 non.magical.person 3SG=climb
 ‘the muggle/non-witch climbs’ (bush_betelnut_011115 026-7, 62.011 68.590)

- (146) *ve=vana=nga=va umbwa regha*
 3SG.INT=climb=TR=REP tree one
 ‘he climbs another tree’ (frogstory_161214 064-65, 159.400 162.540)

As discussed in §4.3.8.2.1, at least a third of the verbs that occur in causative VCs with *va-...=nga* can also be transitivised with just =nga. Example (147) shows the transitivised verb *utu=nga* ‘speak about’, which adds a theme as O. See examples (138) and (139) above for tokens of intransitive *utu* ‘speak’ and causativised *va-utu=nga* ‘make talk, question’.

- (147) *a=utu=nga=nggi=ya bwanbwani na thangwethangwe*
 1SG=speak=TR=3PL=YA sea.eagle and k.o.eagle
 ‘I (will) speak about Bwanibwani eagle and Thangwethangwe eagle’
 (eagle_story_081115 002-3, 5.490 11.196)

Derived transitives with the motion verbs *longga* ‘walk’, *ruku* ‘run’ and *njogha* ‘go back’ add an O with the semantic role of goal. Transitivity tokens with *ruku* ‘run’ and *longga* ‘walk’ are shown in (148) and (149) respectively. The latter is used here euphemistically to describe someone looking for a romantic or sexual partner.

- (148) *maa ne i=ruku=nga rama-e*
 NEG FUT 3SG=run=TR father-3SG.POSS
 ‘he will not run to his father’ (fp_stimuli_201015_02 114, 385.180 387.679)

- (149) *wevo ande me=longga=nga=re umoru*
 young.woman NEG1 3SG.IMM.PST=walk=TR=NEG2 young.man
 ‘a girl does not look for (lit. walk to) a young man’
 (dating_081015 043, 111.480 115.240)

When the enclitic combines with psychological verbs, the object added has the semantic role of stimulus, as shown for the verbs *nemo* (150) and *warari* (151) which both mean ‘be happy’. The verb *warari* ‘be happy’ also occurs with the applicative enclitic =*wana*. They appear to be used interchangeably and =*wana* also adds a stimulus as O (see example (158), §4.4.1.2).

- (150) *nggama=ke na tina-e ne thi=nemo=nga=nggo*
 child=SPKR.PROX and mother-3SG.POSS FUT 3PL=be.happy=TR=1SG
 ‘the child and his mother will be happy with/because of me’
 (ft_stimuli_201015_04 047, 139.210 141.240)

- (151) *i=warari=nga=nggi le nggangga=ma*
 3SG-be.happy=TR=3PL POSS.CLF2 children=DET
 ‘he was happy about/because of his children’
 (ft_stimuli_201015_01 250, 940.370 942.496)

A small number of tokens with =*nga* added to directional motion verbs derive a causative construction, introducing a causer as A and demoting S to O. These derived forms all include either a manner-of-causation prefix (152) or a part of a multi-stem verb with a classificatory verb, as in (153) and (154). Cross-linguistically, manner-of-causation prefixes tend to develop causative tendencies (Bradshaw 1982), and classificatory verbs in combination with intransitive verbs also result in VCs with causative semantics (see §5.3 and §6.3 for further discussion and examples of classificatory verbs with intransitive V₂ stems).

- (152) *va i=mwana-voro=nga wangga=ko*
 REM.PST 3SG=w.hands-go.up=TR boat=DIST
 ‘he pulled the canoe up’ (e_021115_01)

- (153) *i=li-voro=nga gheghe=na*
 3SG=GET.SG.FLEX-go.up=TR leg=ADDR.PROX
 ‘she lifts up her leg’ (put_stimuli_231015 065, 519.966 523.189)

- (154) *elisari=ke* *i=thin-njo=nga* *ndeghi=ke* *e*
 old.woman=SPKR.PROX 3SG=GET.SG.CNTR-go.down=TR cup=SPKR.PROX PREP
ghamba *ghaningga=ko* *vwata*
 place food=DIST top
 ‘the old woman puts the cup down on top of the table (lit. food’s place)’
 (put_stimuli_201015_01 160-2, 908.160 913.280)

4.4.1.2 =wana applicative

The applicative enclitic =wana occurs with psychological verbs and verbs of nonverbal expression and adds an O argument with the semantic role of stimulus. The verbs attested with the applicative enclitic are listed in Table 4.11, all verbs save one derive transitive verbs from intransitive stative and active verbs while the single transitive verb *botewa* ‘not want’ remains transitive.

verb	underived meaning	derived meaning	underived valence	derived valence
<i>atemuru</i>	‘be annoyed’	‘be annoyed at s.o.’	INTR	TR
<i>gaithi</i>	‘be angry, fight’	‘be angry at s.o.’	INTR	TR
<i>maraka</i>	‘be angry’	‘be angry at s.o.’	INTR	TR
<i>warari</i>	‘be happy’	‘be happy with s.o.’	INTR	TR
<i>tinguru</i>	‘grunt (in anger)’	‘grunt (in anger) at s.o.’	INTR	TR
<i>yamwaundu</i>	‘pout’	‘pout at s.o.’	INTR	TR
<i>botewa</i>	‘not want s.o./s.th.’	‘dislike s.o.’	TR	TR

Table 4.11 Verbs attested with the applicative enclitic =wana

As can be observed by comparing (155) and (156) with *gaithi* ‘be angry’, the stimulus PP of the intransitive clause in (155) becomes a core argument in the derived construction in (156). There are no data on whether some or all verbs that take =wana show this sort of alternation, although it is quite possible that this is the case. Thus, as the O of the derived verb would otherwise be an adjunct and not a core argument, the enclitic is analysed as an applicative in the current work. See also above in (136) for an intransitive token of *gaithi*, and (137) for a causativised token of the verb with the causative and transitive morphemes *va-gaithi=nga* ‘make s.o. angry’.

- (155) *amala=ke* *i=gaithi* *we=ya* *levo*
 man=SPKR.PROX 3SG=be.angry PREP=ya POSS.CLF2:young.woman
 ‘the man is angry with his wife’ (fp_stimuli_201015_01 157, 617.406 619.590)

- (156) *bubu* *va* *i=gaithi=wana=nggo* *wanji* *baya*
 granparent/child REM.PST 3SG=be.angry=APPL=1SG broom reason
 ‘grandma was angry with me because of the sweeping’
 (sweeping_011115 002, 4.470 10.850)

Examples (157) to (161) show further tokens of the applicative enclitic with psychological verbs. The enclitic only occurs with the verbs *gaithi* ‘be angry, fight’ and *atemuru* ‘be annoyed’ in the text corpus; all remaining examples come from elicitation.

- (157) *thi=ve-gaithi=**wana**=nggi* *o thi=ve-atemuru=**wana**=nggi*
 3PL=RECP-be.angry=APPL=3PL or 3PL=RECP-be.annoyed=APPL=3PL
 ‘they are angry with each other or they are annoyed with each other’
 (divorce_111015 016, 35.190 38.430)

The applicative occurs with the verb *warari* ‘be happy’ and appears to have the same sense and function as the derived verb with the transitiviser *=nga*, shown in (150) above.

- (158) *a=warari=**wana**=ngge*
 1SG=be.happy=APPL=2SG
 ‘I’m happy with you/because of you’ (e_161116_02)

The enclitic also derives transitive VCs from intransitive active verbs that denote activities associated with particular emotions. The activity is typically carried out as a physical expression of the associated emotion. The two verbs of this type attested with *=wana* are *yamwaundu* ‘pout (angrily)’ (159) and *tinguru* ‘grunt (angrily)’ (160).

- (159) *i=yamwaundu=**wana**=nggo*
 3SG=pout=APPL=1SG
 ‘she pouts/makes an angry face at me’ (e_151116)

- (160) *i=tinguru=**wana**=nggo*
 3SG=grunt=APPL=1SG
 ‘she grunts (in anger) at me’ (e_151116)

The addition of *=wana* to the transitive verb *botewa* ‘not want’ is somewhat idiomatic. The valence and argument structure remain the same, but the enclitic changes the meaning from ‘not want (something/someone)’ to ‘not like/dislike (someone)’:

- (161) *a=botewa=**wana*** *ela=ko*
 1SG=not.want=APPL woman=DIST
 ‘I don’t like/dislike the woman’ (e_151116)

4.4.2 *=ma* ‘hither’ and *=wo* ‘thither’

The second postverbal slot can be filled by one of two directional enclitics *=ma* ‘hither’ and *=wo* ‘thither’. Such directional morphemes are widely attested in the Oceanic languages (Lynch et al. 2002: 46). The enclitic *=ma* indicates movement towards the deictic centre – typically the speaker – and *=wo* encodes movement away from the deictic centre. In the direct speech in (162) a grandmother orders her grandchildren to first go away from her in order to bring a specific man to the grandmother to meet her.

- (162) *i=nga* “*hu=njogha=wo* *vohu=vanggu=ma=Ø* *ra=thuwe=Ø*”
 3SG=say 2SG=go.back=thither 2PL.INT=lead=hither=3SG 1INCL=see=3SG
 ‘she said “go back thither/there to bring him here/hither (to me) (and) we can see him”’
 (mandumbunga_02_181016 273, 686.632 691.112)

The following examples show the position of the directionals in relation to the other postverbal slots of the VC, namely following the transitiviser (163) and preceding the object indexes (164).

- (163) *umbwa* *yangga-yangga* *i=vana=nga=ma* *iya=na*
 tree/stick RED-branch 3SG=climb=TR=hither DEM=ADDR.PROX
 ‘the tree branches, he climbs them hither’
 (frogstory_161214 085-6, 219.230 223.780)

- (164) *thi-vanggu-ru=wo=nggi=ya* *giya-giya* *o* *bwabwari*
 3PL=lead-go.in=thither=3PL=YA RED-big.man or guest
 ‘they welcome in the big men or the guests (lit. they lead them in thither)’
 (e_251115_01)

As discussed earlier, the directionals orient motion in relation to the deictic centre. This deictic centre is often the speaker, as in (165) and (166), but can also be a larger centre such as a village (167) or an entire island (168).

- (165) *te-mbe* *ne* *u=njogha=ma=va* *we=nggo*
 more-still FUT 2SG=go.back=hither=REP PREP=1SG
 ‘you have to come back to me again’
 (mandumbunga_02_181016 394, 990.683 992.800)

- (166) *u=li-njogha=wo=Ø=na*
 2SG=GET.SG.FLEX-go.back=thither=3SG=ADDR.PROX
 ‘put it back there (near addressee)’ (ft_stimuli_191015_03 184, 481.180 482.160)

The directional =*wo* ‘thither’ In (167), =*wo* ‘thither’ can only be used if the deictic centre is not at Nju but rather somewhere to the northwest, in this case Mwalaghagha. Similarly, in (168), the speaker can only utter the sentence if they are located somewhere to the southeast of Ware Island. In this instance, Vanatina and the subjects of the clause are moving towards the speaker.

- (167) *Mwalaghagha* *va* *ma* *thi=raka-voro=wo=ko*
 place.name REM.PST already 3PL=all-go.up=thither=DIST
 ‘(the people/fish of) Mwalaghagha had all gone up (to the southeast) there (to Nju)’
 (feast_of_the_fish_271015 059, 141.960 143.912)

- (168) *ne* *i=wareri* *Ware* *na* *i=voro=ma=ke*
 FUT 3SG=leave place.name and 3SG=go.up=hither=SPKR.PROX
 ‘it will leave Ware and come up (to the southeast) here (i.e. to Vanatina)’
 (bwaindiya_151115 013, 46.206 50.790)

4.4.3 =*ya* 'YA'

The clitic =*ya* and its allomorph =*a* may fill the fourth postverbal slot in the VC. Anderson and Ross (p. 340) analyse =*ya* as a focus marker that attaches to the element immediately preceding the focussed constituent. Anderson and Anderson state that the enclitic ‘appears to point the focus in the verbal construction at the object instead of the action’ (p. 36). Data from the current corpus indicates that restrictions based on the final vowel/nasal of the root and what other postverbal VC slots are filled call into question a focus analysis of the enclitic.

The enclitic attaches to transitive verbs in cases where there is a following nominal object. It only occurs in tokens when it is the final element in the VC. This means that it never co-occurs with any elements from slots five to 11. Additionally, it can only attach to the verb root itself or the plural object index *=nggi*,¹⁰⁵ never directly to the transitive or applicative enclitics or directionals. Examples (169) to (174) present examples with the enclitic. The allomorph *=a* is used when the enclitic attaches to verbs ending in nasals, as in (174).

- (169) *thi=bigi=ya* *ghaningga*
3PL=GET.PL.CNTR=YA food
'they get the food' (ft_stimuli_191015_07 156, 374.700 376.260)
- (170) *i=taga-kothe=ya* *righe=ko*
3SG=by.striking-poke=YA trunk=DIST
'she struck the tree trunk' (bush_betelnut_011115 030, 73.870 76.830)
- (171) *ra=simai=ya* *bwadibwadi*
1INCL=squeeze/strain=YA coconut
'we squeeze the coconut' (c_031116 159, 286.610 287.636)
- (172) *lo* *umoru* *i=ngginau=ya* *lo* *nggolo*
POSS.CLF2.1SG.POSS young.man 3SG=build=YA POSS.CLF2.1SG.POSS house
'my husband built my house' (sweeping_011115 023, 51.040 54.059)
- (173) *i=ten=nggi=ya* *karot=ma* *e* *tebol=ma* *vwata* *e*
3SG=break=3PL=YA carrot=DET PREP table=DET top PREP
kaina=ma *laghiye*
knife=DET big
'he cuts the carrots on the table top with a large knife'
(cb_stimuli_101116 011, 119.250 123.668)
- (174) *wo=mban=a* *vari-vari=ma*
1EXCL=GET.PL.RIGD=YA RED-stone=DET
'we get the stones' (stone_cooking_251015 077, 212.520 214.290)

¹⁰⁵ As previously noted, first and second person object indexes do not occur with conominals. This, in turn, means that they do not occur with =*va*.

For verbs that end in a schwa [ə], the final vowel assimilates to [a] when followed by a nominal object. Compare the token in (175) (with no nominal object and a verb-final schwa) with (176), in which [ə] becomes [a] before the nominal object *mwata Linggiya* ‘Linggiya snake’.

- (175) *polis ne thi=momodi=∅*
 police FUT 3PL=pull=3SG
 ‘the police will pull him’ (fp_stimuli_201015_04 027, 72.860 76.323)

- (176) *i=momod=a mwata Linggiya*
 3SG=pull=YA snake personal.name
 ‘she pulled Linggiya Snake’ (snake_story_101214 013-4, 43.780 45.920)

The clitic also attaches to the ambiposition *we* ‘to, for’ (§3.3.6.2) and preposition *wei* ‘with’ (§3.3.6.4) when the object of the PP is expressed by an NP that follows the preposition/ambiposition and has third person reference.

There appear to be morphophonological restrictions and tendencies governing =*ya* in the morphosyntactic environments in which it occurs in the VC. As illustrated by the above examples in (169) to (174), the enclitic nearly always attaches to verbs ending in the front vowels [i] and [e], the vowel sequences [ai] and [au], and the nasal [n], when they precede nominal objects. The final vowel of verbs ending in a schwa also changes with [ə] moving forward and down and becoming [a] when the verb precedes a nominal object (176). The enclitic does not occur with verbs ending in [a], and generally does not occur with verbs ending in the back vowels [o] or [u]. However, if a verb ending in [a], [o], or [u] takes a third person plural object index *and* there is a conominal, =*ya* cliticises to the object index. Compare the pairs of examples in (177) to (180) without and with the object index and =*ya*:

- (177) *i=mwana-vatha umbwa=ma yanggai*
 3SG=w.hands-gather tree/stick=DET branch
 ‘she gathers the branches with her hands’ (cb_stimuli_051016_01 111, 1210.900 1216.670)

- (178) *a=kula-vatha=nggi=ya lo gharighari=ko*
 1SG=call-gather=3PL=YA POSS.CLF2.1SG people=DIST
 ‘I call my children together/to gather’ (cooking_111015 028-9, 83.440 87.780)

- (179) *i=vamo gaeba*
 3SG=dry wooden.dish
 ‘he dries the wooden dish’ (e_191015 094, 290.890 293.505)

- (180) *Jaclyn i=vamo=nggi=ya pileti*
 pers.name 3SG=dry=3PL=YA plate
 ‘Jaclyn dries the plates’ (e_300915_01 112, 364.818 368.459)

The presence of any of the postverbal morphemes excluding a third person plural object index also blocks the occurrence of =*ya*, as shown in (181) to (184).

- (181) *ma a=la-ten vara njingga-njingga*
 already 1SG=and.go-break truly RED-leaf
 ‘I cut the leaves and went on’ (stone_cooking_251015 032, 88.730 91.221)
- (182) *ma i=rangi=engge le kin-kin=ko*
 already 3SG=cry.for=just POSS.CLF2 RED-spear=DIST
 ‘he just cried for his spears’ (eagle_story_081115 051, 141.110 143.340)
- (183) *me-ne ve=ro-tamwe=va umoru regha*
 more-FUT 3SG.INT=stay.and-look.for=REP young.man one
 ‘she (can) stay and look for a husband again’ (marriage_111015 087, 262.520 265.890)
- (184) *amba=ma mwata Linggiya i=momodi=va mwata Enauwa*
 then=DET snake personal.name 3SG=pull=REP snake personal.name
 ‘then Linggiya snake pulled Enauwa snake again’
 (snake_story_101214 021-3, 59.660 64.371)

The apparent restrictions on the occurrence of =*ya* based on the phonological shape of the verbs it attaches to bring into question a focus analysis. Such restrictions on a morpheme that carries real functional load would seem odd; further analysis is currently needed in order to verify or refute the analysis of =*ya* as a focus marker. Consequently, the enclitic is glossed as ‘YA’ throughout the study. While investigating the occurrence of =*ya*, it was also considered whether the enclitic could be a surface realisation of the third person singular object index = \emptyset .¹⁰⁶ However, this hypothesis can be discounted given that =*ya* also occurs with the third plural object index. Again, morphophonological restrictions on a functional morpheme make this doubly unlikely. Another hypothesis is that =*ya* is a form of word-final vowel epenthesis that adds a paragogic syllable. A definitive answer, however, must be left to future investigation.

4.4.4 Demonstratives

The ternary spatio-temporal demonstrative enclitics (§3.3.5) may fill the fifth postverbal slot in the VC. In this slot, the demonstratives function as locative adverbials, indicating the source, goal, path or location of the event encoded by the verb. Such adverbial demonstratives in the VC are not widespread in the Oceanic languages, but do occur, for example, in the Papuan Tip language Sinaugoro (Central Papuan Family, PNG, Tauberschmidt 1999: 47) and Vaeakau-Taumako (formerly Pileni, Polynesian, Solomon Islands, Næss & Hovdhaugen 2011: 126-7). Demonstratives

¹⁰⁶ In Saliba, another Papuan Tip language, the third person singular object suffix - \emptyset has an allomorph -*ya*, which is triggered when preceding a directional suffix (Margetts 1999: 75), although its use is triggered by VC internal morphology rather than a nominal object.

functioning adverbially may be used in place of a locative adjunct with the locative base *ghe* (§3. 3. 5. 2). Compare the token in (185) - where the demonstrative cliticises onto the locative base *ghe* to mean ‘there (near addressee)’ - with the example shown in (186), where the demonstrative enclitic occurs VC finally and also indicates a goal ‘there (near addressee)’.

- (185) *u=li-ra=∅* *ghe=na*
 2SG=OBJ.CLF-put=3SG LOC=ADDR.PROX
 ‘put it there (near addressee)’ (ft_stimuli_201015_02 214, 714.829 716.554)

- (186) *u=li-njogha=wo=∅=na*
 2SG=OBJ.CLF-g.back=thither=3SG=ADDR.PROX
 ‘you return it (a picture) back there (near addressee)’
 (ft_stimuli_191015_03 182, 479.220 480.500)

In (187) the demonstrative specifies the location where the event takes place. In (188) it indicates the path followed by the subject.

- (187) *i=njogha* *e* *ghemba* *ve=kaiwo=ko*
 3SG=go.back PREP village 3SG.INT=work=DIST
 ‘he goes back to the village to work there’
 (ft_stimuli_191015_03 329-30, 798.825 802.420)

- (188) *iya* *te-mbe* *a=mbele=nggi=ke=va*
 DEM more-still 1SG=follow=3SG=SPKR.PROX=REP
 ‘that (is why) I follow them here (from Yeina to Sudest) in the same way’
 (family_ties_081115 034, 84.848 86.465)

The demonstratives also function as temporal adverbs. The demonstrative *=ke* ‘here (speaker proximal)’ occurs VC internally to specify that an event has occurred or will occur close to the time of reference. This can be seen in (189) in which the speaker is describing events from earlier that same morning.¹⁰⁷

- (189) *me=ghiviya=ke*
 3SG.IMM.PST=be.morning=SPKR.PROX
 ‘early this morning’ (cooking_111015 002, 8.250 14.690)

The enclitic *=ko* ‘there (distal)’ designates an event as occurring in a more distant past. When it combines with the verb *viva/vuvva* ‘go first’, the resulting meaning is idiomatic and is the equivalent of English phrases such as ‘in the olden days’ or ‘in the past’:

- (190) *va* *i=viva=ko* *va* *i=vuyuwo* *moli*
 REM.PST 3SG=go.first=DIST REM.PST 3SG=be.heavy INTS
 ‘in the past (lit. it went first there)’ it was very hard’
 (bagi_181215 012, 27.107 29.310)

¹⁰⁷ There are no examples of *=ke* being used for future reference in VCs in the corpus. However, it is used in nominal expressions meaning ‘next month’, ‘next year’, etc.

4.4.5 *moli* intensifier

The sixth postverbal slot only has a single candidate: the intensifier *moli*. This modifier is used to emphasise the intensity of an event or state, and can be glossed as ‘very’ or ‘really’.¹⁰⁸

- (191) *menda riwa-me i=bane moli*
 yesterday body-1EXCL.POSS 3SG=be.tired INTS
 ‘yesterday we were very tired (lit. our bodies are really tired)’
 (stone_cooking_251015 006 17.520 19.730)
- (192) *i=thari moli*
 3SG=be.bad INTS
 ‘it is very bad’
 (moving_291214 028, 50.446 53.000)
- (193) *Peter va yawali-ye=ko ande va*
 pers.name REM.PST life-3SG.POSS=DIST NEG1 REM.PST
i=iteten=nga=∅ moli=re va ve=kaiwo mbe
 3SG=leave=TR=3SG INTS=NEG2 REM.PST 3SG.INT=work still
i=munimu
 3SG=PROG.drink
 ‘Peter’s way of life, he really didn’t leave it, he worked but was still drinking’
 (ft_stimuli_191015_07 048-9, 126.520 131.719)
- (194) *maa va thi=ve-ghena-thai=nggi moli*
 NEG REM.PST 3PL=RECP-sleep-be.close=3PL INTS
 ‘they didn’t sleep really close to each other’
 (mandumbunga_02_181016 348, 873.551 876.193)

The intensifier occurs in the somewhat idiomatic temporal VC with *viva/vuva* ‘go first’ meaning ‘first’ or ‘firstly’:

- (195) *i=vuva moli a=rumbo ndeghi...*
 1SG=go.first INTS 1SG=make(fire) fire
 ‘first(ly), I make a fire...’
 (womens_work_221214 013-4, 27.526 34.614)
- (196) *i=vuva=ko moli vara ra=nga rama-nda...*
 1SG=go.first=DIST INTS truly 1PL.INC=say father-1INCL.POSS
 ‘firstly, we say our father...’
 (kinship_071015 006-7, 19.260 26.720)

Anderson and Anderson (p. 47) describe *moli* as an intensifier. Both they and A&R (p. 344) include examples of *moli* occurring postverbally, although neither include it in their description of the postverbal elements of the VC. Data from the corpus, however, demonstrates the particle’s VC-

¹⁰⁸ When occurring in an NP, *moli* can have an intensifying function, e.g. *kaiwo ighinagha moli* ‘very many uses’. It is also used to specify close blood relations, e.g. *tinanggu moli* ‘my really/true/bio mother’ (which may be in contrast to other women who could also be called ‘mother’, such as one’s mother’s sister or a foster or adoptive mother).

internal position following the demonstrative adverbials (as in (196)), and preceding the second part of the discontinuous negative marker *=re* (as in (193)).

4.4.6 *mun* ‘a bit’

The negative-polarity particle *mun* ‘a bit’ can fill the eighth postverbal slot in the VC. In the VC, the particle obligatorily occurs with the dehortative proclitic *nde*= (§4.3.2). Together, they have an emphatic negative function that can be glossed as ‘(not) a bit’, ‘(not) at all’ or ‘(n)ever’.¹⁰⁹ Examples with the polarity particle are presented in (197) and (198), see also (46) and (50) to (52) for further examples. Note: VCs with emphatic negation also always have one of the negative markers (*ande*...*=re* or *maa*).

- (197) *ko wolaghiye ande regha i=nde=thari=re mun*
 CONJ everything NEG1 one 3SG=DEHORT=be.bad=NEG2 a.bit
 ‘but the rest isn’t bad all’ (c_031116 031, 63.040 65.367)

- (198) *thonggo wevo togha ande mbe i=nde=ghambi=re*
 if young.woman new NEG1 still 3SG=DEHORT=give.birth=NEG2
mun...
 a.bit
 ‘if a young woman still hasn’t given birth ever...’
 (new_mother_251214 003-4, 7.699 13.002)

There is some variation in the ordering of *=re* ‘NEG2’ and *mun* ‘a bit’. There are four tokens in which the ordering of these morphemes is reversed. All four tokens share a further atypical feature, namely the combination of the negator *maa* ‘NEG’ with the second half of the discontinuous negator *=re* ‘NEG2’ instead of *ande* ‘NEG1’. Consider the two tokens presented in (199):

- (199) *i=nga “posi hu=ghena gougou na maa*
 3SG=say if 2PL=sleep night and NEG
i=nde=ghena-thai-ngge mun=re maa
 3SG=DEHORT=sleep-be.close.to=2SG a.bit=NEG2 NEG
i=nde=vi-ghathi=ngge mun=re...
 3SG=DEHORT=w.fingers-touch=2SG a.bit=NEG2
 ‘she said “if you sleep tonight and he doesn’t sleep close to you at all (and) does not touch you at all...”’ (mandumbunga_02_181016 354-5, 885.646 894.102)

The four tokens were produced by one speaker in a single text, while the five remaining corpus tokens with the ‘standard’ ordering of *=re mun* came from four different speakers. This suggests that the variation may be idiolectal in nature. This speaker was also only one of two speakers to produce the *maa*...*=re* negation combination; both of the speakers that did produce the combination were men of the same age (early 20s at the time of recording). The second speaker did not produce

¹⁰⁹ The particle may be related to the transitive verb *mun* ‘drink’.

any predicates with *mun* ‘a bit’, but the common usage of *maa...=re* could potentially point to a wider type variation.

The negative-polarity item is not mentioned by A&R. Neither they nor A&A include any tokens of the particle. This is likely due to a gap in their data, as they also do not identify the negative emphatic function of the dehortative prefix *nde=* in combination with *mun* (the most common type of clause in which the particle is attested).

4.4.7 =*va* repetition

The enclitic =*va* can fill the ninth slot in the VC. It indicates repetition and can be glossed as ‘again’. It specifies either that an activity is being performed a number of times (200) or that an individual or entity is returned to an earlier state (201) or location. It does this even when the action of returning the entity is not a repeated action itself, as in (202).

- (200) *Bwaindiya gha-ma u wo-u=ghaywawo-nga=va*
 pers.name POSS.CLF1-1EXCL.POSS friend HORT-2SG=watch-TR=REP
ghena=ko?”
 lime.stick=DIST
 ‘Bwaindiya said “our friend, look at the limestick again”’
 (bwaindiya_151115 059-60, 180.896 185.912)

- (201) *kero i=pa-panunuwana=va levo=ma*
 already 3SG=RED-make.happy=REP POSS.CLF2:young.woman=DET
 ‘already he is making his wife happy again’
 (ft_stimuli_191015_03 221, 557.350 560.092)

- (202) *ela=ma i=wo ndeghi=ma e mbwa=ma variye*
 woman=DET 3SG=GET.SG.RIGD cup=DET PREP water=DET container
tine na kero i=wo-utu-njogha=Ø=va
 inside and already 3SG=GET.SG.RIGD-immersed-go.back=3SG=REP
 ‘the woman gets the cup from the water container and then puts it back again’
 (put_stimuli_191015_02_02 086-9, 592.593 611.800)

The enclitic also occurs in clauses with the particles *te-mbe* ‘more-still’. The combination of morphemes specifies that the situation denoted by the verb is the same or similar to another prior situation. Thus, this combination can collectively be glossed as ‘in the same way’. In (203), the speaker outlines the parallel trading partnerships traditionally practised between the people of Vanatina and neighbouring islands.

- (203) *vethi=loyau* *Panaeati* *Vanatina-e=ke* *vethi=wa*
 3PL.INT=exchange place.name place.name-3SG.POSS=SPKR.PROX 3PL.INT=go
Misima *te-mbe* *vethi=giya=Ø=va* *nggorei-ye* *buda*
 place.name more-still 3PL.INT=give=3SG=REP like-3SG.POSS what
vethi=giya=Ø *Panaeati* *we=nggi*
 3PL.INT=give=3SG place.name PREP=3PL
 ‘we exchange to Panaeati, (people of) Vanatinae go to Misima (and) trade (lit. give) it
 in the same way like how they give it to Panaeati’
 (kula_exchange_101214 047-51, 147.630 149.965 162.110)

4.4.8 =engge ‘just’

The tenth postverbal slot can be filled by the restrictive enclitic =engge. The enclitic can be glossed as ‘just’¹¹⁰, only, merely’ and specifies that ‘only’ the activity of the verb is being undertaken to the exclusion of any other activity. In (204) the use of =engge emphasises that participants are ‘just’ meant to talk and do not have to do anything else.

- (204) *ra=utu* *vara* *nggora=ke* *kero*
 1INCL=speak really like=SPKR.PROX already
i=taga-wo=Ø *ra=utu-utu=engge*
 3SG=by.striking=GET.SG.RIGD=3SG 1INCL=RED.speak=just
 ‘we talk like this, she’s already recording, we just talk’
 (ft_stimuli_201015_01 001-2, 59.450 64.080)

Further examples with the enclitic are given in (205) to (208):

- (205) *le* *gogomwa=ko* *va* *i=la-bigi=mban=Ø* *e*
 POSS.CLF2 riches=DIST REM.PST 3SG=and.go-GET.PL.RIGD-put=3SG PREP
le *nambo=ko* *tine* *ko* *amba* *i=wareri=engge*
 POSS.CLF2 basket=DIST inside CNJ then 3SG=leave=just
 ‘her riches, she put them in her basket and then just left’
 (bush_betelnut_011115 131-, 312.530 319.720)
- (206) *wevo=ko* *i=wo-vairi* *sises=ma* *na* *ma*
 young.woman=DIST 3SG=GET.SG.RIGD-lift scissors=DET and already
i=nde-wo=Ø=engge
 3SG=stand.and-GET.SG.RIGD=just
 ‘the woman lifts the scissors up and just holds them’
 (cb_stimuli_051016_01 239-40, 2577.138 2584.366)
- (207) *amba* *i=renuwanga=engge* *vara* *thari*
 then 3SG=think.about=just truly bad
 ‘then he just thought of the problems’ (ft_stimuli_201015_01 227, 851.010 853.140)

¹¹⁰ Even though the gloss might suggest it, the enclitic does not have an aspectual function.

- (208) *ande me-ne thi=ghan=re bwarogi [...] thi=ghan=engge vara*
 NEG1 more-FUT 3PL=eat=NEG2 fish 3PL=eat=just really
theyara na ghaningga
 ginger and food
 ‘they cannot eat fish [...] they just eat ginger and (meat-free) food’
 (funeral_feasting_081015_02 100-03, 253.260 264.264)

4.4.9 *vara* ‘truly’

The final possible element of the VC is the particle *vara*. The particle emphasises the veracity of the situation described by the VC, and can be glossed as ‘truly’ or ‘really’ (in the sense of ‘actually’):

- (209) *...na ve=ru vara Esirava*
 and 3SG.INT=go.in truly place.name
 ‘...and she truly went in to Esirava (on Yeina)’
 (snake_passage_061215 184, 439.611 441.843)
- (210) *nggama=ma na tina-e mbe ma i=botewanggi*
 child=DET and mother-3SG.POSS still already 3SG=not.want=3PL
moli vara
 INTS truly
 ‘the child and its mother, he really truly does not want them (i.e. he truly wants a divorce)’
 (marriage_111015 085, 255.410 258.730)
- (211) *“ko amba ra=thuwe=Ø vara!”*
 CNJ then 1INCL=see=3SG truly
 “but then really we see it!”
 (snake_passage_061215 086, 203.624 208.119)

It is relatively common for there to be no overt reflection of *vara* ‘truly, really’ in the free translation in corpus tokens. In these cases, however, the wider context of the texts often appears to support a reading that would include ‘truly/really’. The example presented in (212) follows just a few clauses after the example already given above in (209), in which ‘truly’ is expressed in the translation. The examples come from a traditional narrative; the speaker is describing the journey made by a snake between Vanatina, Yeina and Rossel Island, emphasising the exact ‘real’ route taken by the snake (as she – the snake – is credited with creating and changing certain landmarks).¹¹¹

- (212) *ve=yaku vara Yeina luwa*
 3SG.INT=stay truly place.name middle
 ‘she (really/truly) stayed in the middle of Yeina (island)’
 (snake_passage_061215 190, 458.450 461.640)

¹¹¹ The snake is credited with creating the twisting passage in the reef called Snake Passage between Vanatina and the western tip of Yeina Island. See also Lepowsky (1991: 125-6) for another version of the narrative (in English).

The example presented in (213) comes from a text that describes the traditional trade networks of the Louisiades. The speaker concludes by stating that these networks are, in fact, still functioning today, and will continue to do so.

- (213) *ma-ma* *mumuga* *ande* *ne* *i=ko=re*
 POSS.CLF2-1EXCL.POSS tradition/custom NEG1 FUT 3SG=finish=NEG2
mbe *i=nawe* ***vara***
 still 3SG=continue truly
 ‘our customs/traditions never end, they still (really/actually) continue’
 (kula_exchange_101214 076-8, 218.190 224.310)

Anderson and Ross and A&A gloss the morpheme as ‘really’, but do not consider it to be positioned within the VC. It is included in the analysis of the VC in the current description as it precedes any lexical object (if present), as shown in (214).

- (214) *mbe* *i=nunuwana* ***vara*** *levo*
 still 3SG=love truly POSS.CLF2:young.woman
 ‘he still (really/truly) loves his wife’ (ft_stimuli_191015_05 316, 724.350 726.339)

5 ‘Classificatory’ elements in the verb complex

5.1 Introduction

As was shown in chapter 3, Sudest has nominal classification systems widely attested among the Oceanic languages of the western Pacific (Lynch et al. 2002): possessive classifiers (§3.4.4.2) and numeral classifiers (§3.4.3.1.1). This chapter describes two further sets of ‘classificatory’ morphemes that occur within the verb complex. The first group consists of a set of over a dozen derivational prefixes that specify how an action is carried out. Such affixes are traditionally labelled ‘classificatory prefixes’ in the Papuan Tip literature (Capell 1943; Ezard 1978), although the term ‘manner-of-causation prefixes’ is adopted here for reasons that are outlined below. The second group comprises a suppletive set of ten classificatory verbs (CLFVs) with a basic meaning of ‘get’ that can be grouped into seven categories. While verbal classifiers are attested in multiple Papuan languages (see Aikhenvald 2000: 171 and the references therein or Fedden 2011 for a recent description of two verbal classifier systems in Mian), no verbal classifier system is, to the best of my knowledge, attested in an Oceanic language. Examples of the manner-of-causation prefixes are presented in (1), which show the transitive verb *bebe* ‘break’ in sentences both with and without the verbal prefixes.

- (1) a. *i=bebe=ya* *umbwa=ma* *yanggai*
 3SG=break=YA tree/stick=DET branch
 ‘he breaks the tree branch’ (cb_stimuli_051016_01 035, 309.792 313.600)
- b. *i=mwana-bebe=ya* *umbwa*
 3SG=w.hands-break=YA stick/tree
 ‘she breaks a stick with her hands/she snaps it’
 (cb_stimuli_051016_02_01 163, 883.096 885.260)
- c. *i=go-bebe=∅*
 3SG=by.cutting-break=3SG
 ‘she breaks it (a stick) by cutting/she cuts it’
 (cb_stimuli_051016_01 112, 1218.011 1219.922)

The examples presented in (2) show two of the classificatory verbs. When appearing as the only verb stem in the VC, the basic meaning of the verbs is ‘get’. The verbs are selected based on the qualities and number of the object referent. For example, in (2a), the singular CLFV *wo* ‘get (sg. rigid entity)’ is used with the object *vari* ‘stone’, but in (2b) its plural counterpart *mban* ‘get (pl. rigid entity)’ occurs with the plural object referent *varivari* ‘stones’.

- (2) a. *lolo* *i=wo* *vari*
 person 3SG=GET.SG.RIGD stone
 ‘the person gets the stone’ (put_stimuli_191015_01_02 162, 593.630 595.586)
- b. *wo=mban=a* *vari-vari*
 1EXCL=GET.PL.RIGD=YA RED-stone
 ‘we get the stones’ (stone_cooking_251015 077, 212.520 214.290)

The descriptions of the two verbal paradigms are grouped in the current chapter due to their prominence in both the Sudest VC and the expression of 3PEs, and because of the traditional nomenclature of the two types of morphemes. Nevertheless, as I will now show, only one of the paradigms can be considered ‘classificatory’ in terms of being a type of nominal classification.

Before continuing to the description of these two groups of morphemes, it is, therefore, necessary to consider the term ‘classificatory’ further. Verbal classifiers are included in the majority of nominal classification typologies as a kind of nominal classification, along with numeral, noun and possessive classifiers (Aikhenvald 2000; Kilarski 2013; Fedden & Corbett 2017; see Passer 2016a, 2016b for an opposing view).^{112, 113} The present analysis follows Aikhenvald’s (2000: 149) definition of verbal classifiers as ‘categorizing the referent of [the verb’s] argument in terms of shape, consistency, size, structure, position, and animacy’ (Aikhenvald 2000: 149). The Sudest verbs fit within such a definition. Thus, they can be considered a type of noun classification device as their selection is based on properties of the O argument referent. The manner-of-causation prefixes, however, do not fit into the above definition. If one is to analyse the prefixes as categorising any referent, it is that of an instrumental adjunct and not a verbal argument.¹¹⁴ Furthermore, the Sudest prefixes specify the manner in which an action is carried out rather than

¹¹² Definitions of ‘nominal classification’ and exactly what is classified are sometimes ambiguous in the literature - are they classifying a noun or a real-world entity? See Senft (2000, 2007), Lucy (2000) and Contini-Morava and Kilarski (2013) for discussion. Contini-Morava and Kilarski (2013: 265) use ‘nominal classification’ as an umbrella term for “classification of nouns and/or extralinguistic entities to which nouns refer that is grammaticalized to some degree, and expressed in one or more syntactic contexts that relate to nouns”. Recent work from Corbett and Fedden (2016, 2018), Fedden and Corbett (2017, 2018), and Corbett et al. (2017) calls for a Canonical Typology approach to investigation and analysis of nominal classifiers. Within this framework they argue for gender and classifier systems to be considered under the umbrella of ‘nominal classification’ and outline the criteria for ‘canonical gender’ against which all types of nominal classification systems can be measured and analysed.

¹¹³ Passer (2016a; 2016b) excludes ‘verb classifiers’, i.e. verbal classifier affixes, from his typology of nominal classification. However, his conclusions are partially based on a data set that includes ‘classificatory’ systems analogous with the Sudest and wider Papuan Tip manner-of-causation prefixes that specify manner/cause and/or instrument rather than properties of the S/O argument referent. Languages with these ‘classificatory’ stems included in his data set are Manam (Oceanic), Kumiai (Kumeyaay/Digueño, Yuman), and Great Andamanese languages.

¹¹⁴ For this reason, they are also sometimes labelled as ‘instrumental prefixes’ (e.g. Olson (1992) on Gumawana (Nuclear Papuan Tip)). M. Anderson and T. Anderson (1991: 23) also label the Sudest prefixes as ‘instrumental affixes’.

the instrument itself, although some of the manner prefixes do entail the use of particular types of instrument (e.g. *ri-* 'with teeth').

The chapter is divided into two sections: a description of the manner-of-causation prefixes is presented in §5.2, followed by an analysis of the classificatory verbs in §5.3. Used in conjunction with traditional text data, the CUT-BREAK stimuli task (Bohnenmeyer et al. 2001) and PUT project stimuli task (Bowerman et al. 2004) proved useful to investigate the manner-of-causation prefixes and classificatory verbs respectively. This is because manner-of-causation morphemes and verbal classifiers frequently play a role in the expression of events from semantic domains of cutting and breaking and placement respectively.

5.2 Manner-of-causation prefixes

'Classificatory prefixes' are a well-known feature of the Papuan Tip and their study goes back to Capell (1943), who characterised them as 'defin[ing] the manner in which an action is carried out – by hand, by word of mouth, by poking holes, etc.' (p. 242). Following A&R (2002), however, the current study adopts the term 'manner-of-causation prefix' in its stead (including when citing literature that discusses 'classificatory prefixes'), which serves not only to avoid confusion with classificatory verbs specifically, but also serves as a more descriptive term that specifies the function of the prefixes.

Manner-of-causation prefixes are attested both in Nimowa (Ezard 1978) and Misima (W. Callister 1985a), two of the most closely related languages to Sudest. Further descriptions of manner-of-causation prefixes in Papuan Tip languages include Ezard's detailed descriptions of the Tawala prefixes (1978, 1992, 1997), Hockett (1974) on Iduna, Olson (1992) on Gumawana and Ross (2002) on 'Ala'ala.¹¹⁵ There are also descriptions of manner-of-causation prefixes attested in Oceanic languages outside of the Papuan Tip cluster, including Bali-Vitu (Meso-Melanesian cluster, Ross 2002c), Manam (North New Guinea cluster, Lichtenberk 1983) and multiple New Caledonia languages (Ozanne-Rivierre & Rivierre 2004). The most extensive description of a New Caledonian system is found in Osumi (1995) on Tinrin (also Tîrî).

Bradshaw (1982: 80, 1985: 28) and subsequent scholars (e.g. Crowley 2002: 177; Ozanne-Rivierre & Rivierre 2004: 350; Verkerk & Frostad 2013: 10) propose that the manner-of-causation prefixes are grammaticalised *V*₁ stems in serial verb constructions with cause-effect (resultative) semantics. Bradshaw (1982: 67-68) analyses the manner-of-causation morphemes as falling along a continuum.

¹¹⁵ Capell (1943: 236- 253) lists prefixes for ten Papuan Tip languages although Ezard (1978: 1162-3) and Bradshaw (1982: 61) question the reliability of some of this data.

At one end are verb stems that indicate manner-of-causation in cause-effect complex verbs. Further down the continuum are prefixes that have lost their independent verb status and may have undergone phonological reduction and/or semantic bleaching (Bradshaw 1982). At the far end of the continuum, Bradshaw (1982) finds prefixes that have experienced such extreme semantic bleaching that they function as general causative prefixes. Some Papuan Tip languages today have multiple general causative prefixes as a result of this process. For example, both Muyuw and Iduna have five general causative prefixes unrelated to the Austronesian causative **pa(ka)-* (Bradshaw 1982).¹¹⁶ Recurring semantic distinctions are found in the manner-of-causation prefixes across Oceanic languages no matter the size of individual language's inventories and include actions completed with various body parts (fingers, hand, teeth, feet), cutting or chopping actions, and actions involving the voice (Bradshaw 1982; Ozanne-Rivierre & Rivierre 2004).

The Sudest manner-of-causation prefixes are presented in Table 5.1. Many of the prefixes are also identified in Ezard (1978) and A&R as manner-of-causation prefixes. The prefixes can roughly be divided into those that specify a manner that involves a body-part and those that specify non-body-part involvement.¹¹⁷ The distinction, however, is not always clear-cut. For example, the prefix *vo-* 'by spearing, piercing' occurs in VCs describing an event in which an entity is speared or pierced with a sharp tool but is also used when describing the action of poking holes into something with a finger (e.g. poking holes in the dirt while planting). In a third type of event, *vo-* is used to specify that an object is being manipulated by the 'pointy end' of an animal or human, i.e. by using the head/snout/tusks.

¹¹⁶ Bradshaw (1982) links the emergence of the manner-of-causation prefixes with the SOV clause order of the majority of Papuan Tip. The Nimoa-Sudest languages are an exception to this with SVO clause order and manner-of-causation prefixes.

¹¹⁷ The prefix *go-* 'by speaking' is grouped as a body-part manner-of-causation prefix, which parallels other parts of the grammar. For example, the noun *ghalinga* 'voice' is a directly possessed noun, as are nearly all body part nouns.

prefix	meaning	potentially related verbs
<i>ghe-</i>	‘by hand’	
<i>mwana- *^</i>		
<i>nji-</i>		
<i>vi- *</i>	‘with fingers’	<i>vi</i> ‘braid/plait (hair)’
<i>thu- *</i>	‘by pointing’	
<i>vuri- *^</i>	‘with feet’	
<i>ghala- *</i>	‘by body weight’	
<i>ri- *^</i>	‘with teeth’	<i>ghari</i> ‘bite’
<i>riri- ^</i>	‘by striking (with bent arm)’	
<i>taga- *</i>		<i>taga</i> ‘cut (leaf)’
<i>go-</i>	‘by speaking’	<i>go</i> ‘speak (a language)’
<i>vo- *</i>	‘by spearing/piercing’	<i>vwe</i> ‘spear’
<i>go- *</i>	‘by cutting’	<i>gu</i> ‘cut (tree)’
<i>ki- *^</i>		
<i>sowo-</i>	‘by sawing’	
pseudo-prefix		
<i>thuwo- *</i>	‘with tongs’	<i>thuwo</i> ‘grip with tongs, get with tongs’

Table 5.1 Manner-of-causation prefixes (*indicates prefixes attested by M. Anderson and Ross (2002), ^ prefixes attested by Ezard (1978))

The current analysis distinguishes 15 manner-of-causation prefixes and one pseudo-prefix, which are grouped based on semantic and formal criteria. Semantically, the prefixes conform to prefixes documented in other Papuan Tip languages: they specify the manner in which an action is performed. Formally, the prefixes are in a paradigmatic relationship and are mutually exclusive. While nearly all the prefixes – with the potential exclusion of the English borrowing *sowo-* ‘by sawing’ – have likely grammaticalised from verb stems in multi-stem constructions, the majority of the prefixes have no identifiably related verbal counterparts today, and cannot function as independent verbs in the VC. Instead, they fill a preverbal slot in the VC following the reciprocal prefix *ve-*, and preceding the causative prefix *va-* (see §4.3 for positional slots in the verb complex).¹¹⁸

Six of the prefixes may be related independent verb stems that are attested in the lexicon. Some of these verb stems (*gu* ‘cut (tree)’, *taga* ‘cut (leaf)’, *vwe* ‘spear’) have only been attested in elicitation and/or in texts with older speakers, suggesting that they may be falling out of use. In one case, the prefix is also phonologically reduced (*ghari* ‘bite’, *ri-* ‘with teeth’). As previously noted, a tendency towards semantic bleaching is a pervasive feature of the Papuan Tip manner-of-causation prefixes and this appears to be born out when comparing the Sudest prefixes and their more general

¹¹⁸ An alternative analysis is that the manner-of-causation prefixes are verb stems, the majority of which can no longer function as independent verbs. The fact that the prefixes may be followed by a causative prefix does not exclude this potential analysis as there are complex verbs in which the V₂ stem is causativised (see §6.3.2). Nevertheless, they are analysed as prefixes here due to the semantic differences between the prefix and verb forms. The prefixes also precede classificatory verbs in the VC that are otherwise never preceded by other verb stems in the VC. Given the gradual and non-uniform nature of grammaticalisation, it is also to be expected that some of the prefixes still share an identifiable link to related verb stems.

semantics to their verb stem counterparts. Semantic bleaching may also be responsible for multiple prefixes with identical semantics (e.g. *ghe-*, *mwana-*, and *nji-* ‘by hand’). Indeed, evidence from A&R points to the prefixes *go-* and *ki-* ‘by cutting’ (§5.2.10) previously possessing distinct semantics that are not present in the current data.

The manner-of-causation prefixes typically occur in clauses that describe events where an agent uses an instrument to impact or come into physical contact with a patient. Most commonly, these are different kinds of events of breaking, e.g. ‘break’, ‘crack’, ‘crush’, ‘cut’, ‘rip’, ‘saw’, ‘scratch’, ‘smash’, ‘snap’, ‘split’, ‘tear’. Indeed, many events of breaking are distinguished by the manner-of-causation prefix they take. This is shown in the previous section in (1), where *mwana-bebe* ‘with hands-break’ means ‘snap’ or ‘break (using hands)’ and *go-bebe* ‘by cutting-break’ means ‘cut’. Events of exerting force and caused accompanied motion without bringing about a change of state in a patient also regularly take a manner-of-causation prefix, e.g. ‘immerse’, ‘poke’, ‘push’, ‘pull’, ‘take in/out’, ‘turn over’.

The prefixes occur with both transitive or intransitive verbs. Argument structure and valence remain the same when a manner-of-causation prefix combines with a transitive verb, as in (1) above.¹¹⁹ When a prefix occurs with an intransitive verb stem, it typically has a function comparable with the causativiser *va-* (§4.3.8.2) in addition to its manner-specifying function and the derived verb is transitive. Compare the intransitive clause with *ranggi* ‘go out’ in (3a) with the derived transitive clause containing manner-of-causation prefixes in (3b). The S of the intransitive clause is demoted to the O argument of the transitive clause and a new agent-like argument (A) is introduced.

- (3) a. *i=ranggi* *e* *thiyo*
 3SG=go.out PREP string/jail
 ‘he goes out of the jail’ (fp_stimuli_191015_05 461, 1017.760
 1018.610)
- b. *wevo=ma* *i=mwana-ranggi=ya* *kap=ma*
 young.woman=DET 3SG=w.hands-go.out=YA cup=DET
 ‘the girl takes/pulls out the cup’ (cb_stimuli_101116 016, 214.590 217.735)

The manner-of-causation prefixes for striking (*riri-* and *taga-* ‘by striking’) and piercing (*vo-* ‘by piercing/spearing’) combine with intransitive verbs of motion to describe the actions of paddling or poling a canoe respectively. Unlike all other constructions involving a manner-of-causation prefix and intransitive verb, the derived forms are not transitive, but rather remain intransitive and appear to specify the manner of motion of the subject (S) rather than an object (although the event also entails the caused motion of the vessel as well but this is expressed by an adjunct not by a core

¹¹⁹ A manner-of-causation prefix obligatorily occurs with one transitive verb, the causativised *va-mare* ‘CAUS-die’ or ‘kill’.

argument of the verb). Compare the intransitive examples with *ranggi* 'go out' and *lawa* 'go across' in (4) and (5) with the causativised VC in (3b).

- (4) *i=vo-ranggi* *Rospoin* *mbothi-ye*
 3SG=by.piercing-go.out place.name nose-3SG.POSS
 'he poled out to Rospoin point' (mandumbunga_02_181016 121, 301.877 304.387)
- (5) *me=taga-lawa* *e* *koukou* *e* *imba=ke*
 3SG.IMM.PST=by.striking-go.across PREP canoe PREP river=SPKR.PROX
tine
 inside
 'he paddled across the river by canoe (lit. by canoe in the river)' (e_021115_02)

The remainder of this section outlines each of the prefixes in turn before considering the pseudo-manner-of-causation prefix and stems attested in previous descriptions of the language that do not occur in the current data (both corpus and elicitation).

5.2.1 *mwana-*, *ghe-* and *nji-* 'with hands'

The three prefixes *mwana-*, *ghe-* and *nji-* specify that an action is completed using the hands. In many cases, the prefixes may be used interchangeably without any apparent semantic difference. Consider the three sentences presented in (6):

- (6) a. *lolo=ko* *i=momodi* *wool=ko* *na* *i=mwana-ten=∅*
 person=DIST 3SG=pull wool=DIST and 3SG=w.hands-break=3SG
 'the person pulls the wool and breaks it with their hands/snaps it'
 (cb_stimuli_051016_01 166, 1875.420 1880.925)
- b. *a=ghe-ten=a* *thiyo=ke*
 1SG=w.hands-break=YA string=SPKR.PROX
 'I break the string with my hands/snap the string' (e_181116_02)
- c. *amala=ko* *i=nji-ten=a* *thiyo=ko*
 man=DIST 3SG=w.hands-break=YA string/rope=DIST
 'the man breaks the string with his hands/snap the string'
 (cb_stimuli_051016_02_02 131, 994.605 997.659)

None of the prefixes has an identifiable corresponding verb form and the prefix *mwana-* is the only one of the three prefixes identified in previous literature. This may be due to the relative frequencies of the three prefixes. In the corpus, there are 162 tokens of *mwana-* but only four tokens of *nji-* and two of *ghe-*.

One set of tokens from elicitation does show a semantic distinction between *mwana-* and *ghe-* 'with hands'. As shown in (7) and (8), when the intransitive stem *ru* 'go in' combines with *mwana-* it

means ‘pull’, and when it combines with *ghe-* it means ‘push’. It is unclear whether there are further such combinations, tendencies or constraints on the three prefixes and how they combine (or do not) with specific verb stems.

- (7) *a=mwana-ru=wo* *daghata=ma* *e* *nggolo* *raberabe*
 1SG=w.hands-go.in=thither log=DET PREP house under
 ‘I pull the log in under the house’ (e_021115_01)
- (8) *i=ghe-ru=wo* *daghata=na* *e* *nggolo=ko* *raberabe*
 3SG=w.hands-go.in=thither log=ADDR.PROX PREP house=DIST under
 ‘I push the log in under the house’ (e_021115_01)

Some speakers also note that *nji-* ‘with hands’ is associated with actions involving not just hands but specifically fingernails. This analysis is compatible with the examples in (9) and (10) which describe the picking of a flower and stem and a rat scratching; both activities that generally involve nails/claws.

- (9) *i=nji-nggila=∅* *na* *ma* *i=mena* *i=vo-thithi*
 3SG=w.hands-break=3SG and already 3SG=come 3SG=by.spear-ing-push.through
e *baba=ko*
 PREP wall=DIST
 ‘he broke/plucked it (a flower) by hand hands and he came and poked/stabbed it into the wall’
 (mandumbunga_02_181016 091-92, 236.642 240.264)
- (10) *teo=ma* *i=ruku-ranggi* *i=nji-koko=ya* *nggama=ma* *mbothi-ye*
 rat=DET 3SG=run-go.out 3SG=w.hands-scrape child=DET nose-3SG.POSS
 ‘the rat runs out (and) scratches the child’s nose’
 (frogstory_161214 058-59, 145.292 149.910)

A hands and nails interpretation also fits the derived verb in (11) *nji-vun* ‘by hand-turn off’, which means ‘pinch (using hands)’ but is extended here to describe abdominal contractions experienced during childbirth.

- (11) *gamo-ye* *i=nji-vun=∅*
 stomach-3SG.POSS 3SG=w.hands-turn.off/finish=3SG
 ‘she has contractions (lit. her stomach pinches her)’
 (new_mother_251214 041, 98.500 101.037)

Examples (12) and (13) show the only spontaneous examples of the prefix *ghe-*. In (12), a girl immerses a receptacle in a body of water, and in (13) a woman physically rolls a man over so that he is sleeping closer to her granddaughter (in the hope of marrying them).

- (12) *regha* *i=nja* *i=ghe-utu=∅*
 one 3SG=go.down 3SG=w.hands-immersed=3SG
 ‘one (girl) went down (and) dipped it by hand (into the water)’
 (mandumbunga_02_181016 174, 430.279 435.642)

- (13) *elisari=ko va i=ghe-vaghile=Ø*
 woman=DIST REM.PST 3SG=w.hands-turn=3SG
 'the old woman turned him over with her hands'
 (mandumbunga_02_181016 341-342, 858.137 861.780)

It is possible that the prefixes were previously semantically more distinct but have become similar due to semantic bleaching as is suggested by the fingernails connotation that *nji*- sometimes carries.

There is also evidence that the prefix *mwana*- is developing a secondary meaning 'quickly'. This can be seen when comparing the three examples in (14) to (16) with the examples in (17) and (18) (as well as (6a) and (7) above); the latter of which only express the 'with hands' sense. While the event of getting a burning log/stick in (14) presumably involves the use of the hands, the same cannot be said for the examples shown in (15), where the speaker is urging the hearers to discuss their story quickly so that they can get on with recording it, and (16), which describes a man lowering his head into a bucket.

- (14) *i=mwana-yengge ndighe*
 3SG=w.hands-GET.SG.FIRE fire
 'he quickly gets/grabs the fire' (child_and_giant_201015 067, 172.580 177.210)
- (15) *...ko wo-vara=mwana-utu=nga-kai vara iya=ko*
 but IMP-1INCL.INT=w.hands-speak=TR-INC really DEM=DIST
 '...but we will quickly talk about that first'
 (fp_stimuli_201015_02 237, 802.840 804.380)
- (16) *i=mwana-njo=nga umbali-ye e buket*
 3SG=w.hands-go.down=TR head-3SG.POSS PREP bucket
 'he quickly lowers his head down to the bucket'
 (put_stimuli_201025_01 041-2, 305.695 309.230)
- (17) *i=mwana-thatha kaliko e nima-e*
 3SG=w.hands-tear cloth PREP hand-3SG.POSS
 'she tears cloth with her hands' (cb_stimuli_051016_02_02 053, 414.984 417.500)
- (18) *i=mje ve=mwana-ngonje une=ko*
 3SG=try 3SG.INT=w.hands-pick fruit=DIST
 'she tried to pick that fruit by hand' (bush_betelnut_011115 038-39)

Manner-of-causation prefixes specifying the involvement of the hands crosslinguistically may have a tendency to grammaticalise over other manner-of-causation morphemes, albeit usually into general causatives. Bradshaw (1982: 72) finds that in at least two Papuan Tip languages, Tawala and Iduna, the manner-of-causation prefixes meaning 'with hands' only sometimes expresses their manner-specifying function, and are now also used as a general causative prefix alongside reflexes of the Austronesian causative **pa(ka)-*. For a number of North American languages, Mithun (2002) reports that 'with hands' manner-of-causation morphemes have also grammaticalised into general

causatives. She speculates that this tendency of hand-related manner-of-causation morphemes to grammaticalise over others is due to the ubiquitous nature of actions involving the use of hands. This ubiquity leads to such morphemes becoming the default marker and opens them up to reanalysis.

5.2.2 *vi-* ‘with fingers’

The prefix *vi-* indicates that the action involves the fingers. In (19), the subject clasps a piece of material between her fingers.

- (19) *wanakau=ko* *regha* *i=vi-kiki=ya* *kaliko* *vali*
 young.women=DIST one 3SG=w.fingers-be.firm=YA cloth side
mbothi-ye
 part-3SG.POSS
 ‘the girls, one (of them) clasps a side of the cloth with her fingers’
 (cb_stimuli_051016_02_01 104, 616.770 621.701)

The prefix may be related to the transitive verb *vi* ‘braid/plait (hair)’:

- (20) *a=vi* *umbalu-nggu=ke*
 1SG=braid(hair) head/hair-1SG.POSS=SPKR.PROX
 ‘I braid my hair’
 (e_231116_02)

There are ten tokens of the prefix in the corpus, the majority of which occur in with a CLFV to specify that the object is acquired using the fingers, as in (21) and (22).

- (21) *wevo=ma* *i=vi-wo* *kap* *e* *tebol=ma*
 young.woman=DET 3SG=w.fingers-GET.SG.RIGD cup PREP table=DET
vwata-e
 top-3SG.POSS
 ‘the girl gets the cup with her fingers from the table top’
 (put_stimuli_191150_02_01 011-4, 72.731 79.524)

- (22) *buku=ma* *i=ghena-ghena* *lolo=ma* *i=mena=engge* *ma*
 book=DET 3SG=RED-sleep person=DET 3SG=come=just already
i=la-vi-thin=Ø
 3SG=and.go-w.fingers-GET.SG.CNTR=3SG
 ‘the book is lying on the floor, the person just comes and gets it with their fingers’
 (put_stimuli_231015 055, 430.840 434.223)

In (23), the verb *kum* ‘tap’ combines with the prefix to mean ‘touch’ or ‘caress’, and in (24) the prefix occurs with *varara* ‘turn on’ to specify the action needed to switch on a light or computer.

- (23) *maa* *i=nde-vi-kum=nggo* *mun*
 NEG 3SG=DEHORT-w.fingers-tap=1SG a.bit
 ‘he didn’t touch/caress me a bit’ (mandumbunga_02_181016 362, 909.414 911.897)

- (24) *lolo=ma* *i=vi-varara* *le-Ø* *powa=ma*
 person=DET 3SG=w.fingers-turn.on POSS.CLF2-3SG.POSS power=DET
 ‘the person turns/switches on the power (with their finger)’
 (put_stimuli_231015 019, 176.370 181.468)

5.2.3 *thu-* ‘by pointing’

The prefix *thu-* appears to indicate that the action is completed with explicit pointing on the agent’s part, either with a non-body part instrument or hand/arm. The use of the prefix is highly restricted and appears to only combine with the verb *vatomwe* ‘show’. The prefix does not occur in the corpus and the only tokens of it comes from elicitation, shown in (25).

- (25) *gamaina* *i=thu-vatomwe* *koukou* *we=nggo*
 girl 3SG=w.pointer-show canoe PREP=1SG
 ‘the girl showed the canoe to me (with a pointer/by pointing)’ (e_041215_02)

M. Anderson and T. Anderson (1991: 23) provide an example of the prefix occurring alongside *ru* ‘go in, enter’ with the meaning ‘poke (instrument)’. Speakers, however, rejected the example cited by A&A, shown in (26).

- (26) **i=thu-ru-wo* *e* *goga*
 3SG=w.point-move/go.in-thither PREP hole
 Intended: ‘he poked (the instrument) into the hole’ (e_111116)

While the prefix may have fallen out of use in the last three decades, the above example was rejected by speakers who would have been in their 20s and 30s in the late 80s and early 90s, suggesting that any such prefix may already have been falling out of use then. Attempts to elicit *thu-* ‘by pointing’ with additional verbs were also deemed ungrammatical by speakers.

5.2.4 *vuri-* ‘with feet’

The prefix *vuri-* signals the involvement of the feet in the action. There is no specific verb with the meaning ‘kick’ in the language and the sense of ‘kick’ is conveyed by adding the manner-of-causation prefix *vuri-* ‘with feet’ to the verb stem *vewo* ‘push’:

- (27) *nggama=ma* *i=vuri-vewo* *bal=ma*
 child=DET 3SG=w.feet-push ball=DET
 ‘the child kicks the ball’ (e_211116_02)

There are four tokens of the prefix in the corpus, and the prefix has no identifiable corresponding verb form (although see further below). The corpus examples are presented in (28) to (30) (the fourth token is identical to (30) and is therefore not repeated here). In (28), where *vuri-* ‘with feet’

is preceded by the subsequent associated motion prefix *la=* ‘and go’, the clause describes a series of events in which a woman kicks over a bucket seemingly accidentally and then walks away.

- (28) *ela=ma* *i=mena=engge* *ma*
 woman=DET 3SG=come=just already
i=la-vuri-linggi-thavwi=∅
 3SG=and.go-with.feet-pour-accidentally=3SG
 ‘the woman came and tipped it (a bucket) over accidentally with her foot and kept going’
 (put_stimuli_231015 053-4, 408.314 409.712)

Example (29) describes the action of pushing a chair out from a table while being seated.

- (29) *wevo=ko* *i=ro-vala-ra* *e* *chair*
 young.woman=DIST 3SG=stay.and-cover-put PREP chair
i=vuri-vewo-ranggi=∅
 3SG=w.feet-push-go.out=3SG
 ‘the woman sits on a chair (and) she pushes it out using her feet’
 (cb_stimuli_051016_02_01 057, 333.643 341.136)

The example given in (30) is different from the preceding tokens in that the instrument type specified by the prefix is both the manner/instrument of the action and the theme of the event – *karitau* ‘tridacna clam’ is not an argument of the verb but rather the possessor of *gha-ye* ‘mouth-3SG.POSS’ and part of the PP. The combination of *vuri-* ‘with feet’ and *mban* ‘put’ is also notable because *mban* ‘put’ never functions as an independent verb and only occurs in complex verbs with a monotransitive V₁ (§6.3.3). In this case, the prefix is filling the function of what is usually a monotransitive verb.

- (30) *i=vuri-mban=∅* *karitau* *e* *gha-ye*
 3SG=w.feet-put=3SG tridacna.clam PREP mouth-3SG.POSS
 ‘she puts it (her foot) in the tridacna clam’s mouth’
 (chicken_story_181015 016-17, 42.070 45.720)

5.2.5 *ghala-* ‘by body weight’

The prefix *ghala-* indicates that an action is completed using an individual’s own body weight:

- (31) *a=ghala-bebe=ya* *umbwa=ke* *yanggai*
 1SG=by.body.weight-break=YA tree/stick=SPKR.PROX branch
 ‘I break the tree branch (e.g. by climbing/stepping on it)’
 (e_111116)

The prefix appears to have no related verb form.¹²⁰ The only token of the prefix in the corpus is presented in (32). It describes how a couple is sinking first one end of a canoe and then the other

¹²⁰ One speaker in her early thirties provided an example of *ghala* as a transitive verb meaning ‘lay down/fasten down (e.g. floorboards/stones)’, however multiple older speakers did not recognise such a verb.

while passionately kissing. The stem *utu* ‘immerse’ is only grammatical in verbs with a manner-of-causation prefix or in V₂ position in complex verbs (§6.3.2, 6.3.4).

- (32) *wangga* *thi=wa* *vethi=ghala-utu* *vali* *wangga*
 boat 3PL=go 3PL.INT=w.body.weight-immerse side boat
mbothi-ye *thi=wa* *vali* *wangga* *mbothi-ye*
 nose-3SG.POSS 3PL=go side boat nose-3SG.POSS
 ‘the boat, they go, they sink (one) boat end, they go (sink the other) boat end’
 (mandumbunga_02_181016 450, 1138.193 1143.183)

5.2.6 *ri-* ‘with teeth’

The prefix *ri-* indicates that an action or event was completed using the teeth:

- (33) *karitau* *i=ri-mbiye* *le-nji* *ela-ghi*
 tridacna.clam 3SG=w.teeth-hold POSS.CLF2-3PL.POSS woman-old/esteemed
 ‘the tridacna clam clasped their old woman with its teeth (i.e. with its shell)’
 (chicken_story_181015 018, 45.720 47.201)

The prefix may be historically related to the verb *ghari* ‘bite’. There are six tokens of the prefix in the corpus. It occurs with the verb *thinge* ‘get with teeth, grip with teeth’¹²¹ in five of the tokens, doubly marking the manner of the event, as in (34) (the remaining four tokens describe the same stimulus video and are, therefore, not repeated below). Further, elicited examples are presented in (35) and (36).

- (34) *wevo=ma* *i=ri-thinge=ya* *gha-Ø* *ndeghi* *e*
 young.woman=DET 3SG=w.teeth-get.w.teeth POSS.CLF1-3SG.POSS cup PREP
gha-ye
 mouth-3SG.POSS
 ‘the woman got her cup with her teeth’
 (put_stimuli_191015_02_02 009, 59.347 62.326)
- (35) *ela=ma* *i=ri-ten=a* *thiyo=ma*
 woman=DET 3SG=w.teeth-break=YA rope/string=DET
 ‘the woman breaks the string (with her teeth)’ (e_141116_01)
- (36) *waragoi* *i=ri-va-mare* *lolo=ko*
 crocodile 3SG=w.teeth-CAUS-die person=DIST
 ‘the crocodile killed the person with its teeth’ (e_041215_02)

¹²¹ The verb *thinge* ‘get with teeth’ can occur without the manner-of causation prefix *ri-* ‘with teeth’ but cannot occur with any other manner-of-causation prefixes.

5.2.7 *go-* ‘by speaking’

The prefix *go-* indicates that the event involves speech:

- (37) *i=nga* “*maa* *i=nde-go-ghembe=nggo-mun*”
 3SG=say NEG 3SG=NEG?-by.speaking-go.towards=1SG-a.bit
 ‘she said “he didn’t speak to me at all/a bit”’
 (mandumbunga_02_181016 423, 1074.122 1076.918)

The prefix is presumably related to the transitive verb *go* ‘speak (a language)’, shown in (38). It is also homophonous with the manner-of-causation prefix *go-* ‘by cutting’ (§5.2.10).

- (38) *ande* *u=go=re* *vanga* *Vanatina* *moli*
 NEG1 2SG=speak=NEG2 language Sudest INTS
 ‘you don’t speak (in) the Sudest language’ (c_031116 033, 68.416 72.615)

There are five tokens of the prefix in the corpus. It combines with directional verbs to encode events of directed communication, as in (37) with *ghembe* ‘go to(wards)’, meaning ‘speak (to s.o.)’, and in (39) with *njogha* ‘go back’, meaning ‘respond’ or ‘talk back’.

- (39) *Yenggiyenggi* *i=go-njogha* *we=Ø* *ighai-ye* *i=nga...*
 monitor.lizard 3SG=by.speaking-go.back PREP=3SG cousin-3SG.POSS 3SG=say
 ‘Monitor Lizard responded to his cousin, he said...’
 (lizard_and_possum_121015 044, 115.825 118.086)

In (40) it occurs with the verb of communication *vaito* ‘ask’.

- (40) *i=go-vaito=nggi=ya* *euni-wo=ma*
 3SG=by.speaking-ask=3PL=YA COUNT.CLF-two=DET
 ‘he asked the two women’ (mandumbunga_02_181016 200, 501.448 505.193)

The prefix can also occur with verbs of physical impact to specify manner/cause. Such a combination can be used to describe the use of spells to effect change, as in (41).

- (41) *wadawada=ma* *i=go-nggila* *umbwa* *e* *kukura*
 witch=DET 3SG=by.speaking-break stick/tree PREP spell
 ‘the witch breaks the tree with a spell’ (e_070818)

The prefix is not documented in previous work on the language, however prefixes that indicate talking or speech are relatively common among the Papuan Tip languages (cf. Capell 1943: 243 - 250; Ezard 1978: 1165). There is also a cognate prefix *go-* ‘involving speech’ in Misima (W. Callister 1985a: 5).

5.2.8 *riri-* and *taga-* ‘by striking’

The prefixes *riri-* and *taga-* specify that an action involves a striking motion with a bent arm:

- (42) *i=riri-viya* *le-vo* *umbali-ye* *e* *ndighe*
 3SG=by.striking-split POSS.CLF2-young.woman head-3SG.POSS PREP wood
gethi-gethi
 RED-split
 'he cracks his wife's head with the firewood'
 (feast_of_the_fish_271015 088, 213.951 219.480)
- (43) *i=taga=kothe* *righe=ko*
 3SG= by.striking-poke trunk=DIST
 'she struck that tree trunk (with a stick)' (bush_betelnut_011115 030, 73.870 76.830)

The prefix *riri-* does not appear to have a related verbal counterpart in use today but the prefix *taga-* does. The transitive verb *taga* means 'cut (leaves)' but cannot be used when describing cutting events involving other object referents such as a banana plant. This is illustrated by the examples in (44).

- (44) a. *a=taga* *mbouye=ko*
 1SG=cut(leaf) young.shoots=DIST
 'I cut the young shoots' (c_031116 147)
- b. **a=taga* *kunumwana* *umbwa=ke*
 1SG=cut banana tree/stick=SPKR.PROX
 Intended: 'I cut the banana plant' (e_251116_02)

The two prefixes do not entail a particular instrument in the same way as the manner-of-causation prefixes outlined in the previous sections. This is demonstrated by the example pairs shown in (45) and (46). The examples presented in (45) describe an event in which an agent uses their forearm and hand in a motion reminiscent of a knifehand strike ('karate chop') to break a stick. In contrast, the event described in (46) involves an agent using a sledgehammer to break a piece of cloth strung between two tables.

- (45) a. *i=riri-nggila* *umbwa=ma* *e* *nima-e*
 3SG=by.striking-break tree/stick=DET PREP arm/hand-3SG.POSS
 'she broke the stick with his hand (by striking)'
 (cb_stimuli_051016_03 425, 1811.594 1813.790)
- b. *i=taga-nggila* *e* *nima-e*
 3SG=by.striking-break PREP arm/hand-3SG.POSS
 'she breaks it (a stick) with her hand (by striking)'
 (cb_stimuli_101116 061, 791.098 795.880)
- (46) a. *umoru=ma* *i=wo* *sledgehama* *i=riri-ten=a*
 young.man=DET 3SG=GET.SG.RIGD sledgehammer 3SG=by.striking=break=YA
kwama=ma
 cloth=DET
 'the man gets a sledgehammer (and) he breaks the cloth (by striking)'

(cb stimuli 051016 01 129, 1407.310 1412.740)

- b. *i=taga-ten=a* *kwama=ma* *e* *hama*
 3SG=by.striking=break=YA cloth=DET PREP hammer
 ‘he breaks the cloth with a hammer (by striking)’

(cb stimuli 051016 03 272, 1070.777 1073.020)

The examples in (45) and (46) also illustrate the interchangeability of the two prefixes; the sentences in (45a) and (45b) come from two different speakers describing the same video stimulus, as do the sentences in (46a) and (46b). The prefixes also occur with nearly identical frequencies in the corpus (50 tokens of *riri-* and 48 of *taga-*). Use of the two prefixes does not appear to be related to the variables of age or gender. There may be slight regional variety. There is a slight tendency for people from further to the west (around Taranggiya) to use *riri-* slightly more often than *taga-*; the opposite pattern can be observed for speakers from the east (Vuwo and eastwards).¹²²

The causativised verb *va-mare* ‘CAUS-die’ or ‘kill’ obligatorily takes a manner-of-causation prefix. The prefixes *taga-* and *ri-ri-* can be used when the death was the result of a beating (47), but the two prefixes are also used as default ‘neutral’ prefixes when the manner of death is unspecified, unknown, or there is no prefix that specifies the exact manner (48).

- (47) *thi=ngge=∅* *yenggiyenggi* *na* *thi=taga-va-mare=∅*
 3PL=hit.SG=3SG monitor.lizard and 3PL=by.striking-CAUS-die=3SG
 ‘they hit Monitor Lizard and kill him’
 (lizard_and_possum_121015 050, 128.240 132.713)

- (48) *umoru=ma i=taga/riri-va-mare wevo=ma*
 young.man=DET 3SG=by.striking/ by.striking -CAUS-die young.woman=DET
 ‘the man killed the woman’ (041215)

When the two prefixes occur with intransitive directional verbs, the resulting construction remains intransitive with the prefixes specifying the manner of motion, i.e. that the agent is paddling (a canoe), as in (49) (see also (5)).

- (49) *i=taga-ranggi-wo=ko* *Ghinya*
 3SG=by.striking-go.out-hither=DIST place.name
 ‘he paddles out there, to Ghinya’
 (mandumbunga_02_181016 398, 1002.146 1005.102)

¹²² It is also possible that the prefix *taga-* was originally borrowed from Nimowa or Misima, which both use manner-of-causation prefixes *taga-* to indicate the involvement of a “hit” (Ezard 1978: 1173) and “force” (W. Callister 1985a: 5) respectively. For Sudest, A&R list *taga-* as indicating the action is accomplished ‘by bending the arm’ but do not mention *riri-*, while Ezard (1978: 1174) cites *riri-* as indicating the involvement of a hit but does not list *taga-*.

5.2.9 *vo-* 'by spearing'

The prefix *vo-* indicates the involvement of a spearing or piercing motion in the completion of the event described by the verb stem:

- (50) *amala=ko i=vo-bebe=ya karot=ko e umbwa*
 man=DIST 3SG=by.spearing=break=YA carrot=DIST PREP stick/tree
 'the man breaks the carrot with a stick (by stabbing)'
 (cb_stimuli_051016_02_02 074, 583.990 587.398)

The prefix is related to the verb stem *vwe* 'spear' (51); however, the verb form appears to have fallen out of use and is only attested in elicitation data. In contrast, the synonymous verb *nggau* 'spear' (52) occurs in five different texts in the corpus (six tokens).

- (51) *i=vwe=ya bwarogi*
 3SG=spear=YA fish
 'he spears a fish' (e_251115_01)

- (52) *u=nggau=a morouma*
 2SG=spear=YA k.o.fish
 'you spear the morouma fish' (mandumbunga_061215 164, 470.459 472.884)

There are 43 tokens of the prefix in the corpus. Events described by VCs with the prefix generally involve a pointed instrument.¹²³ This is usually a long, thin, non-body part instrument, as in the example above and in (53) and (54).

- (53) *ela=ko i=vo-utu kaliko=ko e umbwa*
 woman=DIST 3SG=by.spearing-immersed cloth=DIST PREP stick/tree
 'the woman pierces/stabs the cloth with a stick'
 (cb_stimuli_101116 065, 852.340 855.520)

In (54), the flower stem is both a part of the object, and the instrument used to 'spear' the woven wall (see also (30) for a similar example).

- (54) *i=nji-nggila=Ø na ma i=mena*
 3SG=w.hands-break=3SG and already 3SG=come
i=vo-thithi=Ø e baba=ko
 3SG=by.stabbing-push.through=3SG PREP wall=DIST
 'he plucked/broke it (a flower) with his hands, he came (and) inserted it into the wall
 by piercing/stabbing (the woven wall)'
 (mandumbunga_02_181016 091-92, 236.642 240.264)

The prefix is also used when the instrument involved is a bodily extremity, such as a finger (55), head (56) or other extremity like a the snout or tusks of an animal (57).

¹²³ M. Anderson and Ross (2002: 332) list the prefix as meaning 'with an instrument'.

- (55) *amala=ke* *i=vo-wi=ya* *rag=ke* *e* *truk*
 man=SPKR.PROX 3SG=by.spear-ing-plug-YA rag=SPKR.PROX PREP truck
e *exhaustpipe*
 PREP exhaust.pipe
 ‘the man plugs the rag into the truck’s exhaust pipe (by poking)’
 (put_stimuli_201015_02 097-100, 586.661 593.092)
- (56) *amba* *i=vo-thin-vairi=∅* [...] *amba*
 then 3SG=by.spear-ing-GET.SG.CNTR-lift=3SG then
i=vo-thin-vewo=∅
 3SG=by.spear-ing-GET.SG.CNTR-push=3SG
 then it (a deer) lifts him up (with its head) [...] then it (the deer) pushes him (using head)’
 (frogstory_161214 087, 223.780 226.100)
- (57) *mbombo=ko* *i=vo-thin-vairi* *lo* *nambo*
 pig=DIST 3SG=by.spear-ing-GET.SG.CNTR-lift POSS.CLF1.1SG.POSS basket
e *soki/mbothi-ye* *na* *i=tara-yathu* *lo*
 PREP tusk/nose-3SG.POSS and 3SG=pour-throw.away POSS.CLF1.1SG.POSS
bigi-bigi
 RED-things
 ‘the pig poked (up) my basket with its tusks/snout and tipped my things out’
 (e_211016_02)

The prefix occurs with the CLFV *bigi* ‘get (pl. container-with-contents)’ to specify head-carrying (58), which is the most common manner of carrying loads on the island. See §5.3.2.3 and §5.3.5 for further discussion of these types of examples.

- (58) *nambo* *ra=vo-bigi=∅*
 basket 1INCL=by.spear-ing-GET.PL.CNTR=3SG
 ‘the baskets, we get/load on our heads’ (education_241214 037, 116.420 123.310)

The prefix also occurs with intransitive motion verbs to specify the manner of motion – and thereby the mode of transport – such as poling a canoe, as in (59). (See also (4) above for a further example). Like the parallel constructions with *taga-* and *riri-* ‘by striking’ that specify the manner of travelling as paddling (a canoe), the derived construction is intransitive.

- (59) *i=mena* *i=vo-lawa* *Wavowavo*
 3SG=come 3SG-by.spear-ing-go.across place.name
 ‘he comes (and) poles across to Wavowavo’
 (mandumbunga_02_181016 118-9, 292.979 299.157)

5.2.10 *go-* and *ki-* ‘by cutting’

The prefixes *go-* and *ki-* indicate that the action is accomplished by cutting (see §5.2.7 for the homophonous prefix *go-* ‘by talking’). The two prefixes can be used interchangeably, as shown in the two sentences presented in (60), which describe the same stimulus video.

- (60) a. *amala=ma i=go-ten=a thiyo=ma e kelumo=ma*
 man=DET 3SG=by.cutting-break=YA string=DET PREP axe=DET
 'the man cuts the string with an axe' (cb_stimuli_101116 018, 251.199 254.988)
- b. *amala=ma i=ki-ten=a thiyo=ma e kelumo=ma*
 man=DET 3SG=by.cutting-break=YA string=DET PREP axe=DET
 'the man cuts the string with an axe' (cb_stimuli_071116 037, 352.690 355.363)

The prefix *go-* is likely derived from the verb *gu* 'cut' (61). The verb *gu* 'cut' only occurs six times in the corpus compared with 109 tokens of *go-*. Moreover, it is only used by speakers over the age of 50. The prefix *ki-* does not appear to have a related independent verb form in use today.

- (61) *Yagharembo iya va i=gu vwarivwari=ko*
 personal.name DEM REM.PST 3SG=cut banana=DIST
 'Yagharembo was the one who cut down that banana (plant)'
 (mandumbunga_ 061215 088, 246.315 250.260)

The 'cutting' prefixes *go-* and *ki-* are among the most frequent ones in the CUT-BREAK stimuli data (109 tokens of *go-* and 58 of *ki-*), but there are only three tokens of *ki-* in the text corpus and no tokens of *go-*. The two prefixes only occur with verbs of breaking but, while the prefix *go-* 'by cutting' occurs with a wide range of verb stems (e.g. *nggila* 'break', *ten* 'break', *thatha* 'tear', *viya* 'split'), the prefix *ki-* is only grammatical in combination with the break verb *ten*, and speakers judge other combinations with the prefix ungrammatical, as illustrated by the grammaticality judgement of the example presented in (62).

- (62) **amala=ma i=ki-nggila umbwa=ma*
 man=DET 3SG=w.single.cut-break tree/stick=DET
 Intended: 'the man breaks/cuts the stick' (e_281116_02)

M. Anderson and Ross (p. 332) analyse *go-* as indicating that an action is completed with more than one cut and *ki-* as specifying that an action is completed with a single cut. While the prefixes may have had those distinct senses at one time, that analysis is not born out by the current data set, which shows that the two prefixes are used interchangeably. This can be seen clearly in the results from the CUT-BREAK task (Bohnenmeyer et al. 2001). Responses to ten of the stimuli videos where cutting was the manner of breaking included responses with both *go-* and *ki-*. In multiple instances, a single speaker offered more than one possible response to a video: one with *go-* and one with *ki-*. Consider the sentences presented above in (60) and below in (63). The examples in (60) describe an event involving a single cut and the sentences in (63) describe a video in which it takes multiple cuts to break through a tree branch.

- (63) a. *wevo=ke* *i=go-vole=ya* *umbwa=ko* *ghavwala*
 young.woman=SPKR.PROX 3SG=by.cutting-cut=YA tree/stick=DIST branch
 ‘the woman cuts the tree branch’ (cb_stimuli_051016_02_01 173, 917.511 920.700)
- b. *i=ki-ten=a* *mwalamwala* *e* *kaina* *nasiye*
 3SG=by.cutting-break=YA small.branch(es) PREP knife small
 ‘she cut the small branch with a small knife’
 (cb_stimuli_051016_03 244, 941.450 944.040)

Neither prefix appears to be sensitive to other parameters such as the nature of the instrument. Both prefixes are used in clauses describing events where instruments such as axes, knives and scissors are used. There may be some sensitivity, however, to the type of object of the cutting event. For ten of the video stimuli both prefixes occur interchangeably with several object referents, including rope, cloth, items of food and sticks. However, there are a further ten stimuli videos for which responses only include one of the prefixes and not both. The prefix *ki-* occurs in responses to stimuli where the object referent is cloth, hair, or rope, while *go-* occurs in response with object referents of solid comestibles and a stick. These referents correspond to the flexible entity and rigid entity categories to which the CLFVs are sensitive (§5.3). This distinction could also be a leftover trace of the ‘single cut’ and ‘multiple cuts’ reading of the prefixes, as items such as cloth, hair and rope typically do not require as much effort to cut or slice as sturdier items such as food and wood:

- (64) *thi=ki-ten=a* *njimwa-e*
 3PL=by.cutting =break=YA skin-3SG.POSS
 ‘they cut the umbilical cord’ (new_mother_251214 057, 137.914 140.450)
- (65) *ndamwa-e=ko* *ra=ki-ten=∅*
 leaf-3SG.POSS=DIST 1INCL=by.cutting-break=3SG
 ‘its (the coconut’s) leaf, we cut it’ (c_031116 131-132, 246.960 251.303)
- (66) *lolo=ko* *i=wo* *kelumo* *nasiye* *na* *i=go-viya*
 person=DIST 3SG=GET.SG.RIGD axe small and 3SG=by.cutting-split
ghaningga
 food
 ‘the person gets the axe and splits the food (a carrot)’
 (cb_stimuli_051016_01 165, 1859.939 1866.999)
- (67) *ela=ma* *i=ten=a* *bwarogi=ma* *i=go-vole=∅*
 woman=DET 3SG=break=YA fish=DET 3SG=by.cutting-break(into pieces)=3SG
na vuvu-to
 and NUM.CLF-three
 ‘the woman breaks the fish, she cuts it in three’
 (cb_stimuli_071116 066-8, 642.522 652.663)

5.2.11 *sowo-* ‘by sawing’

The prefix *sowo-* indicates that an action involves sawing. The English borrowing shows that the group of prefixes can incorporate new members. The prefix is likely a relatively recent addition to the paradigm and no mention of it is made in previous literature. The prefix occurs in responses from four speakers to a stimulus video in which a stick is sawn in half. In total, there are five tokens of the prefix in the corpus; some of the responses are presented below in (68) to (70).

- (68) *amala=ma i=sowo-nggila umbwa=ma*
 man=DET 3SG=by.sawing-break tree/stick=DET
 ‘the man breaks the stick by sawing’ (cb_stimuli_101116 020, 274.467 277.475)
- (69) *amala=ko i=sowo-ten=a umbwa=ko i=sowo-ten=Ø*
 man=DIST 3SG=by.sawing-break=YA tree/stick=DIST 3SG=by.sawing-break=3SG
e sowo
 PREP saw
 ‘the man saws the branch; the man saws the branch with a saw’
 (cb_stimuli_051016_02_01 123-4, 696.070 708.769)
- (70) *lolo=ko i=sowo-ten=a umbwa=ma o*
 person=DIST 3SG=by.sawing-break=YA tree/stick=DET or
i=ki-ten=Ø
 3Sg=by.cutting-break=3SG
 ‘the person saws the stick or cuts it’ (cb_stimuli_051016_01 083-4, 943.130 960.489)

The alternative responses to the same stimulus video in (70) and (71) that include the prefixes *ki-* and *go-*, both ‘by cutting’, indicate that the newer prefix *sowo-* ‘by sawing’ may be replacing the two prefixes in contexts in which the instrument is a saw.

- (71) *i=go-vole=ya umbwa=ma e sowo o*
 3SG=by.cutting-break=YA tree/stick=DET PREP saw or
i=ki-ten=a umbwa=ma
 3SG=by.cutting-break=YA tree/stick=DET
 ‘he cuts the stick with a saw or he cuts the stick’
 (cb_stimuli_051016_03 177, 750.273 752.688)

There is no related independent verb form in Sudest; however, two responses to the stimulus video include an instrumental PP *e sowo* ‘with a saw’, shown in (71) and (69). This could mean that the prefix *sowo-* had a nominal rather than verbal origin like the other prefixes, although *sowo-* may also have originated directly from the English verb *saw* rather than via the borrowed noun.

5.2.12 Pseudo-manner-of-causation stem *thuwo*- ‘grip (with tongs)’

The verb *thuwo* ‘grip with tongs, get with tongs’ or ‘get with tongs’ is analysed as a pseudo-manner-of-causation stem. The morpheme functions as an independent verb in the corpus meaning ‘grip (with tongs)’, as shown in (72).

- (72) *i=wo ghido na i=thuwo vwarivwari*
 1SG=GET.SG.RIGD tongs and 3SG=grip(w.tongs) banana
 ‘she gets the tongs and grips/gets a banana’
 (put_stimuli_191015_01_01 179, 733.449 736.107)

The verb also occurs in constructions with stems that generally only occur with a fully verbal V_1 stem, although the manner-of-causation prefix *vuri*- ‘with feet’ can also occur in a complex verb with a PUT stem, as shown above in example (30) in §5.2.4. In (73), it occurs with *ra* ‘put’, and in (74) with the completive stem *vao*, which can be translated as ‘finished’.

- (73) *i=thuwo-ra kunumwana nggwe-nggwe e tebol=ma*
 3SG=grip.w.tongs-put banana RED-be.ripe PREP table=DET
vwata-Ø
 on.top-3SG.POSS
 ‘she puts the ripe banana on the table (using tongs)’
 (put_stimuli_191015_01_02 137-138, 507.620 511.429)

- (74) *kero wo=thuwo-vao=Ø*
 already 1EXCL=grip.w.tongs-COMPL=3SG
 ‘we finished getting it (hot stone) with tongs’
 (stone_cooking_251015 074, 205.214 207.026)

The stem is included here as it can also occur in contexts where only the manner-of-causation morphemes occur and no full verb stems may occur and modifies the manner in which the action is carried out. For example, the morpheme may occur before verbs meaning ‘break’, as in (75), and before classificatory verb stems, as in (76). These examples suggest that there may be a second or emerging *thuwo* morpheme that is a prefix ‘with tongs’, which diverges from the verb stem.

- (75) *a=thuwo-ten=a kunumwana*
 1SG=w.tongs-break=YA banana
 ‘I break/cut the banana (with tongs)’ (e_181116_02)
- (76) *ela=ma i=thuwo-thin-vai=ya nambo=ma e kleko=ma*
 woam=DET 3SG=w.tongs-GET.SG-lower=YA basket=DET PREP hook=DET
 ‘the woman lowers the basket down from the hook with tongs’ (e_251116_02)

5.2.13 Unattested manner-of-causation prefixes and manner-specifying verbs

The lists of manner-of-causation prefixes in Ezard (1978) and A&R include a number of morphemes that either do not occur in the current data, or appear to be more verbal in nature rather than affixal, as will be argued below.

M. Anderson and Ross (p. 322) list two homophonous manner-of-causation prefixes: *yo-* 'with fire' and *yo-* 'by stepping on', but there are no tokens of either morpheme in the corpus. During elicitation, both sentences in Sudest and the contact language (English) were tested in attempts to elicit the prefixes. However, speakers interpreted the morpheme *yo-* in elicitation stimuli as the concurrent associated motion prefix 'while going' (§4.3.5.1). Example (77) comes originally from A&A (p. 25). Moreover, when presented with the sentence, no speaker interpreted it as having the intended meaning, but rather as the adverbial function 'quickly' of the concurrent motion prefix when it occurs with verbs that include motion semantics.

- (77) *amala=ko* *me=yo-voro=ma* *ghe=ke*
 man=DIST 3SG.IMM.PST-YO-go.up=hither LOC=SPKR.PROX
 Intended: 'the man came up here by light'
 Meaning: 'the man came (quickly) up here' (e_211116_02)

For the sense of 'with/by fire (light)' to be present, an additional clause must be added, as in (78).

- (78) *amala=ko* *me=thin=a* *thenggi* *na*
 man=DIST 3SG.IMM.PST=GET.SG.CNTR=YA coconut.torch and
me=yo-voro=ma *ghe=ke*
 3SG.IMM.PST-YO-go.up=hither LOC=SPKR.PROX
 'the man got a torch and came (quickly) up here' (e_211116_02)

The intended meaning and actual meaning of the elicited sentences targeting the second manner-of-causation prefix listed by A&R as *yo-* 'by stepping on' also appears to be incompatible with the prefix. When speakers were asked about the potential cause of the breaking event in (79), they posited it could be due to running into the tree, suggesting a link between the prefix and the manner of the event but not one that involves stepping on the tree and applying weight. Such a link is also absent in (80), which was interpreted as describing the activity of walking through thick vegetation and hacking it aside with a bush knife or similar. Both sentences are, however, compatible with a concurrent motion interpretation where the event of the verb stem occurs while the subject is moving.

- (79) *a=yo-bebe=ya* *umbwa=ke*
 3SG=YO-break=YA stick/tree=SPKR.PROX
 Intended meaning: 'I broke the tree/stick (by stepping on it)'
 Meaning:

‘I walk/move and break the tree’ (e_181116_02)

- (80) *a=yo-ten=a ndamwa-ndamwa*
 1SG=YO=break=YA RED-leaf
 ‘I move/walk and break/cut the leaves’ (e_261116_02)

Both language change and dialect variation seem unlikely reasons for the lack of recognition of the two *yo-* prefixes. The prefixes were tested with speakers who would have already been adults when A&A conducted their original fieldwork in the 1980s. While the breadth of variation in Sudest remains a topic for future exploration, dialect variation also seems an unlikely cause, as both the current data and A&A’s data come from the central dialect. In addition, intra-island travel is common, and speakers report mutual intelligibility between the Sudest dialects and comment explicitly on lexical and phonetic variation and their origins. While a potential semantic link between the concurrent associated motion prefix *yo-* ‘while going’ and some examples with the reported manner-of-causation prefix *yo-* ‘by stepping on’ can be drawn, any trace of a homophonous prefix meaning ‘with fire’ is completely absent from any current data. The interpretation by speakers of these examples also indicates that they are the concurrent associated motion prefix.¹²⁴

M. Anderson and Ross (2002: 332) analyse the morpheme *gita* as a manner-of-causation prefix meaning ‘by grasping between two fingers/both hands’. The current data show the morpheme functioning as an independent verb meaning ‘pull’ or ‘drag’, as in (81):

- (81) *ghino ma=gita e denka=ko*
 1SG 1SG.IMM.PST=pull PREP cooking.stones=DIST
 ‘I pulled it off the cooking stones’ (cooking_111015_024, 74.040 75.870)

Attempts to elicit the sense listed by A&R produced clauses with *mwana-* or *ghe-*, both ‘with hands’, or *vi-* ‘with fingers’. In the corpus and elicitation data *gita* fills the verb stem slot rather than the manner-of-causation slot and is not in complementary distribution with the manner-of-causation prefixes, as shown in (82) to (84). Note that the verb is compatible with an event that involves neither the hands or feet, as in (84), where it occurs with the manner-of-causation prefix *vuri-* ‘with feet’.

- (82) *i=mwana-gita pensil*
 3SG=w.hands-pull pencil
 ‘she pulls off the pencil (lid/cap with her hands)’
 (cb_stimuli_051016_02_01 180-181, 992.260 1007.014)

- (83) *wevo=ma i=mwana-gita kandel=ma e righe=ma*
 young.woman=DET 3SG=w.hands-pull candle=DET PREP trunk/base=DET
 ‘the young woman pulls the candle from the candlestick with her hands’

¹²⁴ M. Anderson and T. Anderson and A&R only identify the subsequent associated motion prefix *la-* which they label ‘be going to’. This gap in the description potentially results in their analysis of the two *yo-* prefixes.

(put_stimuli_191015_02_02 006-7, 38.045 42.177)

- (84) *a=vuri-gita* *mutu=ke*
 1SG=w.feet-pull weed=SPKR.PROX
 ‘I pull the weed out (with my feet)’ (e_231116_02)

On the basis of the current data available, *gita* ‘pull’ is analysed as a verb. It is possible that the ‘with both hands/arms’ interpretation of the stem arose from the fact that the verb typically describes events involving both hands, as in the tokens from the current corpus (see (82) and (83)).

5.3 Classificatory verbs

Sudest has a group of verbal classifiers comprising ten suppletive classificatory verbs (CLFVs) that can be grouped into seven categories. The choice of CLFV depends on culturally salient qualities of the referent of the O argument of the verb. These properties include consistency/flexibility, composition, and number. As independent verbs, the stems mean ‘get’ or ‘take (from)’. They also occur in a wide range of complex verbs that encode events of handling, and caused motion, such as ‘give’, ‘take (to)’, ‘put’, ‘turn’, and ‘wash’ (see also §6.3.2 for a detailed discussion of all complex verbs).

The remainder of this chapter is dedicated to describing the classificatory verbs. An overview of the main features of verbal classifiers and where they are found is given in §5.3.1. In §5.3.2, the Sudest CFLVs are presented and then discussed in turn. Section 5.3.3 describes the verbs’ occurrence with the posture prefix *nde-* ‘stand and’ with which they combine to mean ‘hold’. The reclassification of nouns using CLFVs as well as unexpected combinations of verb and object referent(s) is described in §5.3.4, and the CLFVs and their manner-of-carrying connotations are presented in §5.3.5. Finally, §5.3.6 considers possible origins for the Sudest paradigm and potential future grammaticalisation pathways.

5.3.1 Verbal classifiers

Verbal classifiers are generally considered a type of nominal classification device along with noun classifiers, numeral classifiers and possessive classifiers, and are comparatively rare cross-linguistically, see e.g. Aikhenvald (2000); Kilarski (2013), and Fedden and Corbett (2017).¹²⁵ The

¹²⁵ Recent work within a Canonical Typology approach argues against the traditional separation of gender and classifier systems, particularly in light of newer data from, for example, languages with systems that are ‘midway’ between classical gender and classifier systems or languages with both ‘gender’ and ‘classifiers’ (Corbett & Fedden 2015; Fedden & Corbett 2017). Corbett and Fedden (2016, 2018) outline morphosyntactic properties that can be used as a baseline from which to analyse a language’s nominal classification system(s)

number of verbal classifiers in a language can vary widely, from just two to around 40 (Kilarski 2013: 40). They function on an ‘absolutive’ basis, classifying the referent of an S or O argument of intransitive verbs and transitive verbs respectively (3.1 1984).

Aikhenvald (2000) differentiates three types of verbal classifiers: incorporated generic nouns, verbal affixes and suppletive verbs.¹²⁶ Cross-linguistically, verbal classifiers occur in the expression of certain states and events (Aikhenvald 2000; Kilarski 2013). If a language has verbal classifiers that occur in intransitive predicates, they will occur in existential, positional/posture and/or free movement (e.g. ‘fall’) expressions. If they occur in transitive predicates, they will occur in handling expressions (‘give’, ‘take’) and other expressions of caused motion and manipulation.

Classificatory verbs can themselves be divided into two groups that Aikhenvald (2000: 154-62) labels type-A and type-B. Type-A CLFVs categorise the S/O argument based on inherent properties of the referent. Type-B verbs classify the S/O argument based on its orientation in space and ensuing properties. Languages with type-A classifiers are attested across North America in multiple language families but also as an areal feature in other regions, including some Chibchan languages in South America and Tibeto-Burman languages in Asia (Mithun 1999; Aikhenvald 2000; Kilarski 2013). Type-B languages are also attested across North America, and CLFVs that combine orientation and inherent properties of the argument referent are found in Papuan languages, including in Asmat, Engan, Huon, and Waris families in PNG, and in some Papuan languages of southern and central Bougainville (Foley 1986; Aikhenvald 2000; Kilarski 2013).

The Sudest CLFVs fall under Aikhenvald’s (2000) Type-A classification, with verb stems selected based on properties of the referent of O. While existential-type verbal classifiers are ‘extremely widespread’ in Papuan languages (Aikhenvald 2000: 171), to the best of my knowledge, there are no verbal classifiers attested among the Oceanic languages or any other Austronesian languages. This is supported by Aikhenvald (2000: 171), who states that ‘[t]here are no verbal classifiers in [...] the Austronesian family’. In Kilarski’s (2013) more recent overview of the study of nominal classification systems there is similarly no mention of Oceanic verbal classifiers.

While CLFVs are otherwise unattested in the Oceanic languages, there are cases where suppletive pairs expressing events of caused motion and transfer display verbal number or pluractionality.¹²⁷

as closer or further away from ‘canonical gender’. See also Fedden and Corbett 2017) and the contributions in Fedden et al. (2018) for applications of canonical gender to specific languages. See Kilarski (2013, 2014) for history of the study of nominal classifiers.

¹²⁶ Aikhenvald’s (2000) classificatory noun incorporation corresponds to Mithun’s (1984) type IV noun incorporation (classificatory noun incorporation). Noun incorporation is attested in Oceanic languages but follows patterns consistent with Mithun’s type I (lexical compounding) (Margetts 2008b). Noun compounding will not be considered further here.

¹²⁷ Verbal reduplication is also attested as having pluractional functions in some Oceanic languages, for example, in the Polynesian language Niuean (Haji-Abdolhosseini et al. 2002). In Sudest, verbal reduplication may also have a pluractional function, see §3.3.2.3.

Nimowa, the only other language of the Nimoa-Sudest family, shows a number distinction for events of getting with the suppletive pair *ho* ‘get (pl.)’ and *yomo* ‘get (sg.)’. Examples in (85) and (86) show the singular and plural verbs respectively occurring with a range of object referents. Unlike the Sudest CLFVs, the Nimowa suppletive pair only distinguishes the number of the object and no other properties such as consistency and composition.¹²⁸

- (85) *yove* *i-ho* *hasaho/nabo/kaliko/pusa* *he* *tebo* *bwatane*
 girl 3SG-get.SG mango/basket/cloth/cat PREP table top
 ‘the girl gets the mango/basket/cat from the table’ (author’s fieldnotes)

- (86) *yove* *i-yomo(-di)* *hasaho/nabo/kaliko/pusa* *he* *tebo* *bwatane*
 girl 3SG-get.PL(-3PL) mango/basket/cloth/cat PREP table top
 ‘the girl gets the mangos/clothes from the table’ (author’s fieldnotes)

Like the Sudest verbs (see §6.3.3), the Nimowa verbs that mean ‘get’ are also used in combination with the stem *te* to mean ‘put’, as in (87) and (88).¹²⁹

- (87) *yove* *i-ho-te* *nabo* *he* *tebo* *bwatane*
 girl 3SG-get.SG-put basket PREP table top
 ‘the girl puts the basket on the table’ (author’s fieldnotes)

- (88) *yove* *i-yomo-te* *hasaho* *he* *tebo* *bwatane*
 girl 3SG-get.PL-put mango PREP table top
 ‘the girl puts the mangos on the table’ (author’s fieldnotes)

Sobei (Sarmi-Jayapura family), another Western Oceanic language, has a suppletive verb pair that means ‘take (in a direction)’ rather than ‘get’. They are likewise selected based on the number of the object referent (R. Sterner 1975; J. Sterner 1987; J. Sterner & Ross 2002). From the limited current data on the two languages, it appears that the suppletive verb pairs are conditioned only by the number of the object referent and no other features.¹³⁰

Some scholars do not consider CLFVs as a fully-fledged type of nominal classification system (e.g. Grinevald 2000; Passer 2016a, 2016b). Grinevald (2000: 68) classifies them as a ‘covert lexical means of nominal classification’. She equates suppletive CLFV systems with verbs of ingesting found in ‘any language’ that imply properties of the ingested object, such as *eat*, *drink*, *chew*, *nibble*, etc. (Grinevald 2000: 68), although Grinevald (2004) does include CLFVs in a subsequent typology

¹²⁸ Nimowa language data were collected from fluent bilingual Sudest-Nimowan speakers who had either one Nimowan parent or had lived on Nimowa for at least five years.

¹²⁹ From the current, limited data, it is not clear whether the Nimowa verb pair *ho/yomo* occurs as extensively as the Sudest classificatory verbs in expressions of handling.

¹³⁰ Sudest also has at least two pairs of suppletive verbs that specify number of the S/O argument, functioning on an absolutive basis. For the intransitive verbs *wa* ‘go’ and *raka* ‘go (pl.)’, *wa* can occur with singular or plural subject referents but *raka* can only occur with a plural subject. The transitive verbs *ngge* ‘hit (sg.)’ and *gabwa* ‘hit (pl.)’ specify whether the referent of the O argument is singular or plural.

of classifiers (see also Barron (1982) and Plank (1984) for discussions on semantic agreement in verbs). Rice (2009: 120) points out that equating verbs of consumption in English with classificatory systems like those found in the Athabaskan languages ignores the fact that the consumption verbs are differentiated based on the manner of consumption, not the consumed item. Of course, in the case of consumption verbs the two cannot be completely separated, for example, in most situations it is unlikely that one would say ‘I drank my steak’. Furthermore, verbs used in expressions of consumption are not used – at least in English – in other parts of the lexicon, particularly in those areas where the CLFVs are used, i.e. in the encoding of existential or locative states and handling events (Rice 2009: 120). Positions similar to Rice’s (2009) can also be found in Aikhenvald (2000: 154) and Kilarski (2013: 43), who point out that the choice of such verbs of consumption and even posture verbs in, for example, Russian or German, are not paradigmatic, whereas ‘classificatory verbs provide a set of paradigmatic oppositions for the choice of verb sets depending on the physical properties of S/O’ (Aikhenvald 2000: 154).

Throughout the thesis, I follow the position of Aikhenvald (2000), Rice (2009) and Kilarski (2013) and consider the Sudest CLFVs a type of nominal classification. The boundary between grammar and lexicon is often ambiguous (particularly for elements in the Sudest VC) and can be invoked for linguistic convenience rather than based on features of a language. In the case of Sudest, however, there is evidence to indicate that the CLFVs show signs of grammaticalisation, specifically their semantic bleaching in some complex verbs (see §5.3.6 and §6.3.2). Even if one does not subscribe to this view, the pervasive nature of CLFVs in languages where they occur and their use in the expression of such basic human experiences and activities as existence in space and interacting with physical entities in the environment should make the study of these verbal paradigms of great interest.

5.3.2 Sudest classificatory verbs

The Sudest CLFVs group into seven classes comprising ten verbs, which are presented in Table 5.2. As stated, they encode not only the event of the verb – as independent verbs they mean ‘get’ or ‘take (from)’ – but also classify the object referent of the verb in terms of consistency, composition, and number and, therefore, align with Aikhenvald’s (2000) type-A CLFVs.

Singular object	Plural object	Object category	Example objects
<i>wo</i>	<i>mban</i>	rigid	people, animals (including fish), fruit and non-leafy vegetables, trees, sticks, stones, knives, axe heads without handles; empty non-flexible containers (bowls, plates, pots), heads (body part), abstract nouns related to speech/language (e.g. <i>utu</i> ‘story’, <i>toto</i> ‘message’), <i>kaiwo</i> ‘work’
<i>li</i>	<i>langa</i>	flexible	cloth, leaves, flowers, leafy foods, paper, string, body paint, empty flexible containers, worms, arms and hands (body parts)
<i>thin</i>	<i>bigi</i>	container with contents/container with contents; single object with multiple parts	full containers, contained items in a container, books, necklaces, tables, <i>thari</i> ‘dance’
<i>thagha</i>		tools with handles	axe, adze, hammer
<i>yambi</i>		boats and transport craft	canoes, sailing canoes and boats
<i>yengge</i>		fire	fire
	<i>tako</i>	plural objects (general)	Attested with wide range of object referents including objects typically associated with other plural OCVs.

Table 5.2 *Sudest classificatory verbs*

The verbs can be divided based on the types of object referents with which they occur. The categories of rigid entity, flexible entity, and container-and-contents have two members each that further distinguish number of the object (singular or plural). The tool with handle, boat, and fire categories do not have plural verb forms and only occur with singular object referents in the data. The final verb is a general plural CLFV and occurs with any type of plural object referent, including object referents that would typically occur with plural rigid entity, flexible entity, and container-and-contents CLFVs. While the CLFVs *wo* and *mban* are labelled as ‘rigid’ CLFVs because they are used with rigid entities such as sticks, trees, stones, non-leafy fruits and vegetables, empty non-flexible containers, etc., not all object referents that occur with them are rigid. The two CLFVs also function as somewhat of a default category and are used with most animate object referents among other non-rigid entities. The term ‘rigid’ is used throughout the thesis because many object referents that occur with the two CLFVs can be classified by this property in contrast to the flexible category and out of convenience. A small number of abstract nouns are also attested with particular CLFVs.

Nouns related to speech/language (e.g. *utu* ‘story’, *toto* ‘message’) are attested with the rigid entity verbs and *thari* ‘dance’ occurs as the object of the container-and-contents CLFV.

The object-categorising qualities of some of the CLFVs was first noted by A&A and further discussed in M. Anderson (1992) and A&R.¹³¹ The previous descriptions analyse the CLFVs as prefixes but also state that some can also occur as verbs. The previous descriptions, however, do not make note of the fact that all stems have the same meaning of ‘get’. In the current data, all ten CLFVs are attested functionally as independent verbs that mean ‘get’. M. Anderson and Ross’s inventory of stems also differs slightly from the one presented here. They include the monotransitive verb *tara* and analyse it as indicating uncountable object substances like water and rice. The current data show that *tara* is a monotransitive verb and means ‘pour’ rather than a CLFV meaning ‘get’. It therefore typically does occur with mass nouns such as *reisi* ‘rice’, *kure* ‘food scraps/leftovers’, or *mbwa* ‘water’, as in (89). The verb *tara* ‘pour’ can also, theoretically, occur with countable items, as in (90) where mangoes are being poured out onto the ground. This implies a plural reading of the object referent as a pouring event that typically involves the pouring of a mass entity or more than one item.

- (89) *lolo=ma i=tara mbwa=ma ghaghada i=tara-vao*
 person=DET 3SG=pour water=DET until 3SG=pour-COMPL
 ‘the person pours out the water until they finish pouring (i.e. all the water is poured out)’
 (put_stimuli_231015 083, 667.460 673.521)

- (90) *u=tara mbathi e thelau vwata-e*
 2SG=pour mango PREP ground top-3SG.POSS
 ‘you pour the mangos onto the ground’ (e_131016_01)

In the current data, morphemes A&R characterise as object-classifying prefixes – excluding *tara* ‘pour’ and with the addition of *yambi* ‘get (sg. boat)’ and *yengge* ‘get (sg. fire)’ – occur not just in VCs as independent verbs meaning ‘get’ but also play a central role in many complex verbs that encode a wide range of handling and transfer events. Such complex verbs are analysed in chapter 6 (§6.3.1.2, §6.3.2, and §6.3.3). Their use in some complex verbs does suggest that the verbs may be becoming grammaticalised in some contexts. This is discussed further in §5.3.6.

5.3.2.1 *wo* and *mban* rigid entity classificatory verbs

The CLFVs *wo* and *mban* are used with singular and plural rigid entity object referents respectively. The rigid entity category is the largest and is used with object referents that include natural items

¹³¹ The current analysis uses a different nomenclature than the earlier analyses for some of the categories. The labels ‘rigid’ and ‘flexible’ are adopted here over A&R’s ‘solid’ and ‘non-solid’.

- (94) *lolo i=kururu na i=wo-mban=a umbali-ye*
 person 3SG=bend.down.head and 3SG=GET.SG.RIGD-put=YA head-3SG.POSS
e bwagit tine e tebol vwata-e
 PREP bucket inside PREP table top-3SG.POSS
 ‘the person bends his head and puts his head inside a bucket (that is) on top of a table’
 (put_stimuli_191015_01_02 113-5, 427.991 434.721)

Several nouns denoting abstract entities also occur with the rigid entity verbs. The majority of these concepts can be grouped semantically as relating speech and language. Consider the examples in (95) to (97).

- (95) *thi=variye=∅ na kwarimaiya i=wa ve=wo toto*
 3PL=send=3SG and k.o.fish 3SG=go 3SG.INT=GET.SG.RIGD message
thovuye
 good
 ‘they send him and Kwarimaiya goes and gets the correct message’
 (feast_of_the_fish_271015 038-40, 95.938 99.828)

In the above example, *wo* takes the object *toto* message, while in (96) the speaker also uses the rigid entity CLFV when discussing finishing his story for the day by ‘putting it (the story) here’. In this case, the speaker does not introduce the object referent with a lexical NP, but it is recoverable from the context.

- (96) *...ko noroke a=wo-kura=∅ ghe=ke*
 but today 1SG=GET.SG.RIGD-put=3SG LOC=SPKR.PROX
 ‘...but today I’ll leave it (the story) here’
 (mandumbunga_02_181016 546, 1372.426 1375.513)

In some cases, the link between the rigid entity CLFVs and object referent(s) relating to information and language could be due to metaphorical extensions of real-world objects. For example, in (97), the noun *righe* ‘tree trunk, base (of a tree)’ is used to mean ‘start’ or ‘base’ of a story.

- (97) *thela ne i=wo-ra righe*
 who FUT 3SG=GET.SG.RIGD-put tree.base/trunk
 ‘who will start (the story) (lit. who will put the tree base)’
 (c_031116 237, 429.120 431.790)

In (98), the young girl Ebeutu does not understand or ‘get’ her mother’s message properly when she calls back to her, and, consequently, later cooks her brother instead of feeding him.

- (98) *tina-e le-∅ kula=ko gha-∅ rumwaru*
 mother=3SG POSS.CLF2-3SG.POSS call=DIST POSS.CLF1-3SG.POSS straight
Ebeutu maa me=wo-wogiyawe=∅
 pers.name NEG 3SG.IMM.PST=GET.SG.RIGD
 -properly=3SG
 ‘the clear (meaning) of her mother’s call, Ebeutu didn’t understand it properly (lit. her mother’s call’s straightness, Ebeutu didn’t get it properly)’

(crab_girl_081115 026-8, 66.130 71.970)

The singular rigid entity CLFV is also used in the rhetorical question *thela iwo* ‘who knows?’ or, literally, ‘who gets it?’:

- (99) *thela i=wo=∅*
 who 3SG=GET.SG.RIGD=3SG
 ‘who knows (lit. who gets it)’ (child_and_giant_201015 015, 46.189 50.220)

The singular rigid entity stem also combines with the manner-of-causation prefix *taga-* ‘by striking’ to mean ‘take (a picture)’ or ‘record (video/audio)’ (100). The origin of *taga-wo* ‘take (photo), record’ is not clear. It could be related to the action and/or sound involved in taking photographs, particularly with older cameras, e.g. the winding action needed to operate wind-up cameras, the action of pressing down a button to take a photograph/start recording, and/or the strike-like noise made by a camera shutter.

- (100) *me-ne ra=utu vara nggora=ke kero*
 IMM.PST-FUT 1INCL-speak really like=SPKR.PROX already
i=taga-wo=∅
 3SG=by.striking-GET.SG=3SG
 ‘we will talk like this and she already records it (lit. gets by striking)’
 (fp_stimuli_201015_01 001, 59.450 62.450)

A final immaterial entity, *kaiwo* ‘work’, also occurs as the object of the rigid classifier:

- (101) *i=wo gha-∅ kaiwo*
 3SG=GET.SG.RIGD POSS.CLF1-3SG.POSS work
 ‘he gets work’ (fp_stimuli_191015_05 278 616.064 617.190)

5.3.2.2 *li* and *langa* flexible entity classificatory verbs

The flexible entity CLFV pair *li* ‘get (sg. flexible entity)’ and *langa* ‘get (pl. flexible entity)’ are used with flexible entity object referents such as cloth and clothing, leaves, flowers, leafy foods, natural twine, string, rope, cloth, clothing, paper, mats and other natural fibres, body paint and empty flexible containers, such as baskets. Examples (102) to (105) show the flexible entity CLFVs in VCs, first as independent verbs, and then in complex verbs. In (102) the object referent is a piece of paper, while in (103) the object referents are leaves.

- (102) *ra=li=ya gha pepa*
 1INCL=GET.SG.FLEX=YA POSS.CLF.1 paper
 ‘we get her paper’ (c_031116 016, 42.490 44.468)

- (103) *ra=langa* *njingga-njingga=ke*
 1INCL=GET.PL.FLEX RED-leaf=SPKR.PROX
 ‘we get the leaves’ (e_211116)

In (104), the speaker describes a woman peeling a banana and then placing the fruit and peel down. The singular rigid entity stem *wo* is used when describing putting down the fruit and the singular flexible entity stem *li* is used to describe placing the banana peel on the table. Vegetable and fruit ‘skin’, as well as animal pelts and skin, occur with the flexible entity CLFVs when they are removed from the entities they cover.

- (104) *i=sima kunumwana nggwenggwe na i=wo-ra=∅ e*
 3SG=peel banana ripe and 3SG=GET.SG.RIGD-put=3SG PREP
pileti i=li-ra njimwa-e e tebol vwata-e
 plate 3SG=GET.SG.FLEX-put skin-3SG.POSS PREP table top-3SG.POSS
 ‘she peels the ripe banana and puts it on the plate, she puts the skin on the table top’
 (cb_stimuli_051016_03 380, 1515.120 1523.610)

The object referent in (105) are sago sleeping mats that the subject has been ordered to burn.

- (105) *ghamba-mi=na ghanggalatha u=ranggi*
 place-2PL.POSS=ADDR.PROX sago.mat 2GS=go.out
u=langa-ngambu=∅¹³²
 2SG=GET.PL.FLEX-burn=3
 ‘your place’s sago mats, go out (and) burn them’
 (marriage_111015 037, 119.710 124.920)

Hands and arms also occur as the object referent of the flexible entity stems. Like the token with *umbali-ye* ‘head-3SG.POSS’ in (94), it is the agent and possessor of the body parts that manipulates the arm and hand in (106) and (107) respectively. No other body parts are attested as the object of CLFVs.

- (106) *i=li-vairi vali nima-e*
 3SG=GET.SG.FLEX-lift one.side hand/arm-3SG.POSS
 ‘she lifts one of her arms’ (mandumbunga_02_181016 189, 470.424 472.860)
- (107) *ela=ma i=li-va-mara nima-e ghare*
 woman=DET 3SG=GET.SG.FLEX-CAUS-look hand/arm-3SG.POSS palm/chest/heart
 ‘the woman shows the palm of her hand’ (cb_stimuli_101116 070, 885.278 887.754)

The singular stem *li*, like the plural rigid stem *mban*, has a presumably related transitive verb that means ‘pull’ (see §5.3.6 for discussion of potential origins of the CLFVs). The verb *li* ‘pull’ is used interchangeably with the verb *momodi* ‘pull’, as shown in (108) and (109) that describe the same stimulus picture in which a pair of police pull a man along. Cases like the one in (108) are easy to

¹³² Examples with a plural CLFV and no overt expression of an object are marked by the zero morpheme \emptyset in examples. This does not assume a zero allomorph of the third person plural object index *=nggi* ‘3PL’ but for clarity to show the transitivity of the VC.

differentiate from instances of the flexible entity CLFV because, aside from contextual knowledge, the object referent is human. If this were the CLFV, it would have to be *wo* ‘get (sg. rigid entity)’.

- (108) *thi=ruku-li=∅*, *giya-giya=ma*
 3PL=go.and-pull=3SG RED-big.man=DET
 ‘they go and pull him, the big men (police)’
 (fp_stimuli_201015_01 147-8, 595.090 596.560)
- (109) *polis ne thi=momodi=∅*
 police FUT 3PL=pull=3SG
 ‘the police pull him’
 (fp_stimuli_201015_04 027, 72.860 76.323)

The verb also takes a human object in the phrase *ghe i/melinggo* ‘marriage pulls/ed me’ in (110) and (111). In the examples, the two speakers talk about moving to their husbands’ villages when they are married.

- (110) *ghamba-nggu=ko ida-e Yena ghe*
 place-1SG.POSS=DIST name-3SG.POSS place.name marriage
me=li=nggo a=mena Vanatina-∅=ke
 3SG.IMM.PST=pull=1SG 1SG=come place.name-3SG.POSS=SPKR.PROX
 ‘my place (of birth) is called Yena (Piron Island), marriage pulled me, I came to Vanatina’
 (family_ties_081115 003-6, 10.240 19.785)
- (111) *menda ghe i=li=nggo na a=ru=ma=ke*
 yesterday/past marriage 3SG=pull=1SG and 1SG=go.in=hither=SPKR.PROX
 Vuwo
 place.name
 ‘in the past, marriage pulled me and I came in here to Vuwo’
 (vuwo_111015 004-5, 16.900 21.370)

The sense of ‘pull’ also occurs in several tokens that describe harvesting cassava. Verbs meaning ‘pull’ appear to be used over the general verb *ghalolo* ‘gather, harvest’ for produce that is pulled by a stalk from the ground.¹³³ Compare the examples in (112) and (113) with *li* ‘pull’ and *gita* ‘pull (out from)’ respectively which describe harvesting cassava and taro, two crops that are typically pulled from the ground by their stalks, to (114), where *ghalolo* ‘gather, harvest’ is used with unspecified objects/produce.

- (112) *wo=raka voo=li tapiyoka=ma*
 1INCL=go.PL 1INCL.INT=pull cassava=DET
 ‘we went to pull cassava/tapioca’ (stone_cooking_251015 021, 58.080 61.190)

¹³³ An alternative analysis could be that the verb *li* in these tokens is the classificatory verb and the relatively pliable cassava stems are interpreted as ‘flexible’ entities. Aside from the fact that another ‘pull’ verb (*gita* ‘pull (out from)’) is used when describing harvesting another crop that is processed in the same manner, a further argument against such an analysis is that the situation being described involved the harvesting of a considerable amount of cassava – likely multiple plants – in which case the plural flexible entity classificatory verb *langu* would have been more appropriate.

- (113) *vethi=la-gita* *gha-Ø* *samuwo* *uthu* *viya*
 3PL.INT=and.go-pull POSS.CLF1-3SG.POSS k.o.taro k.o.taro k.o.taro
 ‘they harvested (pulled) his samuwo, uthu, and viya taro’
 (mandumbunga_02_181016 369, 925.003 928.051)
- (114) *a=wa* *e* *uma* *tine* *va=ghalolo=Ø*
 1SG=go PREP garden inside 1SG.INT=harvest/pick=3SG
 ‘I go to the garden, harvest it (food)’ (womens_work_221214 027, 68.348 70.081)

5.3.2.3 *thin* and *bigi* container-and-contents classificatory verbs

The final pair of CLFVs that make a distinction for number of the object referent is the container-and-contents pair *thin* ‘get (sg. container-and-contents)’ and *bigi* ‘get (pl. container-and-contents)’.¹³⁴ As the name suggests, the container-and-contents verbs are used for containers that are holding contents, such as baskets, bags, and cooking pots, as well as for bowls, plates and cups containing food and drink. They also occur with object referents that are made up of multiple parts, such as brooms (115) and books (116).

- (115) *i=nga* “*u=nja* *u=thin=a* *wanji* *na* *u=wanji*”
 3SG=say 2SG=go.down 2SG=GET.SG.CNTR=YA broom and 2SG=sweep
 ‘she said “go down, get a broom and sweep!”’
 (sweeping_011115 009-10, 24.580 28.040)
- (116) *nggama* *eunda* *thi=bigi=nggi=ya* *buku=nggi*
 child one.F 3PL=GET.PL.CNTR=3PL=YA book=3PL
 ‘a girl gets the books’ (put_stimuli_191015_01_01 101-3, 437.686 444.265)

In (117) and (118) the container-and-contents CLFVs occur in complex verbs. In (117) the object referent is a full basket that contains riches.

- (117) *thi=thin-giya* *le-Ø* *nambo* *bigi-bigi=ko*
 3PL=GET.SG.CNTR-give POSS.CLF2-3SG.POSS basket RED-thing=DIST
wolaghiye *va* *le-Ø* *gogomwau=ko*
 all REM.PST POSS.CLF2-3SG.POSS riches=DIST
 ‘they gave her basket (with) all the things, her riches’
 (bush_betelnut_011115 130-1, 311.030 314.470)

The CLFVs are used not only when the full container(s) are the object referent(s) of the VC but also when the ‘contained’ contents are the object referent(s). In (118), the speaker is describing a picture in which a couple are transporting baskets of fruit and vegetables. Because the food is contained in a basket, the plural container-and-contents stem *bigi* is used rather than the plural rigid entity stem *mban*, that would be used if the subjects were just carrying the produce in their arms. Note that *bigi* ‘get (pl. container-and-contents)’ is only used when there is more than one container,

¹³⁴ There is also a noun *bigi* ‘thing’.

even if it is the contents that are being referred to. If there is more than one object referent contained in a single receptacle, the singular container-and-contents stem *thin* is used.

- (118) *thi=bigi-mena* *ghaningga*
 3PL=GET.PL.CNTR-come food
 ‘they bring food’ (fp_stimuli_201015_01 121, 473.860 476.235)

Another case of a contained entity as object referent is presented in (119). The speaker describes how menstruating women were traditionally prohibited from walking directly in front of men, e.g. when men were sitting in a house and a woman walked past. The object referent of the verb is the contained menstrual blood (*madibe*).¹³⁵

- (119) *ande ne wanakau thi=thin-yere=re madibe e*
 NEG1 FUT young.women 3PL=GET.SG.CNTR-go.past=NEG2 blood PREP
yamwa-nji i=boboma we=nggi=ya umo-umoru
 face/forehead-3PL.POSS 3SG=be.taboo/sacred PREP=3PL=YA RED-young.men
 ‘young woman cannot take the (menstrual) blood in front (of the men), it is taboo for
 the young men’ (menstruation_081015 063-4, 182.454 194.070)

The noun *thari* ‘dance’ denotes an event rather than an entity and occurs as the object of VCs with the container-and-contents stem *thin*, as in (120), rather than a rigid entity CLFV, which occur with the majority of attested abstract nouns. A hypothesis for this is that *thari* ‘dance’ occurs as the object of this CLFV because ‘taking up’ a dance also typically involves transporting related paraphernalia, such as specific clothing, ceremonial coconut oil, and body paint.

- (120) *ve=thin-voro thari Nju*
 3SG.INT=GET.SG.CNTR-go.up dance place.name
 ‘he brings the dance up to Nju’ (feast_of_the_fish_271015 013-14, 34.997 45.200)

In some cases, manner-of-causation prefixes combine with the CLFVs to specify the manner in which an object is handled. Such combinations are generally predictable, e.g. *mwana-wo* ‘with hands-GET.SG.CNTR’ or ‘get with hands’. However, when the prefix *vo-* ‘by spearing’ combines with the container-and-contents CLFVs it results in a somewhat unpredictable meaning. Rather than specifying an actual spearing or piercing action, the combination indicates that the object is being manipulated with a person’s head (58) (repeated in (121)) or an animal’s snout/beak or tusks (122).

- (121) *nambo ra=vo-bigi*
 basket 1INCL=by.spearing-GET.PL.CNTR
 ‘the baskets we get/load on our heads’ (education_241214 037, 116.420 123.310)

¹³⁵ Although it is unclear whether the ‘container’ is the item used to absorb the blood or the woman herself.

- (122) *mbombo=ko i=vo-thin-vairi lo nambo (e*
 pig=DIST 3SG=by-spearing-GET.SG.CNTR-lift POSS.CLF2.1SG basket PREP
soki/mothi-ye)
 tusk/nose-3SG.POSS
 ‘the pig lifts my basket with its tusk/snout’ (e_211016_02)

The extension of *vo-* from a meaning of ‘piercing’ or ‘spearing’ to manipulating using one’s head or an animal’s snout or other pointed body part, while not completely predictable, is not too difficult to conceptualise. See §5.3.5 for further discussion of the expression of head-carrying and manner-of-carrying expressions.

5.3.2.4 *thagha* tool with handle classificatory verb

The CLFV *thagha* is used when the object referent is a single tool with a handle such as an adze, axe or hammer. When referring to an axe head (having been removed from its handle), or to tools with a non-separable handle, such as crowbars, the rigid entity CLFVs *wo* or *mban* are used. The verb is used with singular object referents and, unlike the CLFVs already described, it does not have a plural-object counterpart. Examples (123) to (125) show the CLFV, first as an independent verb in (123) and (124), and then in a complex verb in (125).

- (123) *ra=thagha kelumo na ra=waghi*
 1INCL=GET.SG.TOOL axe and 1EXCL=remove.sago.bark
 ‘they get an axe and remove sago bark’ (sago_101214 013-4, 39.660 47.310)
- (124) *lolo=ko i=thagha hama*
 person=DIST 3SG=GET.SG.TOOL hammer
 ‘that man gets an axe’ (cb_stimuli_051016_02_01 178, 961.360 964.819)
- (125) *amala=ma i=thagha-giya kelumo thovuye we=nggo*
 man=DET 3SG=GET.SG.TOOL=give axe good PREP=1SG
 ‘the man gave a good axe to me’ (e_071116_03)

5.3.2.5 *yambi* vessel classificatory verb

The CLFV *yambi* is used when the object referent is a single transport vessel of some kind, e.g. a small, paddling outrigger canoe (*koukou*), a sailing outrigger (*sailau*), or any other type of boat (*wangga*). Examples of the stem as an independent verb and in complex verbs are given in (126) to (128). Example (126) shows the only corpus token of the verb.

- (126) *vethi=yambi=ya sailau laghiye*
 3PL.INT=GET.SG.BOAT=YA sailing.outrigger big
 ‘they get a large sailing outrigger’ (kula_exchange_101214 045, 141.020 143.970)

- (127) *a=mje a=yambi wangga ko lo ndavari*
 1SG=try 1SG=GET.SG.BOAT boat but POSS.CLF2.1SG shell.money
maa laghiye
 NEG big
 ‘I tried to buy (lit. get) a boat but my money was not big (enough)’ (e_211016_01)

- (128) *wo=ruku-yambi-giya wangga=ko we=nggi te-ne*
 1INCL=go.and-GET.SG.BOAT-give boat=DIST PREP=3PL more-FUT
thi=yambi-njogha=Ø=va
 3PL=GET.SG.BOAT-go.back=3SG=REP
 ‘we go and give the boat to them, later they return it again’ (e_021115_02)

5.3.2.6 *yengge* fire classificatory verb

The CLFV *yengge* ‘get’ occurs when the object referent of the verb is a fire, generally a burning stick or log. Keeping a fire alight is an important daily task and, on most days, someone – usually someone caring for smaller children or an older community member – remains in the village to keep a fire burning. When it is time to cook, a child will often be sent off to ‘get’ a burning stick from whomever was keeping the fire alight. Tokens of *yengge* ‘get (sg. fire)’ are presented in (129) to (131). The example given in (129) describes the introduction of fire to Vanatina from Rossel Island by a bird (woman).

- (129) *...ko iya ndighe=ko ma=ma mandumbunga va*
 but DEM fire=DIST bird=DET k.o.bird REM.PST
ve=yengge=Ø Rogha na i=vutha
 3SG.INT=GET.SG.FIRE=3SG place.name and 3SG=arrive
i=yengge-ra=Ø e ndamwa
 3SG=GET.SG.FIRE-put=3SG PREP leaf
 ‘...but that fire, Mandumbunga got it (fire) from Rossel Island and arrived (at Vanatinae), she put it (the fire) on the leaf’
 (mandumbunga_061215 078-80, 215.500 224.570)

- (130) *tanuwaga me=mena i=yengge ndighe=ma*
 owner 3SG.IMM.PST=come 3SG=GET.SG.FIRE fire=DET
 ‘the spirit came (and) got the fire’ (skeleton_181015 055-6, 129.000 132.717)

- (131) *hu=yengge-giya gha-m ndighe=na we=nggo*
 2PL=GET.SG.FIRE-give POSS.CLF1-2PL.POSS fire=SPKR.PROX PREP=1SG
 ‘give your fire to me’ (skeleton_181015 027-8, 68.695 73.180)

5.3.2.7 *tako* plural general classificatory verb

The final CLFV is the plural general stem *tako*. The CLFV can occur with any class of object referents, including rigid entity, flexible entity, and container-and-contents object referents instead

of their respective plural stems. Like the other plural CLFVs, any object referent that occurs with *tako* is automatically interpreted as plural, even if there is no overt marking of plurality. This is shown in the elicited example below, for which a singular object interpretation is ungrammatical:

- (132) *a=tako mbathi*
 3PL=GET.PL.GNRL mango
 ‘I get the mangoes/*mango’ (e_161116_01)

Corpus examples of *tako* ‘get’ as an independent verb and as a stem in a complex verbs are presented in (133) to (135). In (133) and (71) the verb occurs with animate object referents typically assigned to the rigid classifiers. In (135), *thiyo* ‘string’ occurs with *tako* instead of the flexible entity CLFV.

- (133) *thi=tako=nggi=ya mbugha-mbugha=ko wolaghiye*
 3PL=GET.PL.GNRL=3PL=YA RED-dog=DIST all/every
 ‘they get/gather all the dogs’ (hunting_261214_022, 45.550 48.928)
- (134) *amba=ma i=yo-tako=nggi e mbwa=ko tine*
 then=DET 3PL=while.going-GET.PL.GNRL=3PL PREP water=DIST inside
 ‘then he takes them (a group of youths) to the water’
 (funeral_feasting_081015_02 068, 175.083 177.980)
- (135) *amala=ma i=mwana-ten-ten=a thiyo=ma*
 man=DET 3SG=w.hands-RED-break=YA string=DET
i=tako-yathu-ra=Ø e tebol=ma
 3SG=GET.PL.GNRL-throw.away-put=3 PREP table=DET
 ‘the man is breaking the string and gathering it and throwing them (the broken pieces) over/on the table’
 (cb_stimuli_071116_080, 769.600 773.155)

5.3.3 Hold

There are two ways to express that an agent is holding an entity in Sudest and both involve the CLFVs. Classificatory verbs usually have the meaning of ‘get’, but they can also be used when the agent is already physically holding the theme. This can be seen in (136), where the speaker uses a CLFV to describe a scene from a stimulus video in which a man starts out holding a machete and then uses it to cut a branch of a tree.

- (136) *i=wo kaina laghiye na i=nggila umbwa=ko yanggga*
 3SG=GET.SG.RIGD knife big and 3SG=break tree=DIST branch
 ‘he holds (lit. gets) a big knife and cuts the tree branch’
 (cb_stimuli_051016_01 021, 181.870 186.530)

Alternatively, a CLFV can combine with the posture prefix *nde-* ‘stand and’ (§4.3.5.3) to explicitly specify ‘hold’, as in (137).

- (137) *wevo* *regha* *i=nde-wo* *bigi* *regha*
 young.woman one 3SG=stand.and-GET.SG.RIGD thing one
i=njimbu=∅ *kero* *i=wo-dowe=∅* *e* *gha-∅*
 3SG=inspect=3SG already 3SG=GET.SG-load=3SG PREP POSS.CLF1-3SG.POSS
poket
 pocket
 ‘a young woman holds something, inspects it (and) puts it in her pocket’
 (put_stimuli_231015 056, 443.220 447.126)

While a holding event can be encoded by either a bare CLFV or a CLFV with the posture prefix, the two encoding strategies’ distribution varies.¹³⁶ Bare CLFVs tend to be used to express ‘hold’ when the hold event is the first in a series of events, as in (136), while VCs with the posture prefix and a CLFV are used when the hold event is the final event in a series of events, as in (138) to (140), or when describing a holding event in isolation from other events, as in (141). Only a small number of tokens in the corpus are like that shown above in (137), where an initial hold event with the posture prefix is followed by a description of a series of events.

- (138) *iya=ke* *i=nde-thin=∅=a* *nasiye=ke*
 DEM=SPKR.PROX 3SG=stand.and-GET.SG.CNTR=3SG=YA little=SPKR.PROX
i=nde-thin *mbwa*
 3SG=stand.and-GET.SG.CNTR water
 ‘this one is holding it, the little one is holding the container of water’
 (fp_stimuli_191015_01 021, 93.259 95.660)
- (139) *wevo=ko* *i=yaku* *e* *tebol* *ghadidi-ye* *i=mwana-gita*
 young.woman=DIST 3SG=stay PREP table beside-3SG.POSS 3SG=w.hands-pull
marking pen na i=nde-mban=∅
 marking pen and 3SG=stand.and-GET.PL.RIGD=3
 ‘the young woman sits beside a table and pulls (apart) a pen (texta) with her hands and holds them (the pen and lid)’ (cb_stimuli_051016_02_01 180-, 992.260 1010.533)
- (140) *wevo=ko* *i=mwana-thatha* *kwama* *na*
 young.woman=DIST 3SG=w.hands-tear cloth and
i=nde-li=∅
 3SG=stand.and-GET.SG.FLEX=3SG
 ‘the woman tears the cloth with her hands and holds it’
 (cb_stimuli_051016_01 163-164, 1838.987)
- (141) *iya=ke* *i=nde-thin=a* *mbwa* *ina-∅*
 DEM=SPKR.PROX 3SG=stand.and-GET.SG.CNTR=YA water location-3SG.POSS
e buket
 PREP bucket
 ‘this (one) is holding water in a bucket’ (fp_stimuli_191015_01 021-2, 93.259 97.210)

¹³⁶ The comments on distributional differences are based on stimuli data as getting and holding events can be distinguished based on each stimulus video whereas tokens from narrative texts, etc., can be ambiguous as to which sense is meant.

In ‘hold’ VCs with the posture prefix, the CLFV is still selected based on properties of the object referent. However, both the sense of motion of the verb stem and the postural sense of the prefix (i.e. ‘standing’) are neutralised. In (138) and (141), the subjects are indeed standing while holding buckets of water, but in (139) the subject is seated on a chair at a table. In contexts like (139) where the subject is sitting and holding an item, the posture prefix *nde-* ‘stand and’ cannot be replaced with the second posture prefix *ro-* ‘sit and, stay and’ (§4.3.5.2) to mean ‘hold’. This is evidenced by examples as in (142), in which *ro-* combines with a CLFV but means ‘stay and get’ rather than ‘hold’.

- (142) *thi=ru=va* *na* *vethi=thavi* *rumbu-nji*
 3PL=go.out=REP and 3PL.INT=beat.sago grandparent/child-3PL.POSS
i=ro-mban=a *le-nji* *kabura=nggi=ma*
 3SG=sit.and-GET.PL.RIGD=YA POSS.CLF2-3PL.POSS sago.share=3PL=DET
i=ro-kiyo-kiyowak
 3SG=sit.and-RED-make.sago.pudding
 ‘they went out again and made sago, their grandmother stayed and got their sago shares
 and made sago pudding’ (snake_passage_061215 017-21, 39.182 52.520)

5.3.4 Reclassification and unexpected classificatory verb use

Like all nominal classification, the CLFVs can contribute additional information about lexical items that themselves do not specify differences made by the verbs (Aikhenvald 2000: 267; Contini-Morava & Kilarski 2013: 272). The term ‘reclassification’ ‘refers to a different categorization of a noun due to the choice of a different classificatory [morpheme] in order, for example, to highlight a certain feature of the referent’ (Fedden 2011: 197). In Sudest, reclassification primarily pertains to nouns whose referents can be full or empty and, conversely, commonly contained objects (e.g. unprocessed garden and bush produce and cooked food that are often stored in baskets or pots). As discussed earlier, the classifiers also serve to reclassify the referents of nouns based on number; namely, whether they are singular or plural. As such, they are often the only overt indication of number in the clause. The examples shown in (143) and (144) illustrate how the noun *ndeghi* ‘cup’ is reclassified. In (143), the singular container-and-contents stem *thin* is used to specify that the cup contains something, while in (144) the stem *mban* ‘get (pl. rigid entity)’ is used, and thus indicates that the object referents are empty. The use of *mban* in the second example also specifies a plural object referent in contrast to singular *thin* in the first example. In both sentences, only the CLFVs overtly specify the number of the object referent.

- (143) *lolo* *i=thin=a* *gha-Ø* *ndeghi*
 person 3SG=GET.SG.CNTR=YA POSS.CLF1-3SG.POSS cup
 ‘the person gets their (full) cup’ (put_stimuli_191015_01_02 063, 238.279 240.540)

- (144) *ela=ko* *i=nde-mban=a* *mbwa* *gha-Ø*
 woman=DIST 3SG=stand.and-GET.PL.RIGD=YA water POSS.CLF1-3SG.POSS
ndeghi
 cup
 'the woman holds the (empty) water cups'
 (cb_stimuli_051016_02_01 099-100, 578.420 589.639)

The extended example in (145) shows how the CLFVs can reclassify an entity and also highlights their referent tracking function. The excerpt comes from a procedural narrative describing traditional dating practices. When a basket (*nambo*) is first mentioned, the speaker uses the singular flexible verb *li* that specifies the basket is empty. The speaker then describes how the boy's family collect various valuables to fill the basket with before the boy gives it to the girl's family. In the penultimate line of the example or nearly two lines after the basket is last mentioned, the speaker uses the singular container-and-contents stem *thin* to refer back to the basket and thus also indicates that the basket has been filled; in this case with all the valuables collected by the girl's family.

- (145) *thonggo* *i=ghene-kai* *wei-ye* *umoru* *umoru=ko*
 if 3SG=sleep-INC with-3SG.POSS young.man young.man=DIST

tina-e *na* *rama-e* *na* *le-Ø* *boda-boda*
 mother-3SG.POSS and father-3SG.POSS and POSS.CLF2-3SG.POSS RED-relative

thi=li=ya *nambo* *na* *thi=li-giya=Ø* *we=ya*
 3PL=GET.SG=YA basket and 3PL=GET.SG-give=3SG PREP=YA

umoru=ko *na* *le-Ø* *boda-boda* *thi=bigi=ya*
 young.man=DIST and POSS.CLF2-3SG.POSS RED-relative 3PL=GET.PL=YA

tobotobo *bagi* *mbombo* *soki* *ghaningga*
 greenstone.axe shell.money.necklace pig tusk food

ina-Ø *e* *emidima* *tine* *na* *thi=thin=giya=Ø*
 location-3SG.POSS PREP k.o.basket inside and 3PL=GET.SG.CNTR-give=3SG

we=ya *wevo=ko* *tina-e* *na* *rama-e* *na*
 PREP=YA young.woman=DIST mother-3SG.POSS and father-3SG.POSS and

le-Ø *boda-boda* *na* *thi=thin=Ø*¹³⁷
 POSS.CLF2-3SG.POSS RED-relative and 3PL=GET.SG.CNTR=3SG

'If (a girl/young woman) begins to sleep with a young man, the young man's mother and father and relatives get a(n empty) basket and give it to the boy, and his relatives get greenstone axes, shell money necklaces, pig tusks, food in an emidima basket (for the basket) and give it (the full nambo basket) to the girl's mother and father and relatives and they get it'
 (first_time_251214 007-26, 16.960 71.620)

Tools with handles such as axes, adzes and hammers can be reclassified based on whether the speaker is referring to just the tool head or to the complete (component) tool, including the handle.

¹³⁷ This gift is known as *buwo* and is separate from any bridewealth or brideprice. The exchange of a *buwo* gift does not entail marriage at a later date but allows a couple to continue the relationship publicly as long as they desire to do so. See also Lepowsky (1993: 103-4) for a discussion on traditional dating practices.

The example in (146) shows *tobotobo* ‘greenstone axe’ occurring with the specific handled-tool CLFV *thagha* ‘get’.

- (146) *a=thagha tobotobo*
 1SG=GET.SG.TOOL greenstone.axe
 ‘I get the greenstone axe’ (e_041116)

As the speaker who provided the above elicited example emphasised, one would only use *thagha* in cases where the greenstone axe head was attached to a handle. While this may be the default state for regular, everyday axes (*kelumo*), *tobotobo* ‘greenstone axes’ are typically only inserted into decorative hafts when put on display for trade or ceremonial purposes.¹³⁸ Generally speaking, greenstone axe heads are handled or transported separate to their handles, and, therefore, the rigid entity CLFVs are used, as is the case in (147), which describes a journey to Rossel Island in search of greenstone axes.

- (147) *methi=wa Rogha vethi=wo tobotobo*
 3PL.IMM.PST=go place.name 3PL.DEQ=GET.SG.RIGD greenstone.axe
 ‘they went to Rossel Island to get (a) greenstone axe’
 (kula_exchange_101214 014-6, 41.910 50.860)

In (148), *tobotobo* ‘greenstone axe’ occurs with yet another CLFV, this time *thin* ‘get (sg. container-and-contents)’ to indicate that the speaker is referring to a basket of axe heads. In the initial clause with *thin* and *tobotobo* in the first line of the example, the CLFV is the only indication that the object referent is a container of axe heads rather than a single *tobotobo*; a fact that is only explicitly stated in the following clause with the possessive NP *tobotoboma ghanji nambo* ‘the tobotobos’ basket’.

- (148) *i=njogha i=thin=va tobotobo i=nga*
 3SG=go.back 3SG=GET.SG.CNTR=REP greenstone.axe 3SG=say
 “*ra=va-nja=∅* *ra=va-nja=∅* *na i=njogha*”
 1INCL=CAUS-go.down=3SG 1INCL=CAUS-go.down=3SG and 3SG=go.back
i=thin-ra tobotobo=ma gha-nji nambo
 3SG=GET.SG.CNTR-put greenstone.axe=DET POSS.CLF1-3PL.POSS basket
 ‘he returns (to the boat and) again gets the greenstone axes (in a container), he says
 “we unload it, we” and he (to the cave and) puts (down) the greenstone axe basket’
 (child_and_giant_201015 055-60, 140.240 153.140)

The semantic motivation for the reclassification of nouns in the corpus is generally clear. This can be seen in the examples presented thus far in the discussion. There are, however, tokens in the corpus in which one CLFV occurs with one noun where a different noun would generally be

¹³⁸ Indeed, in the corpus, none of the 10 tokens of the noun *tobotobo* occurs as the object of the classificatory verb *thagha*.

anticipated. This is the case for around half of the tokens in which a CLFV takes an axe with handle (*kelumo*) or hammer with handle (*hama*) as the object of a CLFV. In 13 of 25 tokens, speakers use *wo* 'get (sg. rigid entity)' instead of the tool with handle verb *thagha* 'get (singular tool)'. All save one token come from stimuli data, meaning there is no ambiguity as to whether the speakers are just referring to the tool heads rather than the combined tool head and handle. This is illustrated by the following two examples in which speakers describe the same stimulus video. In (149), the first speaker uses the expected verb *thagha*, while in (150) the second speaker uses *wo*, which is supposedly reserved only for axe heads.

- (149) *lolo=ko* *i=nde-thagha* *kelumo=ko* *i=ki-ten=a*
 person=DIST 3SG=stand.and-GET.SG.TOOL axe=DIST 3S=by.cutting-break=YA
thiyo=ko
 string=DIST
 'the person holds the axe (and) cuts the string'
 (cb_stimuli_051016_02_01 108-9, 634.260 639.420)
- (150) *i=wo* *kelumo=ko* *na* *i=ki-ten=a* *thiyo=ma*
 3SG=GET.SG axe=DIST and 3S=by.cutting-break=YA string=DET
 'he gets the axe and cuts the string' (cb_stimuli_051016_01 070, 848.800 851.810)

In this case, the data suggest that the age of the speaker is a factor in CLFV choice. All tokens with *thagha* 'get (singular tool)' were produced by speakers aged 60 years of age and over, while the tokens with *wo* 'get (sg. rigid entity)' come from speakers younger than 40 (there were no data from speakers aged between 40 and 60). The rigid entity CLFVs *wo* and *mban* occur with the widest range of object referents and consequently occur most frequently in the corpus. The corpus data suggest it may be in the process of replacing *thagha* 'get (singular tool)' for younger speakers. However, it should be noted that younger speakers also recognised and produced the verb in elicitation.

In some cases, variation in the choice of CLFV occurs where another would be expected, and there are neither identifiable contextual linguistic factors nor extralinguistic factors that offer a plausible motivation for the variation. Consider the examples presented in (151) to (153).

- (151) *amali-sari=ke* *i=li-ra* *thiyo=ke* *e*
 man-old=SPKR.PROX 3SG=GET.SG.FLEX-put rope=SPKR.PROX PREP
umbwa=ke *ghavwala*
 tree=SPKR.PROX Y.branch
 'the old man puts the rope on the tree branch'
 (put_stimuli_201015_02 139, 821.677 825.212)

- (152) *thiyo=ma me=thin-nda e umbwa=ma yangga*
 rope=DET 3SG.IMM.PST=GET.SG.CNTR-put PREP tree=DET branch
 ‘the rope, he puts up it on the tree branch’
 (put_stimuli_201015_01 045, 320.220 322.346)

- (153) *amala i=mban-ra thiyo e umbwa ghavwala*
 man 3SG=GET.PL.RIGD-put rope PREP tree Y.branch
 ‘the man puts the ropes on the tree branch’
 (put_stimuli_191015_02_01 019, 122.958 128.074)

The examples come from three descriptions of the same stimulus video in which a person places a coil of rope over a tree branch. Out of the five speakers that completed the stimuli task, just two used the expected CLFV *li* ‘get (sg. flexible entity)’, exemplified by (151). A further two used *thin* ‘get (sg. container)’, as in (152), and one used *mban* ‘get (pl. rigid entity)’, as in (153).

Further ‘mismatches’ between object referent and CLFV are present in tokens with a further half dozen or so nouns in the corpus. The fact that the mismatches arise primarily in stimuli responses – particularly for responses to the PUT stimuli task (Bowerman et al. 2004) – suggests that at least some mismatches could be the result of specific stimuli or the stimuli task environment, i.e. watching and responding to videos, including some videos with object referents that are not necessarily clearly identifiable and/or culturally salient. Another potential explanation could be that the variation is a product of semantic bleaching. It could be the case that the CLFVs are in the early stages of a semantic bleaching process comparable to the semantic bleaching of the manner-of-causation prefixes that is attested in some Papuan Tip languages as discussed in §5.2. Such mismatches, however, are in the minority in the corpus. Speakers have strong opinions about ‘correct’ CLFVs for specific object referents when questioned and were always very forthcoming in correcting the researcher, both during elicitation, and in everyday interactions when the incorrect CLFV was used. Future investigation may shed light on the reason for such mismatches.

5.3.5 Classificatory verbs and manner-of-carrying

It is common for Oceanic languages to have multiple verbs meaning ‘carry’ that distinguish the manner in which an item is carried, e.g. ‘carry in hands’, ‘carry on head’, ‘carry hanging from head/shoulder’ (Ross 2016: 433). This is not surprising given that carrying has traditionally been the only way to transport goods overland in Oceanic language speaking communities, and is still the only mode of transporting goods on Vanatina. The prevalence of such manner-specific distinctions when describing carrying events also entails culturally specific knowledge on the part of the speaker about how specific items are usually carried, as highlighted by Hill (2016) in her discussion of Longgu (Southeast Solomonian, Solomon Islands) carry verbs.

Sudest has four documented verbs that specify how an entity is carried, although they do not appear to entail motion and are therefore analysed as meaning ‘bear’. The ‘bear’ verbs are listed in (154) (see Sheppard (forthcoming) for examples and further discussion of their usage). Manner-of-carrying can also be specified within the VC through the addition of a manner-of-causation prefix (§5.2).

- (154) *gogo* ‘bear across/on shoulder(s)’
kithaghe ‘bear on forehead/shoulder with string’ (e.g. like a bilum bag)
kewe ‘bear on shoulder with stick’¹³⁹
kembimbi ‘bear under the arm’

In Sudest, there appear to be no particular verbs that specify two of the most common modes of carrying used on the island, namely, in the arms or hands, and on the head. However, the CLFVs appear to obtain carry (in a manner) senses through contrast with the explicit manner of bearing verbs. The CLFV *bigi* ‘get (pl. container-and-contents)’, in particular, is used in contexts of bearing on the head, even when the object referent is singular. This connection between specific CLFVs and a particular mode of carrying likely arises from real-world knowledge about how specific items are normally transported.

The majority of caused motion events in the corpus that encode events that can be translated as ‘carry’ or ‘take (somewhere)’ involve one of the CLFVs but do not typically specify the mode of the carrying; at least not in any explanations or translations given by speakers. When questioned about these two specified modes of transporting entities, however, speakers consistently respond with two specific construction types. The first construction type consists of a single VC with a CLFV as the head and the addition of the concurrent associated prefix *yo-* ‘while going’ (§4.3.5.1), as in (155). The second construction type is a biclausal construction with two separately inflected verbs that consists of a VC headed by a CLFV followed by a VC with the intransitive verb *wa* ‘go’, as in (156), or occasionally another intransitive motion verb (§6.2.2).

- (155) *a=yo-wo* *nggama=ke* *e* *nggolo*
 1SG=while.going-GET.SG.RIGD child=SPKR.PROX PREP house
 ‘I carry the child to the house (in my arms)’ (e_081116_01)

- (156) *a=wo* *nggama* *a=wa* *e* *nggolo*
 1SG=GET.SG.RIGD child 3SG=go PREP house
 ‘I get the child (in my arms) and go to the house’ (e_041116)

The combination of CLFV with a specific type of material entity appears to be sufficient to evoke a certain mode of carrying. In the above examples, the CLFV *wo* ‘get (sg. rigid entity)’ occurs with

¹³⁹ Events with *kewe* ‘bear (on stick)’ can involve a single agent carrying a stick, for example, with pairs of pineapple or sago bundles hung across the end of the stick, or when a stick is carried between two agents each with an end of the stick resting on their respective shoulders, e.g. when large objects such as pigs are being transported. Generally, only men transport goods in this way.

the child as the theme entity being transported. When questioned, speakers viewed this as the prototypical way to describe an event in which the theme entity was carried by the agent in their arms. In (157), the combination of mustard leaf as the carried item and *li* ‘get (sg. flexible entity)’ were produced when specifically eliciting the mode of carrying as in the hands.

- (157) *nggama=ko i=yo-li=ya ndiya=ko ndamwe*
 child=DIST 3SG=while.going-GET.SG.FLEX=YA mustard=DIST leaf
bubu we
 grandparent/child REP
 ‘the child carries/takes the mustard leaf to her grandmother (in her hands)’
 (e_161116_01)

Examples (158) and (159) show typical responses to questions about carrying items on the head. Such responses take the container-and-contents CLFV *bigi* ‘get (pl. container-and-contents)’ and involve the two types of constructions outlined above in (155) and (156). Carrying items on the head on Vanatina is generally restricted to women like in many other Oceanic language speaking communities (Ross et al. 2016: 433).¹⁴⁰

- (158) *wo=yo-bigi=ya nambo-nambo e mbwa=ko*
 1INCL=while.going-GET.PL.CNTR=YA RED-basket PREP water=DIST
 ‘we carry the baskets to the water (on our heads)’
 (e_261117)
- (159) *wanakau=ma thi=bigi le-nji nambo-nambo*
 young.women=DET 3PL=GET.PL.CNTR POSS.CLF2-3PL.POSS RED-basket
thi=wa e sikulu
 3PL=go PREP school
 ‘the girls get their baskets and go to school (on their heads)’
 (e_071116_03)

There is a notable distinction between the uses of the CLFVs in such constructions when the number of the carried items is changed. The sentence in (160) was supplied by the speaker to describe a situation in which a girl carries a few pieces of food in her hands. The plural CLFV *mban* ‘get (pl. rigid entity)’ is used to encode the event. However, in (161), when the speaker is describing a situation involving one girl carrying a single basket on her head, the speaker still uses a plural CLFV; in this case, the plural container-and-contents verb *bigi* ‘get (pl. container-and-contents)’.

- (160) *wevo=ma i=yo-mban=a ghaniingga e*
 young.woman=DET 3SG=while.going-GET.PL.RIGD=YA food PREP
nggolo=ko tine
 house=DIST inside
 ‘the girl carries the food (PL) into the house (in her hands)’
 (e_120717)

¹⁴⁰ The majority of everyday tasks involving the transportation of goods also fall to women, such as those related to maintaining the garden and harvesting produce, fetching water and firewood and washing household items and clothing. This makes head-carrying one of the most common types of transport modes.

- (161) *i=bigi=ya* *le-Ø* *nambo* *na* *i=wa* *e*
 3SG=GET.PL.CNTR=YA POSS.CLF2-3SG.POSS basket and 3SG=go PREP
sikulu
 school
 ‘she carries/takes her basket to school (on her head) (lit. she gets/carries the basket
 and goes to school)’ (e_081116_01)

As already discussed (see §5.2.9 and §5.3.2.3), the manner-of-causation prefix *vo-* ‘by spearing’ can combine with a container-and-contents CLFV to overtly specify that a someone is supporting an object on her head.¹⁴¹ The ‘mismatch’ between the number of object referents and the use of *bigi* ‘get (pl. container-with-contents)’ also occurs in these constructions, as can be observed in (162) and (163).

- (162) *i=vo-bigi=ya* *buku=nggi/buku* *mbamba-ra*
 3SG= by.spearing-GET.PL.CNTR=YA book=3PL/book COUNT.CLF-one
 ‘she gets/loads the books/one book (on her head)’ (e_131016_01)
- (163) *wevo=ma* *i=vo-bigi=ya* *mbwa* *ina-Ø*
 young.woman=DET 3SG=by.spearing-GET.PL.CNTR=YA water location-3SG.POSS
e *sospen=ma* *tine*
 PREP saucepan=DET inside
 ‘the girl gets/loads the saucepan with water (on her head)’ (e_101016_01)

It appears that in the specific context of bearing an item on the head, the plural CLFV *bigi* ‘get (pl. container-and-contents)’ does not always indicate multiple object referents but instead suggests the mode of carrying. The link between *bigi* and head-carrying is also supported by the fact that speakers either find the addition of *vo-* ‘by spearing’ to a VC with *thin* ‘get (sg. container-and-contents)’, with the meaning ‘carry on head’, only marginally acceptable:

- (164) *?a=vo-thin=a* *lo* *nambo*
 1SG=by.spearing-GET.SG.CNTR=YA POSS.CLF2.1SG.POSS basket
 ‘I carry my basket (on my head)’ (e_120917/e_171116_02)

Furthermore, during elicitation, speakers also accepted that sentences like the one below in (165) with *thin* ‘get (sg. container-and-contents)’ could refer to a situation where a basket was carried by a person on their head. However, such a token was never provided when the speakers were asked explicitly to describe such a situation. Instead, they only ever provided tokens with the plural container-and-contents CLFV *bigi*.

¹⁴¹ Or that an animal is using its head/snout/beak/tusks to manipulate or carry an object.

- (165) *i=thin=a* *le-∅* *nambo* *na* *i=wa* *e*
 3SG=GET.SG.CNTR=YA POSS.CLF2-3SG.POSS basket and 3SG=go PREP
sikulu
 school
 ‘she carries/takes her basket to school (on her head) (lit. she gets/carries the basket
 and goes to school)’ (e_081116_01)

However, this does not mean that all caused motion events with the stem *bigi* entail that the transported entity is carried on the head, or that VCs with *thin* cannot encode events with head carrying. The first point can be demonstrated by examples such as (166) and (167). Example (166) uses the CLFV *bigi* to describe a picture of a couple carrying baskets of produce in their arms.

- (166) *thi=yo-bigi* *e* *market* *vethi=sel*
 3PL=while.going-GET.PL.CNTR PREP market 3PL.INT=sell
 ‘they take them (baskets of produce) to market to sell’
 (fp_stimuli_191015_07 157, 376.260 379.280)

Example (167) likewise rules out an exclusive ‘carry on head’ reading as the speaker here is describing transporting produce between Vanatina and the Calvados Chain Islands: a journey that entails travel by sea rather than on land.

- (167) *methi=wa* *Saisai=ko* *methi=yo-bigi=ya*
 3PL.IMM.PST=go place.name=DIST 3PL=while.going-GET.PL.CNTR=YA
ghaningga *yambiya* *tobotobo* *mbombo*
 food sago greenstone.axe pig
 ‘they went to the Calvados Chain Islands, they took food, sago, greenstone axes (and)
 pigs’ (kula_exchange_101214 021-5, 65.130 81.490)

The second point, namely that *thin* ‘get (sg. container-and-contents)’ can be used to describe head-carrying events, is suggested by example (168), which describes a woman taking a pot of sago pudding to a cave from her village. While there is no explicit mention of mode of carrying, the default mode for a woman carrying a pot of pudding would be on her head.

- (168) *me=kiwaki=ko* *i=yo-thin=∅*
 3SG.IMM.PST=make.sago.pudding=DIST 3SG=while.going-GET.SG.CNTR=3SG
 ‘when she made the sago pudding, she took/carried it quickly (to the snake)’
 (snake_passage_061215 022-23, 52.520 56.430)

The fact that the verb stem *bigi* can occur with a singular object referent suggests either that there is a second, head-carrying sense of the verb that ‘competes’ with the plurality sense of the verb, or that there are two related but separate verbs, i.e. ‘get (pl. container-and-contents)’ vs. ‘bear (on head)’. Examples in which *bigi* occurs with a singular object referent, as in (161), or when it occurs with *vo-* ‘by spearing’, as in (162) and (163), support a two-verb analysis, similar to the ones outlined for *mban* (‘get (pl. rigid entity)’ vs. ‘put’) described in §5.3.2.1, and *li* (‘get (sg. flexible entity)’ vs. ‘pull’) discussed in §5.3.2.2. On the other hand, elicitation tokens like those in (158)

and (159), and in (166) and (167) that occur with the plural container-and-contents sense of *bigi* show that contextual knowledge is necessary to know whether the event described involves head-carrying or not. This supports an analysis of *bigi* as a single verb with multiple – but not necessarily mutually exclusive – senses. Furthermore, not all transport events that likely involve head-carrying take the stem *bigi* in the corpus, with some encoded by the singular container-and-contents CLFV *thin* (168).

No matter whether *bigi* is analysed as two separate stems or as one, the examples presented in this section suggest that there is a connection between the CLFVs, the object referents and the mode of carrying (head/hands). This connection involves cultural knowledge about how certain material objects either should, or are, typically transported (cf. Hill 2016). The CLFVs appear to be used in contrast to the manner of bearing verbs to imply certain common manners of carrying that are not lexicalised by the ‘bear’ verbs.

5.3.5.1 Stimuli responses with *buku* ‘book’

The norms relating to how items are typically carried could also help explain at least one area of ‘mismatches’ between CLFVs and object referents found in results from the PUT stimuli task (Bowerman et al. 2004). The stimuli task includes seven scenes in which books are moved around. In four of the scenes, an agent moves a single book, while, in the remaining three scenes, an agent moves stack of books. In each of the three scenes where the stack of books is moved and in one scene where a single book is moved, the agent moves along with the book. The task was conducted with five speakers.¹⁴² All save two of the 35 responses to scenes involving the caused motion of books involve at least one CLFV, either as an independent verb, complex verb, or both. Table 5.3 shows the CLFVs in responses by the five speakers to the seven stimuli videos involving the caused motion of books. The column labelled ‘event description’ is taken from Bowerman et al.’s (2004) description of each video with an additional note in parentheses indicating whether the agent accompanies the motion event or remains still.

¹⁴² The speakers ranged in age from mid 30s to late 60s at the time of recording. Two of the speakers are male and three are female. The stimuli task includes three versions that vary the order of the videos to minimise order effects. Speakers 1 and 2 viewed version one, speaker 3 viewed version two and speakers 4 and 5 viewed version three.

	event description	object number	S1	S2	S3	S4	S5
vid 1	toss book on floor (while sitting on chair)	SG	<i>thin</i>	<i>thin</i>	<i>thin</i>	<i>thin</i>	<i>thin</i>
vid 2	drop book deliberately onto floor (while sitting on chair)	SG	<i>thin</i>	<i>thin</i>	<i>thin</i>	<i>thin</i>	<i>thin</i>
vid 3	put book on floor (from squatting position)	SG	<i>thin</i>	<i>thin</i>	<i>thin</i>	<i>thin</i>	<i>thin</i>
vid 4	(walks up to magazine) takes magazine from floor (and walks away holding it in hands)	SG	<i>thin</i>	<i>thin</i>	<i>thin</i>	<i>thin</i>	<i>thin</i>
vid 5	(walks up to table holding books in arms and) put armload of books on table	PL	<i>bigi</i>	<i>mban</i>	<i>mban</i>	<i>mban</i>	<i>langa</i>
vid 6	take armload of books off table (and goes while holding books in arms)	PL	<i>bigi</i>	<i>mban</i>	<i>mban</i>	<i>tako</i>	<i>mban</i>
vid 7	(walks towards camera holding pile of books in arms and) drop book accidentally on floor	PL	<i>bigi</i>	n/a	n/a	<i>langa</i>	n/a

Table 5.3 PUT stimuli task responses

As Table 5.3 shows, there is a striking difference between the CLFV usage in the tokens with a singular object referent and a plural object referent. All 20 responses to the four videos with a single book take the expected container-and-contents singular verb *thin*, which also occurs with multi-part items like books. However, when one turns to the responses to stimuli videos with a stack of books, the case is quite different. Only one speaker uses the expected plural container-and-contents verb *bigi* (and uses it consistently in all three responses). Of the remaining four speakers, speakers 2 and 3 use *mban* ‘get (pl. rigid entity)’ for two of the stimuli responses and do not use a CLFV to describe the final video; instead only describing the book-dropping event in isolation. Speakers 4 and 5 switch between different plural CLFVs, with speaker 4 using a different CLFV in each of their responses. Examples (169) to (171) show three responses to video 5, where a different CLFV is used in each (the remaining two tokens are not presented as they closely resemble (170) and use the same CLFV).

- (169) *wevo eunda i=bigi=nggi=ya buku=nggi na*
 young.woman one.F 3SG=GET.PL.CNTR=3PL=YA book=3PL and
i=bigi-ra=Ø e tebol vwata-e
 3SG=GET.PL.CNTR=-put=3 PREP table top-3SG.POSS
 ‘one girl holds (lit. gets) the books and puts them on the table top’
 (put_stimuli_191015_01_01 101-4, 437.686 445.777)

- (170) *wevo=ma i=mena i=mban-ra=nggi=ya buku-buku=ma*
 young.woman=DET 3SG=come 3SG=GET.PL.RIGD-put=3PL=YA RED-book=DET
wolaghiye e tebol=ma vwata-e
 all/every PREP table=DET top-3SG.POSS
 ‘the girl comes, she puts all the books on the table top’
 (put_stimuli_231015 061, 489.177 493.410)

- (171) *gamaina=ma i=mena i=langa-ra buku=ma*
 unmarried.young.woman=DET 3SG=come 3SG=GET.PL.FLEX=put book=DET
 ‘the young woman comes, puts the books (down)’
 (put_stimuli_201015_01 092, 570.237 572.860)

A possible explanation for the unexpected variation in CLFV choice may stem from the mode of carrying the plural objects. In all of the videos, the book(s) is handled and transported while held in the hands or arms. On Vanatina, a single book is likely to be held and carried short distances in the hands (or, when transported over long distances, stored in a basket).¹⁴³ A stack of books, on the other hand, is typically carried on the head by women or children (e.g. on the way to school, church, etc.).¹⁴⁴ Consequently, the responses to videos with a single book conform to expectations of how such an item is handled and moved, while the scenes with more than one book do not as they are carried in hands rather than on the head. It could be the case that when certain objects are not carried in the expected manner, it is particularly salient to the speaker and, to highlight this, the speaker may avoid the expected CLFV *bigi* ‘get (pl. container-and-contents)’ that can also imply ‘head-carrying’ and thereby signal an ‘unusual’ mode of carrying. This could also explain why variation in CLFV use is found both in the responses from individual speakers and across the responses from the five speakers. Given that the speakers are describing situations that are not the norm for the community, this may cause uncertainty or more variability in choice of CLFV. In order to further investigate this hypothesis, future investigation could include stimuli that target common items being carried both in ways that are culturally expected, and in ways that might be more marked for Sudest speakers.

5.3.6 Regional context, origins and grammaticalisation of the classificatory verbs

As already noted, CLFVs of the type described here appear to be unique to Sudest among the Oceanic languages. The question therefore arises as to the origins of the Sudest CLFV paradigm. As discussed in §5.3.1, a wide range of Papuan languages spoken on the mainland are attested to have verbal classifiers. Closer to Vanatina, the Papuan isolate Yélî Dnye, spoken on neighbouring Rossel Island, has three suppletive verb sets that could be analysed as CLFVs. Levinson and Brown (2012: 275) label the Yélî Dnye system a ‘covert system of nominal classification of verbs’. This echoes Grinevald’s (2000: 68) characterisation of CLFVs, which she does not categorise as nominal classification devices. Similar to the mainland Papuan systems, existential and positional predicates in Yélî Dnye are expressed by posture verbs (Levinson & Brown 2012). In existential and locative statements, the S argument referent is classified by whether it is ‘standing’, ‘sitting’ or ‘hanging’

¹⁴³ Furthermore, in all save one of the stimuli videos with a single book, the agent does not move along with the theme, but simply places or tosses a book somewhere. Only the event with the magazine involves accompanied motion (i.e. carrying/taking) where the agent and theme change location together.

¹⁴⁴ A man might carry books in a bilum or small basket clutched under the arm. However, it seems far more common to see women carrying such items, e.g. when going to church and then giving them to the men later.

(Levinson & Brown 2012). Events of ‘putting’ and ‘taking’ are also encoded by suppletive verb paradigms that make the same posture distinctions based on properties of the O argument referent (Levinson & Brown 2012). Example (172) first shows a locative statement with *kaapî* ‘cup’, a ‘standing’ referent, followed by a taking event in which the cup becomes the O argument and therefore the ‘standing’ take verb *y:oo* is also selected.

- (172) *kaapî tapil mbêmê ka kwo pyópu ngê da y:oo*
 cup table on is standing girl ERG 3PST.PERF take.standing
 ‘the cup was standing on the table, a girl took (standing) it’
 (Levinson & Brown 2012: 278)

The Oceanic Papuan Tip languages are known for undergoing grammatical change attributed to prolonged contact with Papuan languages (Lynch et al. 2002: 15). If the CLFVs are the result of contact with Papuan languages, however, one might expect more Oceanic languages than just Sudest to have a CLFV system. One might also expect the Sudest system to be based on posture verbs like the systems found in Yélî Dnye and the majority of mainland Papuan languages with CLFVs (Aikhenvald’s (2000) type-B CLFVs) rather than a system that appears to have more in common with those found in Athabaskan languages (Aikhenvald’s type-A CLFVs, see §5.3.1).¹⁴⁵ None of the Sudest CLFVs appear to be borrowings from the Yélî Dnye suppletive sets or any other Yélî Dnye verbs.¹⁴⁶

The fact that two of the CLFVs have related verb stems (*li* ‘pull’ and *mban* ‘put’) and that *bigi* ‘get (pl. container-and-contents)’ has a related stem or secondary sense (‘bear on head’) suggests that at least some of the CLFVs have developed from verbs of handling.¹⁴⁷ Verbal classifiers that developed from verbs of handling are also attested in some Waris languages, spoken in the northwest of PNG (Seiler 1985, 1986; Foley 1986: 91). In the Waris language Imonda, verbal classifiers appear to have developed from verbs of handling in complex verbs which, over time, lost their verbal meaning in some contexts (Seiler 1986). Unlike the Sudest classifiers, the Imonda ones have completely grammaticalised into prefixes (Seiler 1986). Without further diachronic data or recognisable cognates or sources to identify if they are loanwords, determining the origins of the Sudest classificatory system further is currently not possible. A related question that the current data cannot answer is how the CLFVs became a somewhat rigid semantic paradigm when such paradigms are not present in Nimowa or attested in any other Papuan Tip or Oceanic languages.

¹⁴⁵ As outlined in §4.3.5, Sudest does have posture prefixes meaning ‘sit (and)’ and ‘stand (and)’, but these add a sub-event or positional specification to the VC and are not a nominal classification system. See also §5.3.3 for discussion of *nde-* ‘stand and’ with CLFVs.

¹⁴⁶ There also appear to be no identifiable cognates in Misima, the closest related language to Sudest with a dictionary (S. Callister et al. 2005) and available grammatical descriptions (W. Callister 1985a, 1985b; Callister & Callister 1985).

¹⁴⁷ Although particularly in the case of *bigi*, without diachronic data, it is impossible to say which sense is the ‘original’ sense. It is not unfathomable to imagine a shift from specifying the type of object handled, to the manner of handling of said type of object.

While verbal classifiers are an areal feature in some regions and the Papuan Tip languages are known for their language-contact related features, it is also unclear why such a development would only take place in Sudest and which languages could have influenced it.

Despite not having a clear indication as to the origins of the CLFVs, evidence from complex verbs suggests that the stems, at least in some contexts, may be in the process of grammaticalising into verbal classifier prefixes. The CLFVs occur in V_1 position in a number of complex construction types (see chapter 6 for discussion of each construction type and exhaustive lists of attested complex verbs with CLFVs). They frequently occur in complex verbs with a transitive V_2 stem that encodes an event of handling or transfer (e.g. *beku* 'bury', *giya* 'give', *iteten* 'leave', *kaivi* 'steal', *ngambu* 'burn, roast', etc.). Unlike other types of multi-verb constructions with a CLFV, these constructions are equally grammatical and have the same valence when the CLFV is omitted. Compare (173) and (174); both clauses use the monotransitive verb *giya* 'give', and describe giving events in which a piece of clothing is given. In (173), however, *giya* 'give' occurs in a complex verb with the CLFV *li*, while in (174) *giya* 'give' functions as an independent verb (see §6.3.2).

- (173) *ela=ma* *i=li-giya* *kwama=ma* *lolo* *regha*
 woman=DET 3SG=GET.SG.FLEX-give cloth/ing=DET person one
we=∅
 PREP=3SG
 'the woman gives (a piece of) clothing to a person' (e_181016)

- (174) *noroke* *lumo-lumo=ke* *hu=giya* *kaliko*
 today RED-white.person=SPKR.PROX 2PL=give cloth/ing
 today, white people, you give (western) clothing (to us)
 (traditional_dress_051214 108-10, 282.860 288.040)

In these constructions, the CLFVs show signs of desemanticisation or 'semantic bleaching': one of the key mechanisms involved in grammaticalisation (Heine & Kuteva 2002: 2). Desemanticisation occurs when certain forms are reinterpreted in particular contexts as having 'more abstract, grammatical meanings' and consequently also a loss of semantic content (Heine & Kuteva 2002: 3). In complex verbs with transitive V_2 stems, the 'get' sense of the verb is absent, and the stems only serve to specify qualities of the object referent(s). In (175) and (176), the classificatory stems specify whether the basket is empty or full respectively.

- (175) *amba* *methi=li-giya* *nambo* *we=∅*
 then 3PL.IMM.PST=GET.SG.FLEX-give basket PREP=3SG
 'then they give a (empty) basket to him' (dating_081015 074, 201.500 204.860)

- (176) ...*na* *thi=thin-giya=∅* *we=ya* *wevo=ko*
and 3PL=GET.SG.CNTR-give=3SG PREP=YA young.woman=DIST
tina-e *na* *rama-e*
mother-3SG.POSS and father-3SG.POSS
'...and they give it (a full basket) to the girl's mother and father'
(first_time_251214 021-23, 58.230 64.780)

Such examples show that the CLFVs may be undergoing the initial steps in the path towards becoming verbal classifier affixes.

6 Multi-verb constructions

6.1 Introduction

This chapter describes the structural and semantic parameters of multi-verb constructions in Sudest. Multi-verb constructions are a productive domain in the language and complex verbs in which two or more verb stems combine in one verb complex play a prominent role in the encoding of 3PEs. A detailed understanding of these constructions is, therefore, crucial to any description and discussion of 3PEs in the language.

Multi-verb constructions are widely attested across the Oceanic languages (Lynch et al. 2002: 46–7), and are an areal feature found in the Austronesian, Papuan, and contact languages of the region (Crowley 1990; Givón 1990; Senft 2008). Work focussing on these constructions in the Oceanic languages, sub-groups and individual languages include: Bradshaw (1982; 1993; 2010); Crowley (1987; 2002); Durie (1988); Early (1993), Hamel (1993), Sperlich (1993), Bril and Ozanne-Rivierre (2004), Margetts (2005), François (2006), Lichtenberk (2006), Schneider (2007), Thieberger (2007) and Næss (2011), among others. Cleary-Kemp (2015) includes a survey of the multi-verb constructions found in 36 Oceanic languages.

Multi-verb constructions comparable to the Sudest constructions have frequently been analysed as serial verb constructions (SVCs) in the literature.¹⁴⁸ A key parameter of SVCs, particularly in the Oceanic literature, is the distinction between ‘nuclear-layer’ and ‘core-layer’ serialisation. The term comes from Foley and Olsen’s (1985) work within the framework of role and reference grammar. In their framework, the clause consists of three layers: the nucleus, core and periphery. The nucleus includes only the predicate, while the core comprises the nucleus and nominal arguments. The periphery contains all nuclear and core elements as well as non-core arguments. Oceanic nuclear-layer SVCs are obligatorily contiguous, combining multiple verb stems in a complex nucleus with

¹⁴⁸ A comprehensive overview of the serialisation literature is beyond the scope of this thesis. For general discussion, see Foley and Olson (1985), Foley & Van Valin (1984), Van Valin & LaPolla (1997), Durie (1997), Aikhenvald & Dixon (2006), and Aikhenvald (2018). For serialisation in Oceanic, refer to the works listed above and references therein, especially Crowley (2002) and Cleary-Kemp (2015).

a single, shared set of pronominal markers. Core-layer SVCs are less tightly bound, with each verb stem in the construction taking its own set of pronominal markers.¹⁴⁹

It has been pointed out (e.g., Cleary-Kemp 2015: 97) that ‘verb serialisation’ has been used as a broad umbrella term to describe comparatively heterogeneous constructions. Aikhenvald (2006; 2018) considers serialisation as existing as part of a continuum of multi-verb constructions. A range of common parameters have been proposed for defining constructions as SVCs (e.g., Sebba 1987; Aikhenvald 2006; 2018; Cleary-Kemp 2015; Haspelmath 2016). However, there is no unanimous consensus on specific features. Such parameters typically include some of the following criteria: each verb stem must be able to occur independently as a main verb in single-stem construction; the construction must be monoclausal and represent a single event (e.g., tense must hold scope over all verbs); and, the verbs must share at least one argument and include no subordination or coordination. Not all of the Sudest multi-verb constructions satisfy all of the key criteria. For example, some stems in ‘nuclear’ constructions do not occur synchronically in single-stem or ‘simplex’ predicates, and the ‘core’ constructions can include conjunction with no apparent difference in meaning. Consequently, throughout the current analysis, I refer to these constructions by the umbrella term ‘multi-verb constructions’ as a somewhat ‘neutral’, descriptive label. These constructions include core-like sequences, which I label ‘independently inflected verbs’, and nuclear-like sequences, which I call ‘complex verbs’.¹⁵⁰

As well as distinguishing multi-verb constructions depending on whether they are individually inflected or form a complex nucleus with a single set of pronominal markers, another important criterion is their symmetry (Aikhenvald 2006; 2018). Symmetry pertains to how restricted each verb stem slot is in the construction (henceforth V_1 and V_2). In an asymmetrical construction, one slot is unrestricted, taking a verb from a relatively open or large class while the other slot may only be filled from a smaller, closed or restricted set of stems (Aikhenvald 2006: 21-22). The slots in a symmetrical construction, on the other hand, are all relatively open and unrestricted. Aikhenvald (2006:22) considers the semantic and syntactic head of the construction to be the unrestricted stem, and therefore views the symmetrical constructions as being doubly headed. Semantically, an asymmetrical construction can typically be characterised as expressing a single event. The stem in the restricted slot modifies the event expressed by the head verb, while a symmetrical construction describes a series of events that are generally ordered according to temporal iconicity (Aikhenvald 2006: 22). The diachronic pathways the two construction types follow are also distinct. Asymmetrical constructions tend to grammaticalise into directional,

¹⁴⁹ Nuclear- and core-layer serialisation correspond to what Aikhenvald (2006) labels contiguous and non-contiguous serialisation.

¹⁵⁰ The term complex verb also avoids a differentiation between serialisation and compounding, see Margetts (1999: 101) and Aikhenvald (2006: 1) for similar remarks.

applicative and tense and aspect morphemes, and symmetrical constructions lexicalise and become more idiomatic (Aikhenvald 2006: 30-5).

Crowley (2002: 40-42) finds three types of argument sharing in core-layer serialisation in Oceanic languages: same-subject, switch-subject, and ambient constructions.¹⁵¹ Verb stems in same-subject constructions, as the name suggests, share the same subject. In switch-subject constructions, the object of V_1 is the subject of V_2 . Ambient constructions can only be core-like, with the V_2 taking an obligatory third-person singular subject. The verb stems do not share an argument in ambient constructions. The status of the V_2 subject is currently an open question. Some scholars interpret the subject of the V_2 to be the entire event of the V_1 (e.g., Crowley 2002: 40-41; Aikhenvald 2006: 18), however Cleary-Kemp (2015: 131) suggests an alternative analysis of ambient constructions where the V_2 subject marking is a morphosyntactic requirement and semantically vacuous.

Lynch et al. (2002: 46-47) identify five common semantic types of functions in Oceanic serial verb constructions: directional/positional, sequential, causative (labelled ‘cause-effect’ in the current analysis), manner, and ambient.¹⁵² In addition, Cleary-Kemp’s (2015: 132-141) typological study also identifies aspectual functions – typically imperfective and completive/sequencing – as widespread among Oceanic languages, and instrumental and benefactive functions as less common, but also attested semantic properties. Furthermore, she finds that while some semantic properties traverse argument sharing categories, there are general correlations between the two (Cleary-Kemp 2015: 132-41).

The following discussion examines the Sudest multi-verb constructions, taking into particular consideration questions of contiguity, symmetry, argument sharing (for independently inflected verbs) and semantics. The analysis is divided into two primary sections. Where §6.2 looks at the smaller group of independently inflected, §6.3 describes the larger group of complex verbs.

6.2 Independently inflected verbs

There are two types of possible constructions with independently inflected verbs in Sudest that closely resemble ambient serialisation. In these constructions, the second verb obligatorily taking a third-person singular subject index; a common type of serialisation found in Oceanic languages (Crowley 2002; Cleary-Kemp 2015). However, coordinators can be inserted between the two verb complexes without any apparent change in meaning. As most definitions of serialisation explicitly

¹⁵¹ Aikhenvald (2006; 2018) labels switch-subject constructions ‘switch-function’ constructions, and ambient-subject constructions ‘event-argument’ constructions.

¹⁵² As described above, ‘ambient’ is a morpho-syntactic distinction rather than a semantic one (Aikhenvald 2006: 18-9; Cleary-Kemp 2015: 132).

exclude constructions that can be coordinated (e.g., Durie 1997: 295; Aikhenvald 2006: 1; Cleary-Kemp 2015: 1), it is difficult to more confidently analyse them as mono-clausal constructions without additional supporting formal criteria. . The specific and regular structure of the sequences shows that they can be considered a type of construction, albeit a less tightly bound one, than the complex verbs discussed later in this chapter in §6.3.

It is generally more difficult to identify sequences of individually inflected verbs as a mono-clausal construction (i.e. core-layer serialisation or similar) than it is to identify complex verb constructions as a mono-clausal construction (i.e. nuclear-layer serialisation or similar) (e.g. Margetts 2004b, 2005). This is not to say that Sudest does not have constructions that could be analysed as core-layer SVCs. It is highly likely that further study may identify more possible candidates for core-layer SVCs in the language and further formal criteria to support a core-layer analysis of constructions like those presented below in §6.2.1 and §6.2.2.

6.2.1 Sequencing constructions with *ko* ‘finish’

In the sequencing construction, the first verb obligatorily consists of a complex verb comprised of an open V_1 slot and the completive stem *vao* in V_2 (discussed further in §6.3.9). The second verb is restricted to the intransitive stem *ko* ‘finish’ with a third person singular subject marker. Examples of this construction are shown in (1) to (2).

- (1) *thi=tawoi-vao*= \emptyset *i=ko*
 3PL=shit(diarrhoea)-COMPL=3SG 3SG=finish
 ‘they stop shitting (diarrhoea)’ (funeral_feasting_081015_02 072, 189.430 192.880)
- (2) *wo=vakatha-vao*=*ya* *koghane=ko* *i=ko*
 1EXCL=do/make-COMPL=YA stone.baking.pit=DIST 3SG=finish
 ‘we finish making that stone baking pit’
 (stone cooking 251015 060, 164.460 168.590)

Completive multi-verb constructions with a stem meaning ‘finished’ are common in Oceanic languages, often developing aspectual properties (Cleary-Kemp 2015: 137-138) or discourse linkage functions (Crowley 2002: 81-82; Cleary-Kemp 2015: 219-220). In Sudest, the construction typically occurs in procedural and narrative texts to indicate that one event is completed before another begins. It is frequently accompanied by the sequential coordinator *amba* ‘then’. Consider the two extended examples given in (3) and (4).

- (3) $a=wi=\emptyset$ $a=wi-vao=\emptyset$ $i=ko$ $amba$ $a=ten=\emptyset$
 1SG=grind=3SG 1SG=grind-COMPL=3SG 3SG=finish then 1SG=break=3SG
 [...] $a=ten-vao=\emptyset$ $i=ko$ $amba$ $a=bus=\emptyset$
 1SG=break-COMPL=3SG 3SG=finish then 1SG==bore=3SG
 ‘I grind/smooth it (the bagi shell), I finish grinding it then I cut it [...] I finish cutting it
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then I bore it (to make holes)' (bagi_181215 009-16, 18.790 50.130)

- (4) *i=iku* *uma* *i=iku-vao* *i=ko* *i=mwa*
 3SG=chop(tree) garden 3SG=chop(tree)-COMPL 3SG=finish 2SG=dry
wo=wo-ngambu=∅
 1EXCL=GET.SG.RIGD-burn=3SG
 'he chopped the garden (i.e., the trees to clear for the garden), he finished chopping
 (then) it dried (and) we burnt it' (working_011115 004-5, 16.691 24.985)

The initial verb in the completive construction often, but not always, repeats the verb stem of the prior clause; a feature of tail-head linkage, which is a sequencing device found in both Papuan (de Vries 2005) and Oceanic languages, e.g., Sye (Crowley 1998: 282), Lolovoli (Hyslop 2001: 426), Nafsan (Thieberger 2006: 327-28), and Abma (Schneider 2009). The Sudest tokens also involve another key feature of tail-head linkage, namely, falling intonation on the 'tail' clause, and rising intonation on the 'head' clause, in this case, the completive construction with *ko* 'finish'.

6.2.2 Directional constructions

In the second construction type, the first verb is transitive, while the second verb is an intransitive directional verb that takes a third person singular subject marker referring to the event expressed by the preceding verb, as in (5) to (7), with the motion verbs *njogha* 'go back' and *wa* 'go'.

- (5) *thi=kewe* *mbombo=ko* *i=njogha* *e* *ghemba*
 3PL=carry(on.stick) pig=DIST 3SG=go.back PREP village
 'they carried the pig on a stick back to the village (lit. they carried the pig on a stick, it goes back to the village)' (hunting_261214 036)
- (6) *thi=bigi=ya* *le-nji* *bigi-bigi* *i=wa* *e*
 3PL=GET.PL.CNTR=YA POSS.CLF2-3PL.POSS RED-thing 3SG=go PREP
uma *tine*
 garden inside
 'they carry their things to the garden (lit. they get their things it goes to the garden)' (e_261116)
- (7) *a=rori=ya* *leta* *i=wa* *we=nggi=ya* *lo*
 1SG=write=YA letter 3SG=go PREP=3PL=YA POSS.CLF2.1SG
boda-boda
 RED-relative
 'I write a letter to my relatives (lit. I wrote a letter it goes to my relatives)' (e_311016)

The independently inflected directional constructions with an initial CLFV and *wa* ‘go’ as a second verb, as in the example above in (6) and below in (8), are one of the basic ways to encode a carrying event.¹⁵³

- (8) *wanakau=ma* *thi=**mban**=a* *gha-nji* *i=**wa*** *e*
 young.women=DET 3PL=GET.PL.RIGD=YA food-3PL.POSS 3SG=go PREP
sikulu
 school
 ‘the girls carry their food to school (lit. the girls get their food it goes to school)’
 (e_101116)

Like the sequencing constructions discussed in the previous section, the directional constructions can be separated by a coordinator, as shown in (9) and (10).

- (9) *i=thagha* *le-Ø* *kelumo=ma* *na* *i=wa* *e*
 3SG=GET.SG.TOOL POSS.CLF2-3SG.POSS axe=DET and 3SG=go PREP
uma tine
 garden inside
 ‘he carries his axe to the garden (lit. he gets his axe and it goes to the garden)’
 (e_181016_01)
- (10) *wanakau=ma* *thi=bigi=ya* *le-nji* *nambo-nambo*
 young.women=DET 3PL=GET.PL.CNTR=YA POSS.CLF2-3PL.POSS RED-basket
na i=wa e sikulu
 and 3SG=go PREP school
 ‘the girls carry their baskets to school (lit. the girls get their baskets and it goes to school)’
 (e 071116 03)

See also directional complex verbs in §6.3.1.

6.3 Complex verbs

There are over 250 distinct contiguous verb combinations attested across the corpus and elicitation data. The majority of the constructions contain two verb stems, although a small number contain three. In these constructions, no morpheme may intervene between the verb stems save certain derivational morphology. They function as a single grammatical word, obligatorily sharing a single set of subject and, if transitive, object indexes. The overall valence of the construction is that of the verb stem with the highest valence. Temporal and aspectual marking has scope over the whole construction, as does negation. In (11), the past particle *va* and particle *ma* ‘already’ indicate that both subevents of the complex verb have already occurred.

¹⁵³ The other ‘basic’ way to express events of carrying is with a VC with a CLFV and the concurrent associated motion prefix *yo-* ‘while going’ (§4.3.5.1).

- (11) *va ma thi=vutha-vaiddi=nggi mbungaghalaghalamanggo morouma*
 REM. already 3PL=arrive-find=3PL countless k.o.fish
 PST
 ‘they arrived and found countless morouma fish’
 (mandumbunga_061215 127-9, 365.769 372.734)

When the complex verb is negated by the discontinuous negation marker (*n*)*ande...re*, the marker surrounds the whole verb complex, as in (12).

- (12) *ande i=nde-thin-njogha=Ø=re mun we=Ø*
 NEG1 3SG=DEHORT-GET.SG.CNTR-go.back=3SG=NEG2 a.bit PREP=3SG
 ‘he didn’t return/give it back to him’ (eagle_story_081115 046, 127.630 131.900)

As stated above, a generally agreed upon requirement for a multi-verb construction to be considered true serialisation is the ability of each verb stem in the construction to also function independently as the only verb stem in a verb phrase/complex (Sebba 1987: 39; Aikhenvald 2006: 1; Cleary-Kemp 2015: 102). Not all stems in the complex verbs attested in Sudest comply with this criterion. Restricting the investigation to only those constructions with fully verbal stems would, however, ignore a significant proportion of constructions, including several that play a prominent role in the expression of 3PEs. Throughout the current description, I explicitly note all verb stems that cannot, or are not, attested to function as independent verbs.

In previous work on Sudest, A&R (p. 339) conclude that there are no clear cases of verb serialisation, but assert that verb compounding of two verb stems is productive, giving the three examples reproduced in (13) to (15). They state that verb compounding in the language is not well understood, but that examples in (13) and (14) show a relationship equivalent to coordination, and that the construction in (15) has a V_1 indicating motion and a V_2 indicating direction (these construction types are discussed in §6.3.6 on simultaneous and sequential and in §6.3.1 on directional complex verbs respectively).

- (13) *kero i=ghan-ghan-wothi*
 already 3SG=RED-eat-sing
 ‘already she was eating and singing’ (adapted from Anderson & Ross 2002: 334)
- (14) *thi=vutha-vale=nggi=ya gharighari*
 3PL=arrive-meet=3PL=YA people
 ‘they arrived and met people’ (adapted from Anderson & Ross 2002: 335)
- (15) *thi=vangu-njogha=nggo*
 3PL=lead-go.back=1SG
 ‘they take me back’ (adapted from Anderson & Ross 2002: 335)

The stem combinations attested in the data show that Sudest complex verbs encode a variety of semantic properties, including some that are commonly, and other that are less-commonly attested

in Oceanic languages (see Crowley 2002 and Cleary-Kemp 2015 for Oceanic, Aikhenvald 2006; 2018 for cross-linguistic patterns). Nine construction types can be distinguished in the data based on their semantic properties. These are presented in §6.3.1 to §6.3.9. The structure and patterns of complex verbs with more than two stems are discussed in §6.3.10. It should be highlighted that the notion of argument sharing for the complex verbs is a purely semantic one relating to the logical arguments of the verbs as the verb stems share one set of syntactic argument between them.

6.3.1 Directional constructions

Directional complex verbs are one of the most common type found cross-linguistically (Foley and Olson 1985: 42; Aikhenvald 2006: 48), and are common in Oceanic languages (Crowley 2002). They are the largest group of complex verbs in Sudest. In these constructions, the V_1 slot is relatively unrestricted and the V_2 slot is filled by a directional verb that specifies the literal or fictive motion of the event argument.¹⁵⁴ Intransitive V_1 stems are usually (although not always) manner of motion verbs, and V_1 transitive stems are frequently ones of handling and caused motion.

The directional verbs that fill the V_2 slot express motion along a trajectory, e.g., *voro* ‘go up’, *nja* ‘go down’, *njogha* ‘go back’. There are 20 directional stems attested in these constructions that divide into two subgroups: there are four transitive stems that licence a locational object (§6.3.1.1), and 16 intransitive directional stems (§6.3.1.2). (See also independently inflected directional constructions in §6.2.2).

6.3.1.1 Transitive directional verbs

The first subset of three directional verbs are monotransitive and take an object that specifies the orientation of the event in relation to the ground entity, i.e., whether they are oriented towards a goal or source, follow a moving entity, or a particular path. The monotransitive directional verbs are listed in Table 6.1.

directional stem	gloss	object
<i>ghembe</i>	‘go to/towards’	goal
<i>mbele</i>	‘follow’	path
<i>njolanga</i>	‘go over’	path

Table 6.1 Transitive directional stems in directional complex verbs

¹⁵⁴ The term ‘fictive motion’ is taken from Talmy (1996: 211) and refers to ‘linguistic instances that depict motion with no physical occurrence, for example *the fence goes from the plateau to the valley*; [...] *I looked out past the steeple*’.

The verb *ghembe* ‘go to(wards)’ takes an object with the semantic role of goal, while the remaining three verbs take an object with the semantic role of path. Transitive directional verbs that take locational objects are attested in other (Western) Oceanic languages (see, e.g., Durie 1988).

6.3.1.1.1 *Ghembe* ‘go to(wards)’

The verb *ghembe* ‘go to(wards)’ takes a goal as its object. The complex verbs it occurs in are listed in Table 6.2. The tables throughout this chapter give the individual and combined gloss and transitivity status of each of the verb stems (INTR ‘intransitive, TR ‘monotransitive, and DITR ‘ditransitive’) and token count in the corpus. Complex verbs only attested in elicitation data are labelled with ‘EE’ (elicitation English) or ‘ES’ (elicitation Sudest), where ‘EE’ refers to examples resulting from English to Sudest translations, and ‘ES’ indicates constructions presented in Sudest to speakers.

V₁-V₂	V₁ gloss	combined meaning	transitivity	tokens
<i>ruku-ghembe</i>	‘run’	‘run to’	INTR-TR	1
<i>longga-ghembe</i>	‘walk’	‘walk to’	INTR-TR	1
<i>taodo-ghembe</i>	‘crawl’	‘crawl to’	INTR-TR	2

Table 6.2 Directional complex verbs with ghembe 'go to(wards)'

The stem is only attested with intransitive manner of motion V₁ stems in the corpus and is used in combination with these stems to add a goal argument. Examples (16) to (18) show all the combinations with *ghembe* ‘go to(wards)’ found in the corpus.

- (16) *i=taodo-ghembe* *uye=ma*
3SG=crawl-go.to clay.pot=DET
'the child crawls to the clay pot' (child_and_giant_201015 074-5, 191.450 195.082)
- (17) *amala=ma* *i=longga-ghembe=ya* *karot=ma* *e* *tebol=ma*
man=DET 3SG=walk-go.to=YA carrot=DET PREP table=DET
vwata-Ø
top-3SG.POSS
'the man walks to the carrot on the table'
(cb_stimuli_101116 084, 1051.550 1058.889)
- (18) *i=ruku-ghembe=Ø*
3SG=run-go.towards=3SG
'he ran towards him (his son)' (fp_stimuli_201015_01 248, 937.768 939.100)

6.3.1.1.2 *Mbele* ‘follow’

The directional *mbele* ‘follow’ describes motion following an entity that can be animate or inanimate. The complex verbs with *mbele* ‘follow’ are listed in Table 6.3.

V ₁ -V ₂	V ₁ gloss	combined meaning	transitivity	tokens
<i>raka-mbele</i>	‘go (PL)’	‘chase, follow’	INTR-TR	2
<i>kubaro-mbele</i>	‘hide/be hiding’	‘hide and follow’	INTR-TR	1
<i>utu-mbele</i>	‘speak’	‘describe (a series of things), lit. ‘talk following (s.th.)’	INTR-TR	1
<i>nggari-mbele</i>	‘tie’	‘tie along/following (s.th.)	INTR-TR	1
<i>rangi-mbele</i>	‘cry for, mourn’	‘cry after/for’	INTR-TR	1
<i>uno-mbele</i>	‘say (a name)’	‘say (name)’	INTR-TR	2
<i>vakatha-mbele</i>	‘do, make’	‘do following along’	INTR-TR	1

Table 6.3 Directional complex verbs with *mbele* ‘follow’

When *mbele* ‘follow’ occurs with an intransitive verb with a motion component in V₁, the directional verb adds an object argument that denotes the goal referent the subject is following. In (19), the subjects are ordered to follow a person in order to catch them, and in (20) a grandchild is hiding and following his grandmother.

- (19) *i=nga* “*hu=raka-mbele=Ø*” *i=nga* *wo=hu=awe* *le=ko!*”
 3SG=say 2PL=go.PL-follow=3SG 3SG=say HORT=2PL=catch person=DIST
 ‘he said “you follow him”, he said “catch that person!”’
 (bwaindiya_151115 096-7, 263.926 266.210)

- (20) *rumbu-ye=ma* *mbe* *me=kubaro-mbele=Ø* *vara*
 grandchild/parent-3SG.POSS=DET still 3SG.IMM.PST=hide-follow=3SG really
 ‘the grandchild hid following her (her grandmother)’
 (snake_passage_061215 077, 177.926 180.768)

When *mbele* ‘follow’ combines with verbs that do not have a motion component it has a pluractional meaning. The activity of V₁ is interpreted as being repeated, which can, in turn, indicate a plural object or event reading (see §3.3.2 for reduplication, and §5.3 for CLFVs). The repeated activity can take place immediately over a short period of time, as in (21) with the intransitive verb *utu* ‘speak’. In this example, the speaker is explaining to the hearer how they will each describe a series of pictures that are lined up in front of them one after the other.

- (21) *ko* *ra=utu-mbele-vara* *iya=na*
 COORD 1INCL=speak-follow-really DEM=ADDR.PROX
 ‘we will speak along/following them (a series of pictures)’
 (fp_stimuli_201015_02 120, 405.012 407.430)

Examples (22) and (23) show *mbele* ‘follow’ with transitive V₁ stems. Both sentences describe a repeated series of events completed one after the other. In (22), the agent follows along from one knot to the next (tying each one up).

- (22) *i=nggari le-Ø nuwo=ko i=nggari-mbele=Ø te-ma*
 3SG=tie POSS.CLF2-3SG.POSS knot=DIST 3SG=tie-follow=3SG more-already
ve=nja=engge
 3SG.INT=go.down=just
 ‘he tied the knot, he kept tying them until he went down (to the bottom)’ [context: a man is descending a 12 story building and tying a knot at the entry to each level to lock it]
 (mandumbunga_02_181016 531-3, 1334.571 1342.144)

In (23), the subjects keep repeating a person’s name.

- (23) *mbe thi=uno-mbele-mbele vara le=ko ida-ye*
 still 3PL=say(name)-RED-follow really man=DIST name-3SG.POSS
 ‘they keep on mentioning his name’
 (mandumbunga_02_181016 234, 597.214 599.979)

In (24) and (25), the events described by the V₁ are not repeated immediately one after the other and instead are more habitual, repeated over a longer period of time. In (24), a particular eagle’s cry is attributed to him crying for spears that his cousin stole from him.

- (24) “*sangweee*” [...] *thangwethangwe noroke u=longwe nggora*
 onomatopoeic.bird.call k.o.eagle today 2SG=hear like
iya=ko ghalinga-e me=rangi-mbele=ya le-Ø
 DEM=DIST voice-3SG.POSS 3SG.IMM.PST=cry.for-follow POSS.CLF2-3SG.POSS
kin-kin=ko
 RED-spear=DIST
 “‘sangweee”, Thangwethangwe eagle, today (when) you hear his voice, it’s like that, he is crying for his spears’
 (eagle_story_081115 064-7, 177.524 189.489)

Example (25) discusses the repeated hunting expeditions trained dogs take part in throughout their lives.

- (25) *waidi=ko thi=vakatha-mbele=Ø ghaghadi engge mbugha-mbugha=ko*
 hunt=DIST 3PL=do/make-follow=3SG until just RED-dog=DIST
thi=thanja
 3PL=be.old
 ‘the hunting, they (the dogs) keep doing it until the dogs are old’
 (hunting_261214 037-42, 82.800 95.720)

6.3.1.1.3 Njolanga ‘go over’

The final transitive directional verb are only attested in complex verbs with the V₁ *yo* ‘fly’.

V ₁ -V ₂	V ₁ gloss	combined meaning	transitivity	tokens
<i>yo-njolanga</i>	‘fly’	‘fly/go over’	INTR-TR	2

Table 6.4 Directional complex verbs with njolanga ‘go over’

The two stems have similar semantics, and both describe a path which traverses the object entity. The stem *njolanga* ‘go over’ cannot function as a main verb. In combination with the intransitive manner of motion stem *yo* ‘fly’ it indicates motion over an entity. In (26), the complex verb describes how the recently deceased cross over a particular tree that marks the boundary to the place of the ancestors on the summit of Mount Rio.

- (26) *ra=yo-njolanga* *ghatha=ko* *mborowa*
 1INCL=fly-go.over k.o.plant=DIST trunk
 ‘we fly/jump over the Ghatha trunk’ (engginas_story_231016 035-6, 69.690 74.994)

In (27), the speaker euphemistically describes intercourse as the man ‘flying over’ the women’s legs.

- (27) *ande* *ne* *nggama=ko* *rama-e* *i=yo-njolanga=re*
 NEG1 FUT child=DIST father-3SG.POSS 3SG=fly-go.across=NEG2
nggama=ko *tina-e* *gheghe*
 child=DIST mother-3SG.POSS foot/leg
 ‘the child’s father cannot have intercourse with the child’s mother (lit. cannot fly over the child’s mother’s legs)’ (new_mother_251214 109-10, 269.310 277.160)

6.3.1.2 Intransitive directional verbs

There are 17 intransitive stems attested in the V_2 slot of directional complex verbs, which are listed in Table 6.5. The stems *njolanga* ‘go over’ and *viri* ‘ascend (vertically)’ cannot occur as main verbs in simplex predicates.

directional stem	gloss	orientation
<i>mena</i>	‘come’	(deictic) goal
<i>mwandi</i>	‘go straight’	goal
<i>nja</i>	‘go down, go (to the southeast)’	goal
<i>njogha</i>	‘go back, return’	goal
<i>ru</i>	‘go in, enter (enclosed container)’	goal
<i>voro</i>	‘go up, go (to the northwest)’	goal
<i>vutha</i>	‘arrive’	goal
<i>viva/vuva</i>	‘go first’	goal
<i>njaniya</i>	‘go down’	source
<i>ranggi</i>	‘go out, exit (enclosed container)’	source
<i>ri</i>	‘go’	source
<i>viri</i>	‘ascend (vertically)’	source
<i>nggalai</i>	‘go around’	path
<i>goraun</i>	‘go around’	path
<i>njolanga</i>	‘go across’	path
<i>valawe</i>	‘go across (water)’	path
<i>yere</i>	‘go past/by’	path

Table 6.5 Intransitive directional verbs in directional complex verbs

The orientation of the transitive verbs discussed above can be observed in the semantics of the object argument. What is described here as the orientation of the intransitive directional verbs can be observed by the default reading of locational adjuncts (which is however defeasible, as discussed below). Consider the two PPs in (28) with the general preposition *e* ‘to, from, with’: while the PP following the source-oriented directional *ri* ‘go (from)’ has a source reading ‘*from* in the garden’, the PP following the goal-oriented verb *njogha* ‘go back’ is interpreted as a goal ‘*to* the village’.

- (28) *methi=ri e uma tine thi=njogha e ghemba*
 3PL.IMM.PST=go(from) PREP garden inside 3PL=go.back PREP village
 ‘they went from in the garden (and) go back to the village’ (crab_girl_081115 047-8)

As mentioned, the verbs directional orientation is manifested in the default interpretation of the locational adjuncts. This default interpretation is defeasible, as evidenced by tokens in which a source-oriented directional stem occurs with an adjunct that has a goal reading (and vice versa). Compare the two sentences in (29) with the source-oriented directional *ranggi* ‘go out, exit’, which specifies motion out of an enclosed space. In (29a), the PP *e thiyo* has the reading ‘from the jail’, where the PP denotes the enclosed space. However, in (29b) the combination of the verb and the PP has the reading of ‘out of an enclosed space *and towards a goal*’. It is world knowledge and the context of the utterance which clarify that a reading of ‘exit your father’ is not felicitous.

- (29) a. *va* *ma* *i=ranggi* *e* *thiyo*
 REM.PST already 3SG=go.out PREP rope/jail
 ‘he already went out from the jail’ (fp_stimuli_191015_02 072)
- b. “*thonggo* *ne* *ra=ranggi* *we=ya* *rama-n* *rama-n*
 if FUT 1INCL=go.out PREP=YA father-2SG.POSS father-2SG.POSS
ne *i=mararu=inda*”
 FUT 3SG=be.afraid=1INCL
 “if we go out (of here) to your father, your father will be afraid of us”
 (couples_story_101214 030-1, 91.838 96.680)

The majority of the directional motion verbs in Sudest are goal-oriented, expressing motion in a direction. Such asymmetrical patterning that preferences goals was first noted by Ikegami (1987), and has been reported as widespread cross-linguistically in motion and caused motion events (e.g., Arnold, 2008; Lakusta & Landau, 2005; Lakusta et al. 2007; Regier & Zheng, 2007; Narasimhan et al. 2012).

The remainder of this section describes complex verbs with each of the intransitive directional stems.

6.3.1.2.1 *Ru* ‘go in’ and *ranggi* ‘go out’

The intransitive directional verbs *ru* ‘go in’ and *ranggi* ‘go out’ encode motion into and out of an enclosed space respectively. When describing motion on a geographic scale, such as when travelling between islands, *ru* ‘go in’ is used to describe motion towards land and *ranggi* is used to describe motion away from land. Attested complex verbs with an intransitive V_1 and one of the two directional verbs are presented in Table 6.6.

V_1 - V_2	V_1 gloss	combined meaning	transitivity	tokens
<i>longga-ru</i>	‘walk’	‘walk in’	INTR-INTR	1
<i>raka-ru</i>	‘go (PL)’	‘go in’	INTR-INTR	3
<i>ruku-ru</i>	‘run’	‘run in’	INTR-INTR	1
<i>raka-ranggi</i>	‘go (PL)’	‘go out (seaward)’	INTR-INTR	8
<i>ruku-ranggi</i>	‘run’	‘run out’	INTR-INTR	1
<i>kela-ranggi</i>	‘peep’	‘peep outside/ outwards’	INTR-INTR	2

 Table 6.6 Directional complex verbs with *ranggi* ‘go out’ and *ru* ‘go in’

Examples (30) to (35) show *ru* ‘go in’ and *ranggi* ‘go out’ in intransitive complex verbs. In (30) and (31), *ru* ‘go in’ occurs with manner of motion verbs to indicate directionality into a house.

- (30) *amba me=ruku-ru nunggo mbowo ve=la-yawe=va*
 then 3SG.IMM.PST=run-go.in perhaps still? 3SG.INT=and.go-swing
lolo
 person
 ‘then she rushed/ran in (to her house), perhaps to swing the person (before returning)’
 [context: a speaker returned to her house next door during recording to settle her infant
 who was sleeping in a hammock] (c_031116 043-4, 91.160 95.940)

- (31) *i=longga-ru e nggolo*
 3SG=walk-go.in PREP house
 ‘she walks into the house’ (put_stimuli_201015_01 038-39, 289.110 293.350)

In (32) and (33), the V_2 stems indicate the directionality of animals entering and exiting their holes.

- (32) *bwarogi=ma kero methi=raka-ru e le-nji*
 fish=DET already 3PL=go.PL-go.in PREP POSS.CLF2-3PL.POSS
doda=ma
 hole-DEM
 ‘the fish had already gone into their holes’
 (mandumbunga_061215 065-6, 180.890 185.645)

- (33) *teo=ma i=ruku-ranggi*
 rat=DET 3SG=run-go.out
 ‘the rat ran out (from a hole)’ (frogstory_161214 058, 145.292 146.800)

The directionality indicated by *ranggi* ‘go out’ in (34) is on the global scale, and here encodes movement out from the coast, indicated by the addressee proximal deictic *=na* ‘there’ in the verb complex, towards the shallow reef area *e njighi* ‘to the sea’.

- (34) *thi=raka-ranggi=wo=na* *e* *njighi* *e*
 3PL=go.PL-go.out=thither=ADDR.PROX PREP salt.water PREP
manggomanggo=ko
 low.tide=DIST
 ‘they went out from there to the sea at low tide (i.e., onto the exposed reef)’
 (chicken_story_181015 008-9, 23.888 28.960)

In (35), the directionality of the construction pertains to the fictive motion of the subject’s gaze looking out from a doorway.

- (35) *i=ro-kela-ranggi* *e* *mbwanganggila=ke*
 3SG=stay.and-peep-go.out PREP doorway=SPKR.PROX
 ‘he stayed and peeped out the doorway’
 (mandumbunga_02_181016 497-98, 1253.183 1261.163)

Table 6.7 shows the attested complex verbs with a monotransitive V_1 and one of the two directional verbs. The majority of the monotransitive directional complex verbs express caused motion events. *Ranggi* ‘go out’ is also used in a number of constructions that describe bodily processes.

V_1 - V_2	V_1 gloss	combined meaning	transitivity	tokens
GET- <i>ru</i>	‘get’	‘take in’	TR-INTR	19
<i>gudu-ru</i>	‘fetch (water)’	‘fetch in (water)’	TR-INTR	1
<i>lawe-ru</i>	‘catch’	‘catch and take in’	TR-INTR	1
<i>vangu-ru</i>	‘accompany, lead’	‘lead in’	TR-INTR	4
<i>vanja-ru</i>	‘unload’	‘unload into’	TR-INTR	1
GET- <i>ranggi</i>	‘GET’	‘take out’	TR-INTR	59
<i>gita-ranggi</i>	‘pull’	‘pull out’	TR-INTR	1
<i>linggi-ranggi</i>	‘pour’	‘pour out’	TR-INTR	1
<i>vewo-ranggi</i>	‘push’	‘push out’	TR-INTR	3
<i>tawoi-ranggi</i>	‘shit (diarrhoea)’	‘shit out (diarrhoea)’	TR-INTR	1
<i>uthighe-ranggi</i>	‘shit’	‘shit out’	TR-INTR	2
<i>ghaluwo-ranggi</i>	‘sputter, spew (liquid)’	‘sputter out’	TR-INTR	1

Table 6.7 Directional complex verbs with *ranggi* ‘go out’ and *ru* ‘go in’

Examples (36) to (44) show the stems *ru* ‘go in’ and *ranggi* ‘go out’ with transitive V_1 stems. In (36) and (37) items are being removed from containers.

- (36) *vali nima-e* *i=gita-ranggi* *e* *ghamba-e=ma*
 side hand-3SG.POSS 3SG=pull-go.out PREP place-3SG.POSS=DET
 ‘one hand pulls it (candle) out from its place (candlestick)’
 (put_stimuli_231015 031-2, 267.394 274.368)

- (37) *lolo regha i=wo-ranggi=ya vari e mbwa tine*
 person one 3SG=GET.SG.RIGD-go.out=YA stone PREP water inside
ina-Ø e bilikan
 location-3SG.POSS PREP pot
 ‘a person takes out a stone from the water in a pot’
 (put_stimuli_191015_01_01 174, 697.336 701.762)

When CLFVs combine with directional stems the resulting complex verb can express a table-top scale¹⁵⁵ event, as in (37) above, where the subject remains stationary while taking a stone out of a pot. Directional complex verbs with a CLFVs can also express a caused motion event on a larger scale, as in (38), where the subject moves along with the object out of the garden.

- (38) *kero thi=bigi-ranggi=ya ghaningga=ke e uma=ko*
 already 3PL=GET.PL.CNTR-go.out=YA food=SPKR.PROX PREP garden=DIST
tine
 inside
 ‘they are already taking the food out from the garden’
 (fp_stimuli_201015_01 138, 556.430 559.109)

There is no formal distinction by which the two types of caused motion events can be differentiated. This means that they can only be distinguished through contextual knowledge. Another example of this is shown in the two sentences presented in (39). The two sentences describe two nearly identical stimuli videos, where a young woman in (39a) places a suitcase just inside a doorway while remaining stationary on the outside of it, and in (39b), the young woman walks through the doorway while holding the suitcase.

- (39) a. *wevo=ma i=thin-ru le-Ø bogisi*
 young.woman=DET 3SG=GETSG.SG.CNTR-go.in POSS.CLF2-3SG.POSS box
e mbwanganggila tine
 PREP doorway inside
 ‘the young woman puts her box in(to) the doorway’
 (put_stimuli_191015_02_02 103-5)
- b. *wevo=ma i=thin=a le-Ø bogisi*
 woman=DET 3SG=GET.SG.CNTR=YA POSS.CLF2-3SG.POSS box
ve=thin-ru e nggolo mbwanganggila tine
 3SG.INT=GET.SG.CNTR-go.in PREP house doorway inside
 ‘the girl gets the box (and) carries/takes it into the house’s doorway’
 (put_stimuli_191015_02_02 054-5)

¹⁵⁵ Events that take place in a table-top scale space are ones like passing the salt and pepper that take place in a small space around the size of a table (cf. Pederson et al. 1998). For handling events, the subject generally remains stationary while manipulating an object.

The tokens in (40) and (41) are two descriptions of the same scene in which a man is lead into a jail cell by the police. Both sentences use a complex verb with a transitive *V*₁ and *ru* ‘go in’ in *V*₂. In (41), the goal adjunct =*na* ‘ADDR.PROX’ cliticises to the end of the VC.

- (40) *thi=vangu-ru=wo=∅* *ina-∅* *e* *sel* *tine*
 3PL=lead-go.in=thither=3SG location-3SG.POSS PREP cell inside
 ‘they lead him into a cell’ (fp_stimuli_191015_05 452, 1003.980 1006.060)
- (41) *ma* *thi=lawe-ru=wo=na*
 already 3PL=catch-go.in=thither=ADDR.PROX
 ‘they took him in there (into a cell)’ (fp_stimuli_191015_05 447, 996.167 997.570)

The complex verb *vanja-ru* ‘unload-go in’ in (42) describes the activity of unloading cargo onto land.

- (42) *thi=ya-stak* *e* *garowo=ko* *mara* [...] *na* *thi=vanja-ru=wo*
 3PL=all-gather PREP shore=DIST eye and 3PL=unload-go.in=thither
yawudo=ko
 thing=DIST
 ‘they all gathered on the shore of the inlet [...] and they unloaded those things in (to the inlet)’
 (bwaindiya_151115 036-9, 114.040 122.351)

The directional *ranggi* ‘go out’ is also attested in multiple complex verbs that describe bodily functions that involve various substances leaving the body, including sputtering out liquid (43) and defecating various objects or substances as in (44) and (45).

- (43) *ma* *i=gha-ghaluwo-ranggi=engge* *njighi*
 already 3SG=RED-sputter-go.out=just salt.water
 ‘she was already sputtering out seawater’
 (chicken_story_181015 042-3, 95.570 99.480)
- (44) *i=uthighe-ranggi=ya* *ndave-ndavari*
 3SG-shit-go.out=YA RED-shell.money
 ‘she shits out shell money’ (snake_passage_061215 054-5, 127.000 129.020)
- (45) *nuwa-nji* *iya* *thi=tawoi-ranggi=ya* *gamoi-nji* *une*
 desire-3PL.POSS DEM 3PL=shit(diarrhoea)-go.out=YA stomach-3PL.POSS fruit
 ‘they want to purge the contents of their stomachs (lit. shit out their stomachs’ fruit)’
 (kula_exchange_081215 027, 85.790 89.210)

The final attested complex verb combines the monotransitive verb *linggi* ‘pour’ with *ranggi* ‘go out’ to mean ‘pour out’. Examples of this are presented in (46) and (47).

- (46) *amala=ma i=linggi-ranggi=ya mbwa e uye=ko*
 man=DET 3SG=pour-go.out=YA water PREP pot=DIST
 ‘the man pours the water out of the pot’ (e_080818)

- (47) *ela=ke i=linggi-ranggi=ya gamagai le=nji*
 woman=SPKR.PROX 3SG=pour-go.out=YA children POSS.CLF2=3PL.POSS
ghe=mwadi-mwadiwo e pulo vwata
 INS-RED-play PREP floor top
 ‘the woman pours out the children’s toys onto the floor’
 (put_stimuli_201015_02 039-42, 257.650 264.085)

While the complex verb in (46) occurs with the expected source adjunct, the complex verb in (47) occurs with a goal adjunct rather than a source adjunct. This is because a source interpretation of ‘pouring out the children’s toys *from* on top of the floor’ is infelicitous.

6.3.1.2.2 *Nja* ‘go down’ and *voro* ‘go up’

The intransitive directional verbs *nja* ‘go down’ and *voro* ‘go up’ express upwards and downwards motion. Sudest has a space system that is typical of many Oceanic languages (Ross 2003). On a geographic scale, the two directional verbs have secondary, horizontal senses. In these contexts, *nja* means ‘go (to the northwest)’, and *voro* means ‘go (to the southeast)’ when moving both on land or at sea (or in the air). Both directional stems are goal-oriented, and nearly always take an adjunct with the semantic role of goal. The attested intransitive complex verbs with the two stems are given in Table 6.8.

V ₁	V ₁ gloss	combined meaning	transitivity	tokens
<i>ruku-nja</i>	‘run’	‘run down’	INTR-INTR	1
<i>ghe-nja</i>	‘marry’	‘settle down’	INTR-INTR	7
<i>mara-nja</i>	‘look’	‘look down’	INTR-INTR	1
<i>mun-nja</i>	‘dive’	dive	INTR-INTR	12
<i>ra-nja</i>	‘burn’	‘burn down’	INTR-INTR	1
<i>raka-voro</i>	‘go (PL)’	‘go up’	INTR-INTR	8
<i>ruku-voro</i>	‘run’	‘run up’	INTR-INTR	3
<i>yo-voro</i>	‘fly’	‘fly up (horizontal/up wind)’	INTR-INTR	2
<i>mara-voro</i>	‘look’	‘look up’	INTR-INTR	2
<i>mbuthu-voro</i>	‘grow (plants)’	‘grow up’	INTR-INTR	1
<i>mun-voro</i>	‘dive’	‘swim up (to surface)’	INTR-INTR	1
<i>righe-voro</i>	‘climb (hill)’	‘climb up (a hill)’	INTR-INTR	1

Table 6.8 Directional complex verbs with *nja* ‘go down’ *voro* ‘go up’ and intransitive V₁

Examples (48) and (49) present tokens of *nja* ‘go down’ and *voro* ‘go up’ occurring with the intransitive V₁ stem *mun* ‘dive, move underwater’.

- (48) *i=mun-nja* *e* *mbwa* *tine*
 3SG=dive-go.down PREP water inside
 ‘he dived down into the water’ (frogstory_161214 098, 252.570 256.611)
- (49) *ela=ko* *maa* *ma* *i=mun-voro*
 woman=DIST NEG already 3SG=dive-go.up
 ‘the woman did not swim up (to the surface) (lit. dive up)’
 (mandumbunga_02_181016 445, 1125.377 1127.2751)

The examples in (50) to (52) show the two stems combining with manner of motion stems *ruku* ‘run’ and *yo* ‘fly’.

- (50) *i=ruku-nja*
 3SG=run-go.down
 ‘he ran down’ (frogstory_161214 014, 36.810 38.030)
- (51) *i=ruku-voro* *gha=niye* *Vanamawo* *point*
 3SG=run-go.up LOC=SP place.name top.of.hill
 ‘he ran up to that place, the top of Vanamawo’
 (bwaindiya_151115 111-2, 289.671 292.834)
- (52) *kubwana* *vouta* *i=yo-voro*
 morning.star biggest 3SG=fly-go.up
 ‘the morning start comes/flyes up’ (chicken_story_181015 047, 108.329 111.860)

The directional verb in (53) indicates the upwards growth of a plant. In (54), the complex verb *ra-nja* ‘burn-go down’ is comparable to its English translation ‘burn down’.

- (53) *i=mbuthu-voro=ko*
 3PL=grow-go.up=DIST
 ‘it (a coconut tree) grows upwards’ (c_031116 282, 520.480 521.667)
- (54) *i=ra-vao* *i=ra-nja*
 3SG=burn-COMPL 3SG=burn-go.down
 ‘it (a fire) burns out, it burns down’ (stone_cooking_251015 055, 145.580 149.730)

In complex verbs with *mara* ‘look’, the V₂ stems indicate fictive rather than literal motion, encoding the direction of the subject’s gaze: *mara-nja* ‘look down’ in (55), and *mara-voro* ‘look up’ in (56).

- (55) *mbamba-ra i=dobu na i=mara-nja na i=uthuwe*
 NUM.CLF-one 3SG=fall and 3SG=look-go.down and 3SG=see
 ‘one (book) falls down, he looks down and he sees it’
 (put_stimuli_231015 046, 372.190 375.008)

- (56) *ko amba thi=mara-voro e umbwa=ko ndamwa*
 COORD then 3PL=look-go.down PREP tree=DIST leaf
 ‘so then they both looked up into the tree leaves’
 (mandumbunga_02_181016 194, 483.115 486.193)

The directional verb *nja* ‘go down’ also combines with the intransitive verb *ghe* ‘marry’ in an idiomatic complex verb similar to the English ‘settle down’, which is used to describe a newly married couple:

- (57) *thi=ghe-nja*
 3SG=marry-go.down
 ‘they settle down (lit. marry down)’ (fp_stimuli_191015_03 149, 404.170 405.370)

Table 6.9 shows the attested directional complex verbs with *nja* ‘go down’ or *voro* ‘go up’ and a monotransitive *V*₁.

<i>V</i> ₁	<i>V</i> ₁ gloss	combined meaning	transitivity	tokens
GET- <i>nja</i>	‘get’	‘take down (hill/stairs/wind)’	TR-INTR	3
<i>kewe-voro</i>	‘carry (w stick)’	‘carry up (hill/upwind, using a stick)’	TR-INTR	1
<i>vangu-voro</i>	‘lead’	‘accompany/ lead up’	TR-INTR	1
GET- <i>voro</i>	‘get’	‘take up (hill/wind/stairs)’	TR-INTR	9

Table 6.9 Directional complex verbs with *nja* ‘go down’ *voro* ‘go up’ and transitive *V*₂

The monotransitive complex verbs examples presented in (58) to (61). They all describe caused motion events where the subject accompanies the object that is being moved.

- (58) *i=kewe-kewe-voro=ma=na yambiya*
 3SG=RED-carry(w.stick)-go.up=hither=ADDR.PROX sago
 ‘he is carrying the sago up here’ (marriage_111015 030, 92.980 98.150)

- (59) *thi=vangu-voro=ma=∅*
 3PL=lead-go.up=hither=3SG
 ‘they took him up (here)’ (mandumbunga_02_181016 280, 705.949 707.949)

- (60) *nggama yanga iya=va ve=thin-voro thari*
 child handsome DEM=REM.PST 3SG.INT=GET.SG.CNTR-voro dance
Nju
 place.name
 ‘the handsome child was the one to take the dance up to Nju’
 (feast_of_the_fish_271015 028-31, 69.596 77.340)

- (61) *ghena=ko* *amala=ko* *i=wo-nja=∅*
 lime.stick=DIST man=DIST 3SG=GET.SG.RIGD-go.down=3SG
 ‘the ceremonial limestick, the man took it down (to the village)’
 (bwaindiya_151115 040-1, 122.351 126.990)

There is also a second group of complex verbs with a monotransitive V_1 and *nja* ‘go down’ or *voro* ‘go up’, presented in Table 6.10. They are differentiated from the first group by the presence of the transitive suffix =*nga* on the V_2 (§4.4.1.1). No other directional verbs take the transitive suffix like this in complex verbs.

V_1	V_1 gloss	combined meaning	transitivity	tokens
GET- <i>njo=nga</i> ¹⁵⁶	‘get’	‘take down’	TR-TR	10
<i>tabe-njo=nja</i>	‘open’	‘take down’	TR-TR	1
<i>tara-njo=nga</i>	‘pour’	‘pour out and down’	TR-TR	1
<i>yaru-njo=nga</i>	‘gather’	‘gather down’	TR-TR	1
GET- <i>voro=nga</i>	‘get’	‘put up’	TR-TR	2
<i>thuwobwadi-voro=nga</i>	‘grab/tackle’	‘pull up’	TR-TR	1

Table 6.10 Directional complex verbs with transitivity *nja* ‘go down’ *voro* ‘go up’ and transitive V_1

The presence or absence of the transitivity enclitic in complex verbs with *nja* ‘go down’ and *voro* ‘go up’ formally distinguishes ‘table-top’ caused motion events – where an object is moved while the subject remains stationary – from caused motion events, where the subject moves along with the object. This can be seen in the comparison of the examples in (154) and (63) (below) with a CLFV in V_1 position and the transitive enclitic, with the constructions shown above in (61) and (60), also with a CLFV but without the transitive enclitic. Where the examples below describe putting a cup down on a table and putting a box on a bookshelf, the previous examples describe taking objects ‘up’ and ‘down’ between villages.

- (62) *elisari=ke* *i=thin-njo=nga* *ndeghi=ke* *e*
 old.woman=SPKR.PROX 3SG=GET.SG.CNTR-go.down=TR cup=SPKR.PROX PREP
ghamba *ghaningga=ko* *vwata-∅*
 place food=DIST top-3SG.POSS
 ‘the old woman puts the cup down on top of the table (lit. food’s place)’
 (put_stimuli_201015_01 160-2, 908.160 913.280)

¹⁵⁶ The open central vowel [a] in *nja* becomes the close-mid back [o] before the transitive suffix =*nga*, between the palatal and velar prenasalised stops.

- (63) *amala=ma i=thin-voro=nga bogisi e buku=ma*
 man=DET 3SG=GET.SG.CNTR-go.up=TR box PREP book=DET
ghamba-e
 place-3SG.POSS
 ‘the man puts the box on the bookshelf’
 (put_stimuli_191015_02_02 027-9, 205.478 214.176)

This can also be seen in the other V_1 verbs that occur with the transitivised directional verbs. In (64), the complex verb with *thuwobwadi* ‘grab’ describes an action in which a man pulls a girl (up) out of the water while remaining stationary in his canoe. Example (65) describes the action of taking down a picture from a wall. These can be contrasted with the verbs that do not take the transitive enclitic *kewe* ‘carry (on stick)’ and *vangu* ‘lead’, shown above in (58) and (59) respectively, that entail the accompaniment of the subject.

- (64) *nima-e i=nja e njighe=ko tine na ma*
 hand-3SG.POSS 3SG=go.down PREP salt.water=DIST inside and already
i=thuwobwadi-voro=nga=∅
 3SG=grab/tackle-go.up=TR=3SG
 ‘his hand reached down into the water and pulled (lit. grabbed) her up’
 (mandumbunga_02_181016 446-8, 1127.275 1134.269)
- (65) *wevo=ma i=mwana-tabe-njo=nga=va piktur=ma*
 young.woman=DET 3SG=w.hands-open-go.down=TR=REP picture=DET
 ‘the woman takes (lit. opens) down the picture again’ (context: a person takes down a photo that is stuck on a wall)’
 (put_stimuli_201015_02 153-5, 915.250 919.588)

The combination of a CLFV and the transitivised directional *nja* ‘go down’ is used when describing the removal of clothing or other objects from on one’s person, as in (66) and (67), or taking it off someone else, as in (68). When expressing the sense of ‘take off’, the complex verb always occurs with a source adjunct expressing the body part from which the object was taken, as in (67) and (68), rather than an adjunct expressing a goal.

- (66) *i=nga* “*u=li-njo=nga* *gha-n*
 3SG=say 2SG=GET.SG.FLEX-go.down=TR POSS.CLF1-2SG.POSS
kwaliko=na”
 cloth/clothing=ADDR.PROX
 ‘she said “take off your clothing”’
 (mandumbunga_02_181016 428, 1086.561 1088.602)
- (67) *wevo=ma* [...] *nima-e* *i=voro* *na*
 young.woman=DET hand-3SG.POSS 3SG=go.up and
i=mwana-li-njo=nga *umbali-ye=ma* *ghae*
 3SG=w.hand-GET.SG.FLEX-g.down=TR head-3SG.POSS=DET cover
 ‘the young woman’s [...] hand goes up and she takes off (lit. down) her hat (lit. head’s cover)’
 (put_stimuli_231015 033-4, 283.065 291.379)
- (68) *ela=ma* *regha* *i=li-njo=nga* *flowa* *wevo=ma*
 woman=DET one 3SG=GET.SG.FLEX-g.down=TR flower young.woman=DET
e *umbali-ye*
 PREP head/hair-3SG.POSS
 ‘the woman takes the flower down from the girl’s hair’
 (put_stimuli_201015_01 020-1, 150.940 155.080)

6.3.1.2.3 *Mena* ‘come’ and *vutha* ‘arrive’

The two directional verbs *mena* ‘come’ and *vutha* ‘arrive’ both specify motion to a certain point. Semantically, *mena* ‘come’ can be distinguished for being the only deictic directional verb specifying motion towards the deictic centre, which is often the speaker. The attested directional constructions with *mena* ‘come’ and *vutha* ‘arrive’ and intransitive and monotransitive V_1 verbs are given in Table 6.11.

V_1 - V_2	V_1 gloss	combined meaning	transitivity	tokens
<i>gae-mena</i>	‘swim’	‘swim (towards deictic centre)’	INTR-INTR	1
<i>longga-vutha</i>	‘walk’	‘walk and arrive, arrive walking/on foot’	INTR-INTR	1
<i>ruku-vutha</i>	‘run’	‘run and arrive’, ‘arrive running’	INTR-INTR	3
<i>yo-vutha</i>	‘fly’	‘fly and arrive, arrive flying’	INTR-INTR	2
GET- <i>mena</i>	‘get’	‘bring’	TR-INTR	3
<i>vewo-mena</i>	‘push’	‘push’	TR-INTR	2
GET- <i>vutha</i>	‘get’	‘bring (typically + human obj)’	TR-INTR	6

Table 6.11 Directional complex verbs with *mena* ‘come’ and *vutha* ‘arrive’

Examples (69) to (72) show the two verbs in constructions with intransitive manner of motion V_1 s in which they signal directed motion towards an end point.

- (69) *ma thi=gae-mena nggora umbwa regha va i=roroghagha*
 already 3PL=swim-come like tree one REM.PST 3SG=wait
 ‘they come swimming (to)/swim towards like a log that was waiting’
 (frogstory_161214 103-4, 272.400)
- (70) *i=yo-yo eee i=yo-vutha*
 3SG=RED-fly EMPH 3SG=fly-arrive
 ‘he flew and flew; he arrived flying (at the protagonist’s home)’
 (bush_betelnut_011115 117, 285.120 287.571)
- (71) *mbugha-mbugha=ko tanuwaga-nji i=ruku-vutha*
 RED-dog=DIST owner-3PL.POSS 3SG=run-arrive
 ‘the dogs’ owner arrives running (at the place where their dogs have cornered a pig)’
 (hunting_261214 032-3, 67.930 73.370)
- (72) *gido nasiye i=ruku-vutha we=∅*
 sickness small 3SG=run-arrive PREP=3SG
 ‘small illnesses (will) come/arrive to them (a small child)’
 (new_mother_251214 099, 238.660 242.510)

Examples (73) to (75) show the two directional verbs in constructions with transitive V_1 verbs. While both GET-*mena* and GET-*vutha* are frequently translated as ‘bring’, only complex verbs with *mena* ‘come’ express deictic motion.

- (73) *tene u=mwana-mwana-vewo-mena=∅*
 later 2SG=RED-w.hands-push-come=3SG
 ‘later, keep pushing it (to me) with your hands’
 (fp_stimuli_1910_0315 079, 235.109 236.670)
- (74) *thambwa bigi-bigi menda=va a=mban-mena*
 what RED-thing yesterday=REM.PST 1SG=GET.PL.RIGD-come
iya=ke ina-∅ ghe=ke
 DEM=SPKR.PROX location-3SG.POSS LOC=SPKR.PROX
 ‘those things that I brought here’ (child_and_giant_201015 115, 305.500 308.712)
- (75) *i=wo-vutha nari-ye=ma*
 3SG=GET.SG.RIGD-arrive son-3SG.POSS=DET
 ‘she brought her son’ (couples_story_101214 042, 117.110 119.340)

6.3.1.2.4 *Njogha* ‘go back’

The directional verb *njogha* ‘go back, return’ expresses motion on a return path towards a place (or person) where the moving entity was previously located (e.g., ‘run back’, ‘put back’). In complex verbs, it can also specify the return of the shared argument to a previous state (e.g., ‘tie back up’, ‘bend back’). The directional only expresses repetition of an action insofar as the action is repeated

in order to return to a previous location/state (a repeated action is signalled by the repetition enclitic =*va* ‘REP, §4.4.7). The complex verbs with *njogha* ‘go back, return’ are listed in Table 6.12.

V ₁ -V ₂	V ₁ gloss	combined meaning	transitivity	tokens
<i>dage-njogha</i>	‘speak’	‘speak back, answer’	INTR-INTR	2
<i>kula-njogha</i>	‘call’	‘call back (to s.o. behind)’	INTR-INTR	2
<i>raka-njogha</i>	‘go (PL)’	‘go back’	INTR-INTR	4
GET- <i>njogha</i>	‘get’	‘put/take back’	TR-INTR	20
<i>linggi-njogha</i>	‘pour’	‘pour back’	TR-INTR	1
<i>nggari-njogha</i>	‘tie’	‘tie back up’	TR-INTR	1
<i>njimbo-njogha</i>	‘put on, wear’	‘put back on (clothing)’	TR-INTR	1
<i>renuwanga-njogha</i>	‘think about’	‘think back remember’	TR-INTR	24
<i>tabe-njogha</i>	‘take off/open’	‘take back off’	TR-INTR	1
<i>variye-njogha</i>	‘send’	‘send back’	TR-INTR	1
<i>vathawo-njogha</i>	‘bend’	‘bend back’	TR-INTR	EE/ES
<i>vwowi -njogha</i>	‘plug’	‘plug back up’	TR-INTR	1

Table 6.12 Directional complex verbs with *njogha* ‘go back’

The sentences in (76) to (78) show *njogha* with intransitive V₁ verbs. In (77) and (78), the directional *njogha* ‘go back’ indicates fictive motion towards the hearer ‘answer (someone)’ and ‘call back (to someone)’.

- (76) *thi=raka-njogha e ghemba*
 3PL=go.PL-go.back PREP village
 ‘they ran back to the village’ (child_and_giant_121015, 61.894 64.050)

- (77) *i=dage-njogha we=ya tina-e*
 3SG=speak-go.back PREP=YA mother-3SG.POSS
 ‘she answered (spoke back) to her mother’ (crab_girl_081115 075, 182.311 184.350)

- (78) *yengiyenggi i=kula-njogha we ighai-ye wondeya*
 monitor.lizard 3SG=call-go.back PREP cousin-3SG.POSS possum
 ‘Monitor Lizard calls back to Possum’
 (lizard_and_possum_121015 031-2, 87.290 90.632)

The complex verbs in (79) to (81) have a transitive V₁. In (79) and (80), the objects are moved back to a previous location, whereas in (81), the item is returned to a previous state, i.e., from being tied up, to untied, to retied. The PP in (80) describes an instrument but in other contexts could describe a goal.

- (79) *wevo=ko* *i=wo* *kunumwana* *nggwe-nggwe* *na*
 young.woman=DIST 3SG=GET.SG.RIGD banana RED-be.ripe and
i=simo=ya *njimwa-e* *na* *i=wo-njogha=Ø* *e*
 3SG=peel=YA skin-3SG.POSS and 3SG=GET.SG.RIGD-go.back=3SG PREP
pilet=ko
 plate=DIST
 ‘the woman gets a ripe banana (from a plate) and peels the skin and puts it (the banana)
 back on the plate (cb_stimuli_051016_01 148-9, 1682.535 1690.876)
- (80) *ela=ma* *i=linggi-njogha* *mbwa* *e* *ndeghi=ma*
 woman=DET 3SG=pour-go.back water PREP cup=DET
 ‘the woman poured water back with the cup’
 (put_stimuli_191015_02_02 097-98, 688.694 693.047)
- (81) *i=nggari-njogha=va* *le* *nuwo=ko*
 3SG=tie-go.back=REP POSS.CCL2 knot=DIST
 ‘he tied the knot back up again’
 (mandumbunga_02_181016 530-1, 1331.537 1336.278)

6.3.1.2.5 *Mwandi* ‘go straight’

The verb *mwandi* ‘go straight’ expresses motion in a direction along a straight trajectory. It occurs in a single intransitive complex verb in the corpus where it combines with the intransitive V₁ *ruku* ‘run’, shown in (82).

- (82) *numombwalambwala=ma* *i=ruku-mwandi* *i=wa* *ve=yaku* *e*
 non-witch=DET 3SG=run-go.straight 3SG=go 3SG.INT=stay PREP
buruburu *ma* *e* *ghamba* *regha=va*
 sky already PREP place one=REP
 ‘the non-witch ran/shot straight (up), she went to stay/live in the sky, already to another
 place’
 (bush_betelnut_011115 046-8, 108.420 115.480)

6.3.1.2.6 *Viva/vuva* ‘go first’

The directional verb *viva/vuva* ‘go first/ahead, precede’ indicates motion in a direction with the subject of the independent verb, or the shared argument of a complex verb precedes someone or something that follows behind, either immediately or sometime later. Table 6.13 shows the two directional verbs attested with *viva/vuva* ‘go first’.

V ₁ -V ₂	V ₁ gloss	combined meaning	transitivity	tokens
<i>raka-vuva</i>	‘go (PL)’	‘go first’	INTR-INTR	1
GET- <i>vuva</i>	‘get’	‘take/carry in front’	TR-INTR	1

Table 6.13 Directional complex verbs with *viva/vuva* ‘go first’

In the intransitive complex verb in (83), a mother sends her children home ahead of her.

- (83) *a=variye=nggi=ya lo gharighari na thi=raka-vuva*
 1SG=send=3PL=YA POSS.CLF2.1SG people and 3PL=go.PL-go.first
*thotho=ko*¹⁵⁷
 home=DIST
 ‘I send my children (lit. my people) and they go home first’
 (stone_cooking_251015 024-5, 68.840 71.470)

In the transitive complex verbs with a CLFV in V_1 in (84) and (85), the subject is taking the object somewhere ahead of someone else. In (84), the speaker is going ahead of others with a basket to garden. The example in (85) describes precautions a pregnant person should take, including taking a burning torch to the toilet ‘first’ when it is light so that later in the dark she will be able to find her way safely.

- (84) *a=thin-vuva nambo=ke e uma=ko tine*
 1SG=GET.SG.CNTR-go.first basket=SPKR.PROX PREP garden=DIST inside
 (85) *i=yengge-vuva=∅ e kamwathi=ko amba muyai*
 3SG=GET.SG.FIRE-go.first=3SG PREP path-DIST then later
i=longga gougou bode
 3SG=walk night down
 ‘she takes it (a burning torch) down to the toilet first then later in the night she walks down’
 (new_mother_251214 036-8, 86.720 95.610)

6.3.1.2.7 *Njaniya* ‘go down (from)’

The directional verb *njaniya* ‘go down (from)’ expresses downward motion from a direction. The source-anchored directionality of the event can again be observed in the default reading of locational adjuncts. The only attested multi-verb construction with *njaniya* ‘go down (from)’ takes a CLFV in V_1 position and means ‘take down, remove (from)’, as exemplified in (86) and (87). All tokens describe table-top space caused motion events where the subject remains stationary while moving the shared argument. It is unclear whether the construction can also be used when describing a caused motion event involving the subject moving along with the object.

¹⁵⁷ *Thotho* ‘home’ along with place names do not take the locative/general preposition *e* when occurring as an adjunct.

- (86) *thi=li-njaniya* *thetheghan=ma* *galigaliya-nji* *e*
 3PL=GET.SG.FLEX-go.down animal=DET shadow-3PL.POSS PREP
dumodumo
 wall
 ‘they take the animal picture down from the wall’
 (put_stimuli_191015_02_02 051-3, 350.847 355.107)

- (87) *lolo=ke* *i=wo-njaniya* *pilet=ke* *e*
 person=SPKR.PROX 3SG=GET.SG.RIGD-go.down plate=SPKR.PROX PREP
kap=ke *vwata-e*
 cup=SPKR.PPROX top-3SG.POSS
 ‘the person takes the plate down from on top of the cup’
 (put_stimuli_201015_02 140-2, 832.140 837.307)

6.3.1.2.8 *virī* ‘move up (from)’

The directional stem *virī* ‘move up (from), rise (from)’ expresses upward vertical motion from a direction. It cannot function as a main verb¹⁵⁸ and appears to only be grammatical in complex verbs with intransitive V₁ verbs. The attested complex verbs with *virī* ‘move up (from)’ are listed in Table 6.14.

V ₁ -V ₂	V ₁ gloss	combined meaning	transitivity	tokens
<i>mun-virī</i>	‘dive, move underwater’	‘dive/swim up’	INTR-INTR	ES/SE
<i>tabo-virī</i>	‘grow’	‘grow up’	INTR-INTR	1
<i>wa-virī</i>	‘rise’	‘rise, go up’	INTR-INTR	ES/SE
<i>yo-virī</i>	‘fly’	‘fly up’	INTR-INTR	ES

Table 6.14 Directional complex verbs with *virī* ‘move up (from)’

The attested complex verbs with the directional stem are presented in (88) to (91). The complex clause *mun-virī* ‘dive-move up (from)’ or ‘dive up (from)’ contrasts with the complex verb *mun-voro* ‘dive-go up’ or ‘dive up’ presented above in (49) (§6.3.1.2.2), which expresses upward motion with an implied goal.

¹⁵⁸ There is an intransitive verb *virī* ‘be born’. It is unclear whether the two stems are related.

- (88) *umoru=ma i=mun-viri e ngambuwo*
 young.man=DET 3SG=dive-move.up(vertically) PREP ocean
 ‘the man goes/dives up from the ocean (i.e., is ascending vertically up from deep water)’ (e_091215)
- (89) *mundu i=wa-viri e njamnjam*
 smoke 3SG=move- up(vertically) PREP bush
 ‘the smoke rises from the bush’ (e_091215)
- (90) *i=tabo-viri*
 3SG=grow-move.up(vertically)
 ‘(the child) grows up’ (fp_stimuli_201015_04 100, 293.620 295.086)
- (91) *ma=na i=yo-viri*
 bird=ADDR.PROX 3SG=fly-move.up(vertically)
 ‘the bird flies up’ (e_021115_01)

6.3.1.2.9 *Ri* ‘go (from)’

The directional verb *ri* ‘go (from)’ indicates motion from a direction, and in this way is a counterpart of the transitive directional *ghembe* ‘go to(wards)’ (§6.3.1.1.1). Like *njaniya* ‘go down (from)’, the verb is only attested in one complex verb with a CLFV (two tokens) and is illustrated by the two examples in (92) and (93).

- (92) *ela=ko i=thin-ri=ya nambo laghiye e ghemba*
 woman=DIST 3SG=GET.SG.CNTR-go(from)=YA basket big PREP village
 ‘the woman takes the big basket from village’ (e_280917)
- (93) *e gha-Ø vethe kure*
 PREP POSS.CLF1-3SG.POSS k.o.basket leftover.food
i=thin-ri=Ø i=thin-nja=Ø
 3SG=GET.SG.CNTR-go(from)=3SG 3SG=GET.SG.CNTR-go.down=3SG
 (the child) has a basket of pre-cooked food, (their mother) carries it away (from the village) carries it down (wind)’ (small_child_051214 035-6, 90.250 94.270)

6.3.1.2.10 *Nggalai* and *goraun* ‘go around’

The intransitive verbs *nggalai* and *goraun* ‘go around’ refer to movement along a trajectory that goes around a ground entity. The stem *goraun* is borrowed from English, although it is unclear how widely it is used. Table 6.15 shows the complex verbs in which the two directional verbs are attested.

V ₁ -V ₂	V ₁ gloss	combined meaning	transitivity	tokens
<i>yo-nggalai</i>	‘fly’	‘fly around/ circumvent by flying’	INTR-INTR	2
<i>yo-goraun</i>	‘fly’	‘fly around/ circumvent by flying’	INTR-INTR	1
<i>ruku-goraun</i>	‘run’	‘run around’	INTR-INTR	1

 Table 6.15 Directional complex verbs with *nggalai* and *goraun* ‘go around’

The two stems are only attested in intransitive complex verbs, exemplified in (94) to (96). Both *nggalai* and *goraun* combine with *yo* ‘fly’ to mean ‘fly around (s.th./s.o.)’.

- (94) *kero* *i=thuwe* *takana=ma* *i=yo-nggalai* *Tagina* *theiye*
 already 3SG=see cockatoo=DET 3SG=fly-go.around place.name village.edge
 ‘she saw the white cockatoo fly around the edge of Tagina’
 (marriage_111015 024, 71.130 75.825)

- (95) *ma=ma* *i=mena* *ma* *i=yo-yo-goraun*
 bird=DET 3SG=come bird 3SG=RED-fly-go.around
 ‘the bird comes and is flying around (the boy and dog)’
 (frogstory_161214 081, 210.180 214.400)

- (96) *thi=ruku-goraun* *e* *umbwa* *regha*
 3PL=run-go.around PREP tree one
 ‘they run around a tree’
 (frogstory_161214 096, 247.270 251.002)

6.3.1.2.11 *Valawe* ‘go across’

The verb *valawe* ‘go across’ refers to movement that goes across a ground entity. It only occurs in two directional complex verbs in the data, which are listed in Table 6.16.

V ₁ -V ₂	V ₁ gloss	combined meaning	transitivity	tokens
GET- <i>valawe</i>	‘get’	‘take across’	TR-INTR	1
<i>renuwanga-valawe</i>	‘think about’	‘forget about’	TR-INTR	1

 Table 6.16 Directional complex verbs with *valawe* ‘go across’

In (97), the directional occurs with a CLFV to describe caused motion over water.¹⁵⁹

¹⁵⁹ *Valawe* ‘go across’ is not used to describe going overland, e.g., between the north and south coasts of Vanatina. For this, the transitive directional *valangani* ‘go across’ is used (§6.3.1.1.3).

- (97) *thonggo u=njimbukiki le-n wangga*
 if 2SG=look.after POSS.CLF2-2SG.POSS boat
valikaiwa-e ne i=wo-valawe=ngge e ngambuwo
 be.possible-3SG.POSS FUT 3SG=GET.SG.RIGD-go.across=2SG PREP ocean
 ‘if you look after your boat, it is possible it will take you across the ocean’
 (canoe_021015 023-4, 52.618 58.000)

The complex verb in (98), *renuwanga-valawe* ‘think about-go across’, combines in a construction that is less obviously compositional than many of the other directional complex verbs to mean ‘forget’. In this construction, the ground entity that is moved across is the thing that is forgotten.

- (98) “*ida-n ma thela?*” *i=nga*
 name-3SG.POSS already who 3SG=say
 “*wo=la-renuwanga-valawe=Ø*”
 1EXCL=and.go-think.about-go.across=3SG
 ‘what’s your name?’ she said “we forgot it before we left/went”
 (mandumbunga_02_181016 230-1, 587.020 591.279)

6.3.1.2.12 *Yere* ‘go past’

The directional verb *yere* ‘go past/by’ specifies motion past a ground entity. It only occurs in one complex verb in the data with a CLFV (two tokens), as in (119). The example describes how menstruating women should traditionally avoid walking directly in front of men.

- (99) *ande ne wanakau thi=thin-yere=re madibe e*
 NEG1 FUT young.women 3PL=GET.SG.CNTR-go.past=NEG2 blood PREP
yamwa-nji i=boboma we=nggi=ya umo-umoru
 face/forehead-3PL.POSS 3SG=be.taboo/sacred PREP=3PL=YA RED-young.men
 ‘young woman cannot take the (menstrual) blood in front (of the men), it is taboo for the young men’
 (menstruation_081015 063-4, 182.454 194.070)

6.3.2 Handling constructions with classificatory verbs

The handling complex verbs take one of the ten CLFVs (§5.3) in V_1 position, and either a transitive verb that encodes a handling event in V_2 position, or an intransitive V_2 that express a positional event and combines with a CLFV to express an event of handling or manipulation. As noted in chapter 5, classificatory verbs appear to be unattested in any other Oceanic languages. However, verbal classifiers, including classificatory verbs cross-linguistically occur frequently in predicates expressing handling events (see e.g., Mithun 1999; Aikhenvald 2000; Kilarski 2013). The Sudest handling complex verbs can be divided into three groups based on properties and valence of the V_2 stem: underived transitive V_2 , causativised transitive V_2 , and intransitive V_2 .

The largest group of handling complex verbs take an underived transitive V_2 . The meaning of the complex verb in nearly all cases is the same as that of a simplex predicate with only the V_2 verb, albeit potentially lacking semantic detail provided by the CLFV. This is illustrated in the examples in (100) to (102) that describe three events involving the giving of a container. The clause in (100) with the simplex predicate makes no reference as to whether the container (*ghatighati* ‘coconut bottle’) is empty or filled, while the complex verbs in (101) and (102) explicitly specify the emptiness or fullness of the containers (*nambo* ‘basket’) through the use of the CLFV *li* ‘get (sg. flexible entity)’, used with an empty, flexible container, and the CLFV *thin* ‘get (sg. container-and-contents)’, used with a full container.

- (100) *ghatighati thela ne hu=mena hu=giya=Ø we=nggi?*
 coconut.bottle who FUT 2PL=come 2PL=give=3SG PREP=3PL
 ‘a coconut bottle, who (of you) will come (and) give it to them?’
 (c_031116 268-9, 494.699 498.010)
- (101) *amba methi=li-giya nambo we=Ø*
 then 3PL.IMM.PST=GET.SG.FLEX-give basket PREP=3SG
 ‘then they give a (empty) basket to him’ (dating_081015 074, 201.500 204.860)
- (102) *na thi=thin-giya=Ø we=ya wevo=ko*
 and 3PL=GET.SG.CNTR-give=3SG PREP=YA young.woman=DIST
tina-e na rama-e
 mother-3SG.POSS and father-3SG.POSS
 ‘and they give it (a full basket) to the girl’s mother and father’
 (first_time_251214 021-23, 58.230 64.780)

Table 6.17 lists the handling complex verbs with underived transitive V_2 stem.

V₁V₂	V₂ gloss	combined meaning	V₂ transitivity	tokens
GET- <i>beku</i>	‘bury’	‘bury’	TR	2
GET- <i>dowe</i>	‘load’	‘load’	TR	1
GET- <i>ge</i>	‘cook (in liquid)’	‘put on to cook’	TR	3
GET- <i>giya</i>	‘give’	‘give’	TR	10
GET- <i>imbo</i>	‘cover’	‘cover’	TR	1
GET- <i>vagumo</i>	‘put over’	‘put over, cover’	TR	4
GET- <i>itete</i>	‘leave’	‘leave’	TR	1
GET- <i>kaivi</i>	‘steal’	‘steal’	TR	1
GET- <i>kitho</i>	‘hang’	‘hang’	TR	1
GET- <i>linggi</i>	‘pour’	‘pour’	TR	1
GET- <i>monje</i>	‘stick’	‘stick’	TR	1
GET- <i>papa</i>	‘stick’	‘stick’	TR	2
GET- <i>ngambu</i>	‘burn, cook (roast)’	‘burn, cook (roast)’	TR	7
GET- <i>thewo</i>	‘clean’	‘clean’	TR	3
GET- <i>thithi</i>	‘insert’	‘clean’	TR	3
GET- <i>utu</i>	‘immerse’	‘immerse’	TR	6
GET- <i>vairi</i>	‘lift, raise’	‘lift, raise’	TR	12
GET- <i>vamo</i>	‘dry’	‘dry’	TR	EE
GET- <i>vatha</i>	‘gather’	‘gather’	TR	2
GET- <i>vathinggu</i>	‘wash’	‘wash’	TR	1
GET- <i>vatomwe</i>	‘show’	‘show’	TR	3
GET- <i>vavatha</i>	‘put on (clothing)’	‘put on (clothing)’	TR	3
GET- <i>vavathi</i>	‘put inside/on’	‘put inside/on’	TR	2
GET- <i>vewo</i>	‘push’	‘push’	TR	1
GET- <i>yathu</i>	‘throw away’	‘throw away’	TR	19
GET- <i>ve</i>	‘give’	‘give’	DITR	6

Table 6.17 Handling constructions with underived transitive V₂

Stimuli data show that the Sudest constructions describe a single event rather than a sequential series of sub-events. For example, ‘bury’ rather than ‘get and bury’. Consider the examples (103) and (104), which both describe short stimuli videos. In both instances, the initial event of physically picking up the object is described by a simplex predicate with a CLFV and the subsequent clause describes another single event of ‘throwing away’ or ‘put over’ using a complex verb with GET as V₁.

- (103) *amala regha i=thin=a le-Ø buku na*
 man one 3SG=GET.SG.CNTR=YA POSS.CLF2-3SG.POSS book and
i=thin-yathu=Ø bode
 3SG=GET.SG.CNTR-throw.away=3SG down
 ‘a man gets his book and throws it down’
 (put_stimuli_191015_01_01 176-7, 715.724 720.160)

- (104) *lolo regha i=wo gaeba na*
 person one 3SG=GET.SG.RIGD plate and
i=wo-vagumo=Ø gha-Ø ndeghi we
 3SG=GET.SG.RIGD-put.over=3SG POSS.CLF1-3SG.POSS cup PREP
 ‘a person gets a plate and puts it over a cup (i.e., covers the cups with the plate)’
 (put_stimuli_191015_01_01 162-4, 661.510 667.234)

Examples (105) and (106) describe stimuli in which the agent is already holding the item at the beginning of the video. Again, GET-V₂ complex verbs are used to describe a single event, namely throwing something away and hanging something up.

- (105) *umbwa=ko mara-mare=niye lolo=ko i=riri-bebe e*
 stick=DIST RED-dead=SP person=DIST 3SG=by.striking-break REP
gheghe i=mban-yathu=Ø
 leg 3SG=GET.PL.RIGD-throw.away=3
 ‘the dead stick, a person breaks it by striking it on/over their leg (and) throws them (the pieces of stick) away’
 (cb_stimuli_051016_02_01 050-1, 265.370 274.117)

- (106) *lolo=ko i=thin-kitho thiyo=ma e umbwa=ma yanggai*
 person=DIST 3SG=GET.SG.CNTR-hang rope=DET PREP tree=DET branch
 ‘the person hangs the rope on the tree branch’
 (put_stimuli_231015 010, 114.420 118.430)

One construction with a transitive V₂ expresses a different proposition from its simplex counterpart. The complex verb GET-*ge* ‘get-cook (in liquid)’ adds a caused motion component not present in the single-verb clause and means ‘put on to cook’. Compare (107) and (108).

- (107) *thi=ge gha-nji*
 3SG=cook food-3PL.POSS
 ‘they cook their food’
 (kula_exchange_081215 058, 171.300 173.860)
- (108) *ghino ma=thin-ge=Ø e denga=ko*
 1SG 1SG.IMM.PST=GET.SG.CNTR-cook=3SG PREP cooking.stones=DIST
 ‘I put it (a pot filled with food) on to cook on the cooking stones’
 (cooking_111015 022, 66.820 69.733)

The two stems *utu* ‘immerse’ and *vairi* ‘lift, raise’ can only occur as V₂ in complex verbs, as in (109) and (110), or in conjunction with a manner-of-causation prefix (see §5.2).

- (109) *ela=ma i=wo-utu umbali-ye e buket=ma*
 woman=DET 3SG=GET.SG.RIGD-immersed head-3SG.POSS PREP bucket=DET
tine
 inside
 ‘the woman immerses/puts her head in the bucket’
 (put_stimuli_191015_02_02 078-9, 529.658535.247)
- (110) *wevo i=wo-vairi umbali-ye e buket tine*
 young.woman 3SG=GET.SG.RIGD-lift head-3SG.POSS PREP bucket inside
e tebol vwata-e
 PREP table top-3SG.POSS
 ‘the girl lifts her head from inside the bucket on the table top’
 (put_stimuli_191015_01_02 123, 461.110 466.972)

All the handling combinations described thus far have been monotransitive; however, there is one ditransitive handling construction with the stem *ve* ‘give’. The V_2 stem *ve* ‘give’ cannot function as an independent verb. In examples (111) to (113) it occurs with a CLFV V_1 . Like the two other three-place predicates attested in Sudest (see §7.2), complex verbs with *ve* ‘give’ show primary/secondary object alignment in Dryer’s (1986) terminology.¹⁶⁰ The recipient of a three-place predicate is encoded in the same manner as the patient-like object of a two-place predicate, in Sudest that is by an object enclitic, and the theme is expressed by a lexical NP or understood from the context. The CLFV is selected based on properties of the theme (see also §7.4.1).

- (111) *a=thagha-ve=ngge kelumo*
 1SG=GET.SG.TOOL-give=2SG axe
 ‘I give you an axe’ (e_311016)
- (112) *nggama=ke i=bwanabwana na i=ghe ko amba*
 child=SPKR.PROX 3SG=grow.up and 3SG=marry but then
u=thin-ve=∅ nambo=ke
 2SG=GET.SG.CNTR-give=3SG basket=SPKR.PROX
 ‘the child grows up and marries then you give him the basket’
 (marriage_111015 056-7, 173.806 179.678)
- (113) *wanakau=ma theuni-wo thi=ve-thin-ve=nggi=ya kap*
 young.women=DET NUM.CLF-two 3PL=RECP-GET.SG.CNTR-give=3PL=YA cup
 ‘two young women exchange a cup’ (put_stimuli_231015 040, 334.280 337.019)

The stem *ve* ‘give’ also occurs in complex verbs with the monotransitive verb *giya* also ‘give’ in V_1 (see (172) in §6.3.6 below). For a monotransitive complex verbs with *giya* ‘give’, see (101) and (102) above.

¹⁶⁰ Secundative alignment in Malchukov et al.’s (2010) terms.

There are three handling complex verbs that take a causativised monotransitive V_2 verb. These are shown in Table 6.18.

V_1 - V_2	V_2 gloss	combined meaning	V_2 transitivity	tokens
GET- <i>va-kote</i>	‘CAUS-hang’	‘hang’	TR	EE/ES
GET- <i>va-kware</i>	‘CAUS-hang	‘hang’	TR	1
GET- <i>va-mara</i>	‘CAUS-see	‘show’	TR	1

Table 6.18 Handling constructions with causativised V_2

The causativised monotransitive verbs, like the underived transitive verbs discussed above, can be replaced with a simplex predicate with only the causativised verb without any semantic difference. Compare the sentences given in (114) with *kote* ‘hang’. The causativised simplex predicate in (114a) is interchangeable with the complex verb with a CLFV in (114b). Without the causative prefix, the V_2 is judged ungrammatical, as in (114c).

- (114)a. *Michael i=va-kote kwama e umbwa ghavwala*
 personal.name 3SG=CAUS-hang cloth PREP tree k.o.branch
 ‘Michael hangs a cloth on a tree branch’ (e_041215_01_01)
- b. *Jaclyn i=li-va-kote=ya towel e umbwa*
 personal.nam 3SG=GET.SG.FLEX-CAUS-hang=YA towel PREP tree
yangga
 branch
 ‘Jaclyn hangs the towel on the tree branch’ (e_300915_01)
- c. **wevo=ma i=li-kote=ya kwama=ma e*
 young.woman=DET 3SG=GET.SG.FLEX-hang=YA cloth=DET PREP
umbwa=ma
 tree=DET
 Intended: ‘the girl hangs the cloth on the branch’ (e_120917)

Examples (115) and (116) show tokens with the other two causativised V_2 stems: *kware*, which also means ‘hang’ and *mara* ‘see’:

- (115) *i=voro ve=wo-va-kware ghen=ko*
 3SG=go.up 3SG.INT=GET.SG.RIGD-CAUS-hang lime.stick=DIST
 ‘he went up to hang the limestick’ (bwaindiya_151115 120, 306.900 309.918)
- (116) *ela=ma i=li-va-mara nima-e ghare*
 woma=DET 3SG=GET.SG.FLEX-CAUS-see hand-3SG.POSS chest/palm
 ‘the woman shows her hand’ (cb_stimuli_101116 070, 885.278 887.754)

The third set of handling constructions take an intransitive V_2 stem and are listed in Table 6.19. Unlike the transitive V_2 stems that occur in handling constructions, the intransitive V_2 stems by themselves do not express a handling event and they only encode a handling event in complex verbs with a CLFV. None of the V_2 can function as independent verbs with only a subject index alone. Both *vala* ‘be on top’ and *vadede* ‘be leaning’ are only grammatical as independent verbs with

either a positional prefix or motion prefix (§4.3.5) as a crutch, and *vaghile* ‘turn’ is only grammatical as an independent verb with a manner-of-causation prefix (§5.2). The fourth stem *thuwole* ‘be hidden’ only occurs in complex verbs.

V ₁ -V ₂	V ₂ gloss	combined meaning	V ₂ transitivity	tokens
GET- <i>thuwole</i>	‘be hidden’	‘hide (s.th.)’	INTR	1
GET- <i>vadede</i>	‘lean’	‘lean (s.th.) up’	INTR	EE/ES
GET- <i>vala</i>	‘be on top of, cover’	‘be on top’	INTR	7
GET- <i>vaghile</i>	‘turn’	‘turn over’	INTR	2

Table 6.19 Handling and transfer constructions with GET and intransitive V₂

Unlike the other complex verbs already described in this section in which the V₁ has a predominantly classificatory function, the CLFV appears to have a causative function. The complex verbs introduce a causer as the A argument and the S argument of the simplex intransitive becomes the O of the complex verbs. This is illustrated by the two clauses presented in (117) with *vadede* ‘lean’. In (117a) the intransitive predicate with the posture prefix *nde-* ‘stand and’ takes the stick (*umbwake*) as S, while in the complex verb in (117b) with a CLFV the stick is now the O and a new A argument.

- (117)a. *umbwa=ke* *i=nde-vadede* *e* *dumodumo=ko*
 stick=SPKR.PROX 3SG=stand.and-be.leaning PREP wall=DIST
 ‘the stick is leaning against the wall’ (e_041215)
- b. *thi=wo-vadede=ya* *umbwa* *e* *baba*
 3PL=GET.SG.RIGD-lean=YA stick PREP wall
 ‘they lean the stick against the wall’ (e_191015 112, 374.760 378.773)

Examples (118) to (120) show the remaining handling complex verb with intransitive V₂ stems.

- (118) *i=li-vala* *thiyo=ke* *e* *umbwa=ke*
 3SG-GET.SG.FLEX-be.on.top rope=SPKR.PROX PREP tree=SPKR.PROX
yanggai
 branch
 ‘she places the rope over the tree branch’
 (put_stimuli_201015_01 012, 105.480 107.980)
- (119) *i=wo-vaghile* *lou-ye=ma*
 3SG=GET.SG.RIGD-turn sibling.opp.sex-3SG.POSS=DET
 ‘she turned her brother over’ (crab_girl_081115 036, 88.760 91.754)
- (120) *ndighe=ma* *va* *i=yengge-thuwole=∅*
 fire=DET REM.PST 3SG=GET.SG.FIRE-be.hidden=3SG
 ‘the fire, she hid it’ (stone_cooking_251015 078, 214.290 219.370)

6.3.3 PUT constructions

There is no independent verb meaning ‘put’ in Sudest. Instead, events of putting are encoded by a complex verb containing a CLFV or other transitive verb in the V_1 slot and one of four PUT stems in the V_2 slot: *ra*, *nda*, *kura* and *mban*.¹⁶¹ In some instances, the PUT stems can be used interchangeably, while other combinations are restricted to specific PUT stems. The complex verbs with the PUT stems are given in Table 6.20. The PUT stems nearly always take a transitive V_1 , however, there is at least one complex verb in which *ra* ‘put’ combines with an intransitive verb *dage* ‘speak’ to mean ‘promise (something to someone)’. This shows that at least one of the PUT stems is transitive as the valence of a complex verb is the same as the stem with the highest valence in the construction. The remaining three stems are only attested in transitive complex verbs and are therefore provisionally viewed as transitive in the current analysis.

V_1 - V_2	V_1 gloss	combined meaning	V_1 - V_2 transitivity	tokens
<i>wo-kura</i>	‘GET (s.g. rigid entity)’	‘put	TR-TR	10
GET- <i>nda</i>	‘GET’	‘put’	TR-TR	29
GET- <i>mban</i>	‘GET’	‘put’	TR-TR	31
<i>du-mban</i>	‘throw’	‘throw in/on	TR-TR	2
<i>linggi-mban</i>	‘pour’	‘pour into/on’	TR-TR	5
<i>yaru-mban</i>	‘gather’	‘place, put’	TR-TR	1
<i>dage-ra</i>	‘speak’	‘promise (s.th.)’	INTR-TR	EE/ES
GET- <i>ra</i>	‘GET’	‘put’	TR-TR	88
<i>tate-ra</i>	‘open’	‘open and put/place’	TR-TR	1
<i>thinge-ra</i>	‘get w. teeth’	‘put (with teeth)’	TR-TR	1
<i>thuwo-ra</i>	‘get w. tongs’	‘put down (with tongs)’	TR-TR	3
<i>vangu-ra</i>	‘lead’	‘put (+human self-moving obj.)’	TR-TR	1
<i>vole-ra</i>	‘chop’	‘chop and put away’	TR-TR	1
<i>vu-ra</i>	‘open’	‘open and put’	TR-TR	1

Table 6.20 PUT complex verbs

In constructions with the CLFV *wo* ‘get (sg. rigid entity)’, the four PUT stems can be used interchangeably with each other. Consider the sentences presented in (121) from four speakers describing the same stimulus video, each using a different PUT stem to describe the one scenario. Like the handling events with transitive verbs in V_2 position, the PUT constructions encode a single event rather than an event of getting and putting, as illustrated by (121a) with a separate ‘get’ and ‘put’ VC.

- (121)a. *ela=ma* *me=wo* *waranisi=ma* *i=sima=∅*
 woman=DET 3SG.IMM.PST=GET.SG.RIGD orange=DET 3SG=peel=3SG
e *nima-e* *na* *i=wo-mban=∅=a* *e* *pilet=ko*
 PREP hand-3SG.POSS and 3SG=GET.SG.RIGD-put=3SG=YA PREP plate=DIST
 ‘the woman got the orange, peels it by hand and puts it on the plate’
 (cb_stimuli_051016_02_02 025-6, 237.570 229.910)

¹⁶¹ The stem *mban* is presumably historically related to the classificatory verb *mban* ‘get (pl. rigid items)’.

- b. *i=wo-ra=∅* *e* *pilet*
 3SG=GET.SG.RIGD-put=3SG PREP plate
 ‘she puts it (an orange) on the plate’
 (cb_stimuli_051016_03 377, 1485.170 1486.780)
- c. *te-mbe* *i=wo-nda=va* *une* *e* *pilet=ma* *tine*
 more-still 3SG=GET.SG.RIGD-put=again fruit PREP place=DET inside
 ‘she puts the fruit on the plate again’ (cb_stimuli_101116 047, 609.800 612.893)
- d. *i=wo-kura=∅* *e* *pilet=ma* *tine*
 3SG=GET.SG.RIGD-put=3SG PREP plate=DET inside
 ‘she puts it (an orange) on the plate’ (cb_stimuli_071116 070, 679.760 682.097)

A similar construction is used in neighbouring Nimowa, where a stem meaning ‘get’ combines with a second stem *te* ‘put’. Currently, there is no data available to show if the stem *te* ‘put’ can function as a simplex predicate. Compare the Nimowa examples in (122) and (123) with the Sudest examples above in (121).

- (122) NIMOWA (NIMOA-SUDEST FAMILY)
*yove i-ho-te hosaho/nabo/pusa he tebo bwatane*¹⁶²
 girl 3SG-get.SG-put mango/basket/cat PREP table top
 ‘the girl puts the mango/basket/cat on the table’ (e_141116_01)
- (123) *yove i-yomo-te hasaho/nabo/pusa he tebo bwatane*
 girl 3SG-get.PL-put mango/basket/cat PREP table top
 ‘the girl puts the mangos/baskets/cats on the table’ (e_171116_02)

The four PUT stems are not always interchangeable. In terms of frequency, *ra* (96 tokens) and *mban* (39 tokens) occur the most in the corpus and are also used in the greatest variety of complex verbs. The stem *nda* is only grammatical in combination with a CLFV V₁. The stem *kura* is only grammatical in complex verbs with the CLFV *wo* ‘get (sg. rigid entity)’ and is otherwise ungrammatical. Speakers find complex verbs with *kura* and other CLFVS ungrammatical:

- (124) **u=li-kura kwaliko-na e tebol=na*
 2SG=GET.SG.FLEX-PUT cloth-2SG.POSS PREP table=ADDR.PROX
vwata-e
 top-3SG.POSS
 intended: ‘put the cloth on the table’ (e_071116_03)

Complex verbs with a V₁ with caused motion or change of state semantics and either *ra* or *mban* in V₂ position specify that the object of the clause is placed or moved somewhere as a result of the V₁ event, as in (125) to (129).

¹⁶² The Nimowa data come from limited elicitation recordings collected by the researcher from Nimowan speakers living on Sudest.

- (125) *i=linggi-mban=∅* *e* *mbwa* *variye*
 3SG=pour-put=3SG PREP water container
 ‘she pours it (water) into a water container’
 (put_stimuli_191015_02_02 099, 693.047 695.076)
- (126) *amala=ma* *i=du-mban=a* *vari* *e* *le-∅*
 man=DET 3SG=throw-put=YA stone PREP POSS.CLF2-3SG.POSS
sisikwa *tine*
 k.o.basket inside
 ‘the man throws a stone into the bag’
 (put_stimuli_191015_02_02 100-2, 702.077 708.317)
- (127) *gha-nji* *ndighe* *iya=ke* *thi=vole-ra=∅*
 POSS.CLF1-3PL.POSS fire(wood) DEM=SPKR.PROX 3PL=chop-put=3SG
we=∅
 PREP=3SG
 ‘that’s their firewood, they chopped and put it there’
 (fp_stimuli_191015_01 015-6, 73.966 76.840)
- (128) *ela=ma* *i=tate-ra* *bogisi=ma* *nasiye* *e* *tebol=ma*
 woman=DET 3SG=open-put box=DET small PREP table=DET
vwata-∅
 top-3SG.POSS
 ‘the woman opens and puts the small box on the table top’
 (cb_stimuli_101116 060, 778.527 782.906)
- (129) *i=voro* *i=vangu-ra=∅* *we=∅*
 3SG=go.up 3SG=lead-put=3SG PREP=3SG
 ‘he goes up (and) leads/puts her there’
 (mandumbunga_02_181016 523, 1314.704 1316.398)

In (130) and (131), *ra* changes the event from an event of getting to one of putting with the two instrument-specifying verbs *thuwo* ‘get (with tongs)’ or *thinge* ‘get (with mouth)’.

- (130) *ela=ma* *i=thuwo-ra* *kunumwana=ma* *nggwe-nggwe* *e*
 woman=DET 3SG=get.w.tongs-put banana=DET RED-be.ripe PREP
tebol=ma *vwata-∅*
 table=DET top-3SG.POSS
 ‘the woman puts the ripe banana on the table with tongs’
 (put_stimuli_231015 084, 682.440 687.087)
- (131) *wevo=ma* *i=thinge-ra* *kap=ma* *e* *tebol=ma*
 young.woman=DET 3SG=get.w.mouth-put cup=DET PREP table=DET
vwata-∅
 top-3SG.POSS
 ‘the woman put the cup down on the table top with her mouth’
 (put_stimuli_231015 114-5, 954.110 958.570)

Example (132) shows the only attested combination of a PUT stem with an intransitive V_1 *dage* ‘speak’ to mean ‘promise (something to someone)’.

- (132) *me=dage-ra* *ndavari* *ghagha-ye* *we*
 3SG.IMM.PST=speak-put shell.money sibling.same.sex-3SG.POSS PREP
 ‘she promised the riches to her sister’ (e_261116_01)

The stem *ra* also occurs in complex verbs with a V_1 that expresses a change of state and a manner-of-causation prefix (§5.2). In these constructions, the stem does not indicate caused motion to a location. Instead, in combination with a manner-of-causation prefix, the stem gives a reading of ‘partial completion’ to the break event, as in (133).

- (133) *i=mwana-nggila-ra* *umbwa*
 3SG=w.hands-break-PUT stick
 ‘she half/partially breaks the stick with her hands’
 (cb_stimuli_051016_03 332, 1248.910 1250.935)

The attested combinations of manner-of-causation prefixes, V_1 and *ra* ‘put’ are given in Table 6.21. All tokens come from stimuli task data.

prefix	prefix gloss	V_1	V_1 gloss	combined meaning	V_1 transitivity	tokens
<i>go-</i>	‘by cutting’	<i>ten</i>	‘break’	‘partially break’	TR	1
<i>mwana-</i>	‘w. hands’	<i>bebe</i>	‘break’	‘partially break’	TR	1
<i>mwana-</i>	‘w. hands’	<i>nggila</i>	‘break’	‘partially break’	TR	3
<i>mwana-</i>	‘w. hands’	<i>thatha</i>	‘tear’	‘partially tear’	TR	2
<i>mwana-</i>	‘w. hands’	<i>viya</i>	‘cut/split’	‘partially split/break’	TR	1

Table 6.21 ‘Partial completion’ complex verbs with *ra* ‘put’

Examples (134) to (136) show further tokens of the construction expressing partial completion with other change of state verbs.

- (134) *i=mwana-thatha-ra* *kwama=ma* *o* *i=mwana-viya-ra* *kwama=ma*
 3SG=w.hands-tear-PUT cloth=DET or 3SG=w.hands-split-PUT cloth=DET
 ‘she half/partially tears the cloth with her hands’
 (cb_stimuli_051016_03 404, 1656.104 1660.360)

- (135) *umbwa-ra* *methi=go-ten-ra=Ø*
 NUM.CLF-one 3PL.IMM.PST-by.cutting-break-put=3SG
 ‘one (piece of food), they partially cut it’
 (cb_stimuli_051016_01 092, 1033.950 1039.006)

- (136) *wevo=ma* *i=mwana-bebe-ra* *umbwa=ma* *yanggai*
 young.wo 3SG=w.hands-break=PUT tree=DET branch
 man=DET
 ‘the girl partially breaks the tree branch with her hands’
 (cb_stimuli_051016_01 132, 1456.750 1463.348)

6.3.4 Cause-effect constructions

The cause-effect complex verbs express temporally iconic series of events in which the V_1 expresses causation and the V_2 indicates the effect resulting from the event predicated by the V_1 . In the example presented in (137), a girl drops a bailer, which causes it to be immersed in the water.

- (137) *va ma i=mwana-wo=engge tagataga=ko ma*
 REM.PST already 3SG=w.hands-GET.SG.RIGD=just bailer=DIST already
i=thuvai-utu=Ø
 3SG=drop-immersed=3SG
 ‘she got the bailer (and) she dropped and immersed it (in the water)’
 (mandumbunga_02_181016 411, 1040.826 1044.632)

Complex verbs expressing cause-effect relations are common both cross-linguistically (Aikhenvald 2006: 29) and in Oceanic languages (Cleary-Kemp 2015: 135).¹⁶³ In Sudest, the two slots are relatively unrestricted in terms of verb selection. Temporally iconic V_1 - V_2 order and unrestricted verb selection for both slots are typical for cause-effect constructions cross-linguistically (Aikhenvald 2006: 15).

The attested cause-effect stem combinations are presented in Table 6.22. All V_1 and V_2 stems may function as independent verbs, except *utu* ‘immerse’ which only occurs in complex verbs.¹⁶⁴

V_1 - V_2	V_1 - V_2 gloss	combined meaning	transitivity	tokens
<i>kula-vaidi</i>	‘call-find’	‘call to find’, ‘call for’	INTR-TR	1
<i>kula-vatha</i>	‘call-gather’	‘call together/gather (by calling)’	INTR-TR	1
<i>utu-ravagha</i>	‘speak-stop’	‘advise to stop/ tell to stop’	INTR-TR	1
<i>thithu-yathu</i>	‘bathe-throw away’	‘wash away (s.th.)’	INTR-TR	1
<i>kweru-va- nginjingnji</i>	‘scrape-CAUS-be white’	‘scrape white/clean’	TR-TR	1
<i>lawe-gana</i>	‘catch-fence’	‘block’	TR-TR	1
<i>thuvai-utu</i>	‘drop-immersed’	‘sink (s.th. into water)’	TR-TR	1
<i>vole-ten</i>	‘cut (into pieces)-break’	‘cut/chop’	TR-TR	2
<i>titi-vaidi</i>	‘remember, reminisce- find’	‘realise, find by thinking’	TR-TR	1
<i>renuwanga-vaidi</i>	‘think about-find’	‘remember’	TR-TR	2
<i>renuwanga-yathu</i>	‘think about-throw away’	‘forgive’	TR-TR	EE
<i>linggi-yathu</i>	‘pour-throw away’	‘pour out’	TR-TR	7
<i>rori-yathu</i>	‘write-throw away’	‘write down’	TR-TR	1
<i>tawoi-yathu</i>	‘shit (diarrhoea)-throw away’	‘empty bowels (due to diarrhoea)’	TR-TR	1
<i>ten-yathu</i>	‘cut-throw away’	‘cut away’, ‘cut and threw away’	TR-TR	2

Table 6.22 Cause-effect complex verbs

¹⁶³ Such complex verbs are known by various names in the Oceanic literature, including ‘causatives’ (Lynch et al. 2002: 47), cause-result (Margetts 2005: 67), resultative (Cleary-Kemp 2015: 135) and cause-effect (Aikhenvald 2006: 14).

¹⁶⁴ Not to be confused with the intransitive verb *utu* ‘speak’ and related noun *utu(utu)* ‘story’.

All attested cause-effect complex verbs are transitive. The majority of the constructions contain two transitive stems while four constructions comprise of an intransitive V₁ and transitive V₂. Just under half the constructions take *yathu* ‘throw away’ in V₂ position. One cause-effect complex verb with *yathu* ‘throw away’ takes an intransitive V₁ *thithu* ‘bathe, wash (oneself)’, and means ‘wash away (from on one’s body)’. The example in (138) describes a widow washing off charcoal and body paint applied for a mortuary feast.

- (138) ...*amba=ma wambwi=ko ve=thithu=yathu ngimba=ko*
 then=DET widow=DIST 3SG.INT=bathe-throw.away charcoal=DIST
 ‘...then the widow washes away the charcoal’
 (funeral_feasting_081015_01 113, 324.045 327.740)

All remaining tokens containing *yathu* ‘throw away’ take transitive V₁ stems. In the constructions shown in (139) to (141), the activity of V₁ results in the disposal of the shared argument.

- (139) *thi=tawoi-yathu* *njighi*
 3PL=shit(diarrhoea)-throw.away salt.water
 ‘they shat out saltwater’ (funeral_feasting_081015_02 056, 139.990 146.190)

- (140) *lolo=ma i=linggi-yathu mbwa=ma e ndeghi=ma*
 person=DET 3SG=pour-throw.away water=DET PREP cup=DET
 ‘the person pours out the water in the cup’
 (put_stimuli_191015_02_02 063, 433.611 437.756)

- (141) *i=ten-yathu=∅* *e* *pulo* *wata-∅*
 3SG=break-throw-away=3SG PREP floor top-3SG.POSS
 ‘he cuts (and) throws it (hair) away on the floor’
 ‘he cuts it (hair) away on the floor’ (cb_stimuli_051016_01 137, 1520.660 1523.494)

In (142) and (143), the meanings are somewhat more abstract and less predictable. In (142), the subject will ‘write out’ her writings, and in (143) the subject forgives an individual by ‘throwing away’ their anger/dispute with someone.

- (142) *wo=i=vo-rori-yathu* *le-∅*
 HORT=3SG=by.spear-ing-write-throw.away POSS.CLF2-3SG.POSS
ro-rori=na
 RED-write=ADDR.PROX
 ‘she will/shall write out her writings’ (c. 031116 243, 440.500 443.360)

- (143) *a=renuwanga-yathu=ngge*
 1SG=think.about-throw.away=2SG
 'I forgive you' (e lexicon)

The three other constructions with an intransitive V_1 all share an initial event of communication that brings about (or attempts to bring about) a specific action:

- (144) *i=mje i=utu-ravagha=∅*
 3SG=try 3SG=speak-stop=3SG
 ‘he tries to advise him (another man) to stop (hitting his wife)’
 (fp_stimuli_201015_01 233, 870.163 872.050)
- (145) *me=the-vao ghaningga=ko a=kula-vatha=nggi=ya*
 1SG.IMM.PST=serve-COMPL food=DIST 1SG=call-gather=3PL=YA
lo gharighari=ko
 POSS.CLF2.1SG people=DIST
 ‘I finish serving the food (and) call (and) gather my children (lit. my people)’
 (cooking_111015 028-9, 83.440 87.780)
- (146) *thi=nga=va ne thi=kula-vaidi=ya le-nji*
 3SG=say=again FUT 3PL=call-find=YA POSS.CLF2-3PL.POSS
vwakirakira=ma ina-∅ e umbwa=ko ghadidi-ye
 frog=DET location-3SG.POSS PREP tree=DIST beside-3SG.POSS
 ‘again, they say they will call (and) find their frog around the tree’
 (frogstory_161214 037, 91.040 96.540)

The verbs of cognition *renuwanga* ‘think about’ and *titi* ‘contemplate’, in (147) and (148) respectively, combine with *vaidi* ‘find’ to describe processes in which the subject ‘finds’ a realisation or solution as a result of thinking it over.

- (147) *ko amba vethi=renuwanga-vaidi=∅=va*
 but then 3PL.INT=think.about-find=3SG=again
 ‘but then they thought about (and) found it (the solution to their problem)’
 (snake_passage_061215 110, 267.969 271.769)
- (148) *gha-∅ rumwaru gha-mbe-regha i=titi-vaidi=∅*
 POSS.CLF1-3SG.POSS straight POSS.CLF1-still-one 3SG=contemplate-find=3SG
 ‘his path, he himself contemplates (and) finds it (i.e., he has an epiphany)’
 (fp_stimuli_191015_07 124, 300.910 303.760)

The final three cause-effect constructions are given in (149) to (151). Example (149) is the only cause-effect construction with derivational morphology with the causative on *V₂ va-nginjinginji* ‘CAUS-be white’.

- (149) *i=kweru-van-ginjinginji=∅*
 3SG=scrape-CAUS-be.white=3SG
 ‘she scraped him white/clean (i.e., she scraped all the charcoal/carbon off the roasted flesh until it was clean)’
 (crab_girl_081115 040, 99.430 103.690)
- (150) *amala=ma i=vole-ten=a umbwa=ma yanggai*
 man=DET 3SG=chop-break=YA tree=DET branch
 ‘the man chops and breaks the tree branch’ (cb_stimuli_071116 010, 115.590 118.802)

- (151) *i=lawe-gane-gane=ya nggama=ko le-Ø kamwathi*
 3SG=catch-fence-fence=YA child=DIST POSS.CLF2-3SG.POSS path
 ‘it (a spider) blocks the child’s way’ (new_mother_251214 020-1, 51.818 53.210)

6.3.5 Benefactive constructions

The benefactive constructions share semantic similarities with the cause-effect complex verbs, however, the V_2 in these constructions is restricted. The benefactive constructions have iconic ordering: V_1 describes an action and the V_2 stem *giya* ‘give’ introduces a recipient or beneficiary who receives something or benefits from the action of V_1 . The recipient or beneficiary is indicated by PP with the ambiposition *we*, as in (152) and (153).

- (152) *u=gudu-giya mbwa we=nggo*
 2SG=fetch-give water PREP=1SG
 ‘you fetch me water (lit. you fetch (and) give water to me)’
 (e_251115_01 010, 39.586 41.900)

- (153) *mbala u=utu-giya=Ø we=Ø*
 HYP 2SG=speak-give=3SG PREP=3SG
 ‘you should tell it to her’ (c_031116 081, 158.970 161.030)

Complex verbs with a ‘give’ stem are common cross-linguistically and constructions with ‘give’ in V_2 typically have benefactive semantics (Aikhenvald 2006; 2018). Such constructions appear to be rare in Oceanic languages (Cleary-Kemp 2015: 139), although they are attested in at least three languages of the Solomon Islands (Davis 2003: 210-1; Mosel 1984: 126; Palmer 2009: 212). Table 6.23 lists the Sudest benefactive complex verbs.

V_1 - V_2	V_1 gloss	combined meaning	transitivity	tokens
<i>utu-giya</i>	‘speak’	‘tell (s.th. to s.o.)’	INTR-TR	3
<i>gudu-giya</i>	‘fetch (water)’	‘fetch (water) (for s.o.)’	TR-TR	EE
<i>ten-giya</i>	‘break’	‘break and give’	TR-TR	2
<i>uno-giya</i>	‘say (s.o.’s name)’	‘introduce’	TR-TR	4
<i>vangu-giya</i>	‘lead’	‘give (person to s.o.)’	TR-TR	1

Table 6.23 Benefactive complex verbs

One construction contains an intransitive V_1 *utu* ‘speak’, as in (153) and (154) below, however the complex verb itself is transitive, taking its valence from the V_2 stem.

- (154) *i=utu-giya=Ø we=ya ra-mbar-mbaro*
 3SG=speak-give=3SG PREP=YA AG-RED-law/custom
 ‘he tells it to the judge’ (fp_stimuli_191015_07 083, 207.650 211.430)

The remaining benefactive complex verbs contain a transitive V_1 stem. Examples (155) and (156) show benefactive construction with the stem *uno* ‘say (name)’, and (157) and (158) illustrate constructions with the stem *ten* ‘break’.

- (155) *a=uno-giya* *ida-nggu* *we=nggi*
 1SG=say(name)-give name-1SG.POSS PRE
 ‘I give my name to them’ (education_241214 012, 40.860 44.390)

- (156) *le=ko* *i=uno-giya* *ida-e* *we=nggi*
 person=DIST 3SG=say(name)-give name-3SG.POSS PREP=3PL
 ‘the person gave his name to them’ (mandumbunga_02_181016 214, 540.173 542.346)

- (157) *amba* *wo=ten-giya-giya=Ø* *we=nggi=ya* *gha-ma*
 then 1EXCL=break-RED-give=3SG PREP=3PL=YA POSS.CLF1-1EXCL
une=ko
 friends=DIST
 ‘then we cut and gave it to our friends’ (stone_cooking_251015 119, 321.040 323.260)

- (158) *wo=ten-giya-giya=Ø* *we=nggi*
 1EXCL-break-RED-give=3SG PREP=3PL
 ‘we cut and give it (pork) to them’ (pigs_251214 040, 102.630 104.560)

In (159) the (160), the verb *vangu* ‘lead’ does not have its literal interpretation of ‘lead’ or ‘accompany’, but expresses that a person is being given, for example, in marriage or for adoption.

- (159) *i=nga* “*noroke* *a=vangu-giya=Ø* *we=ngge* *iya=ke* *iya*
 3SG=say today 1SG=lead-give=3SG PREP=2SG DEM=SPKR.PROX DEM
tamwasa-kurikuri”
 person.who-have.diseased.skin
 ‘she said “today I give you this one with skin disease”’
 (mandumbunga_02_181016 382, 958.928 962.268)

- (160) *rama-nggu* *va* *i=vangu-giya=nggo* *we=ya*
 father-1SG.POSS REM.PST 3SG=lead-give=1SG PREP=YA
le-Ø *boda-boda*
 POSS.CLF2-3SG.POSS RED-relative
 ‘my father gave me to his relatives (to adopt)’ (e_041116)

There appears to be a constraint that prohibits the use of a more typical predicate meaning ‘give’ (e.g., complex verbs with a CLFV and a ‘give’ verb, see §6.3.2) when referring to the permanent transfer of a human when describing e.g., marriage or adoption. In these contexts, only the complex verb *vangu-giya* ‘lead-give’ is acceptable to speakers, although a complex verb GET-*giya* ‘get-give’ or simply *giya* ‘give’ is used for non-permanent transfer events such as passing a baby between two people.¹⁶⁵

¹⁶⁵ *Vangu* ‘lead’ is generally used instead of a CLFV to encode caused motion events where the agent is not physically moving the human theme (see Sheppard forthcoming). It could also be that *vangu* ‘lead’ is used

6.3.6 Simultaneous and sequential constructions

The simultaneous and sequential complex verbs consist of two relatively open verb slots that describe two activities undertaken concurrently, or a series of sequential activities that occur one after the other and generally describe quotidian activity combinations. Complex verbs with simultaneous semantics and unrestricted slots are attested in Oceanic languages, for example, Mwotlap (François 2006: 233-4), but sequential complex verbs in Oceanic languages tend to have a restricted slot containing a motion verb and unrestricted slots are not typical (Cleary-Kemp 2015: 134).¹⁶⁶ The simultaneous complex verbs are presented in Table 6.24.

V ₁ -V ₂	V ₁ -V ₂ gloss	combined meaning	transitivity	tokens
<i>ghena-vaghile</i>	‘sleep-turn’	‘turn over in sleep’	INTR-INTR	1
<i>ghena-thai</i>	‘sleep-be close’	‘sleep close to (s.o./s.th.)’	INTR-TR	5
<i>utu-thai</i>	‘speak-be close’	‘speak and be close’	INTR-TR	1
<i>mun-tamwe</i>	‘drink-look for’	‘drink and look for (s.th. else)’	TR-TR	1

Table 6.24 Simultaneous complex verbs

The examples presented in (161) to (164) show the simultaneous complex verbs. As noted in §6.3.2, the stem *vaghile* ‘turn’ can only function independently in a VC with a manner-of-causation prefix.

- (161) “*ma* *u=mun-tamwe=nggi* *vara*
 already 2SG=drink-look.for=3PL really
 “you were just drinking (alcohol) and looking for them”
 (fp_stimuli_201015_01 106, 415.269 417.280)

- (162) *i=ghena-vaghile*
 3SG-sleep-turn
 ‘she turns over while sleeping/she sleeps and turns over’
 (e_161215)

- (163) *maa* *va* *thi=ve-ghena-thai=nggi* *moli*
 NEG REM.PST 3PL=RECP-sleep-be.close=3PL INTS
 ‘they didn’t sleep close to each other’
 (mandumbunga_02_181016 348, 873.551 876.193)

in these contexts instead of a CLFV because the object (the baby/bride(groom)) is not (necessarily) being physically passed or moved to someone or somewhere, but is being led into a relationship rather than the permanence of the transfer.

¹⁶⁶ The Sudest associated motion prefixes (§4.3.4, §43.5.1) presumably grammaticalised from motion verbs in complex verbs.

- (164) *maa i=la=nde=utu-thai=ngge-mun=re* [...] *te-mbe*
 NEG 3SG=and.go=DEHORT=speak-be.close=2SG-a.bit=NEG2 more-still
ne u=njogha=ma=va we=nggo
 FUT 2SG=go.back-=hither=REP PREP=1SG
 ‘(if) he doesn’t talk and be close to you a bit [...] return to me again’
 (mandumbunga_02_181016 392, 986.071 988.673)

The sequential complex verb combinations are listed in Table 6.25.

V ₁ -V ₂	V ₁ -V ₂ gloss	combined meaning	transitivity	tokens
<i>ghena-thuweiru</i>	‘sleep-be awake’	‘wake up, get up’	INTR-INTR	5
<i>vutha-vaidi</i>	‘arrive-find’	‘arrive and/to find’	INTR-TR	1
<i>thavwi-utu</i>	‘wash-immersed’	‘wash and immerse’	TR-TR	2

Table 6.25 Sequential complex verbs

Examples of the sequential constructions are presented in (165) to (167). The stem *utu*, as mentioned previously in this chapter, only occurs in complex verbs or with manner-of-causation prefixes in independent VCs.

- (165) *me=ghiviya=ke* *mo=ghena-thuweiru*
 3SG.IMM.PST=be.daybreak=SPKR.PROX 2SG.IMM.PST=sleep-be.awake
mo=vakatha buda?
 2SG.IMM.PST=do/make what
 ‘this morning (when) you woke up; you did what?’
 (cooking_111015 002-3, 14.690 17.407)
- (166) *a=thavwi-utu ghaningga=ko e uye=ko tine*
 1SG=wash-immersed food=DIST PREP clay.pot=DIST inside
 ‘I rinse the food and immerse it in the pot’ (cooking_111015 0145-6, 48.710 55.665)
- (167) *va ma thi=vutha-vaidi=nggi mbungaghalaghalamanggo morouma*
 REM.PST already 3PL=arrive-find=3PL countless k.o.fish
 ‘they arrived and found countless morouma fish’
 (mandumbunga_061215 127-9, 365.769 372.734)

6.3.7 Synonymous constructions

A group of three complex verbs show combinations of two (near) synonymous verb stems. As noted elsewhere, *ve* ‘give’ can only occur in complex verbs with either a CLFV or the monotransitive ‘give’ stem *giya*, and cannot function independently.

V ₁ -V ₂	V ₁ -V ₂ gloss	combined meaning	transitivity	tokens
<i>kwan-yaro</i>	‘lie-trick’	‘trick’	INTR?-TR	1
<i>yaru-vatha</i>	‘gather-gather’	‘gather together’	TR-TR	1
<i>giya-ve</i>	‘give-give’	‘give’	DITR-TR	EE/ES

Table 6.26 Synonymous complex verbs

To the best of my knowledge, no synonymous complex verbs are described in studies of Oceanic languages, however, such constructions are a productive type of serialisation cross-linguistically (Durie 1997: 337; Aikhenvald 2006: 30). The complex verbs frequently signal properties like repetition, duration, or intensification of an activity, an event, or a state (Aikhenvald 2006: 30). It is unclear from the current data if there are systematic differences in the use, distribution or meaning of the synonymous complex verbs. Compare the simplex predicates with *yaru* ‘gather’ in (168) and *vatha* ‘gather’ in (169) with the complex verb *yathu-vatha* in (170).

- (168) *ela=ma i=yaru bin=ma*
 woman=DET 3SG=gather bean=DET
 ‘the woman gathers the beans’ (put_stimuli_201015_01 142-3, 837.550 840.650)

- (169) *wevo=ma i=wo kaina=ma a i=mwana-vatha*
 young.woman=DET 3SG=GET.SG.RIGD knife=DET PREP 3SG-w.hands-gather
umbwa=ma yanggai
 tree=DET branch
 ‘the woman gets the knife and gathers the branches with her hands’
 (cb_stimuli_051016_01 111, 1210.900 1216.670)

- (170) *ne i=yaru-vatha=nggi boda*
 FUT 3SG=gather-gather=3PL people
 ‘they will gather together the people’
 (lizard_and_possum_121015 043, 113.330 115.825)

The other two complex verbs *kwan-yaro* ‘lie-trick’ and *giya-ve* ‘give-give’ are presented below in (171) and (172) respectively.

- (171) *mbe i=kwan-yaro=inda*
 still 3SG=lie-trick=1INCL.P
 ‘she was tricking us!’ (mandumbunga_061215 133, 382.222 384.185)

As discussed in §6.3.2, the ditransitive stem *ve* ‘give’ only occurs in complex verbs with a monotransitive *V₁* stem; in this case, the synonymous verb *giya* ‘give’.

- (172) *i=giya-ve=nggo mbombo umbwe-iwo*
 3SG=give-give=1SG pig NUM.CLF-two
 ‘he gives me two pigs’ (e_251115_01 060, 196.798 199.103)

6.3.8 Adverbial constructions

The adverbial constructions consist of a *V₁* that describes an activity followed by a *V₂* specifying how the activity is performed. Complex verbs expressing equivalent manner functions are widely attested both in the Oceanic languages and cross-linguistically (Lynch et al. 2002: 47; Aikhenvald 2006: 29). The adverbial *V₂* stems are listed in Table 6.27.

adverbial stem	gloss
<i>wogiyawe</i>	‘properly’
<i>vakatha</i>	‘carefully’
<i>roro</i>	‘in vain’
<i>thavwi</i>	‘accidentally’
<i>kubaro</i>	‘quietly’
<i>thuwole</i>	‘secretly’
<i>thuwowa</i>	‘deeply’

Table 6.27 Adverbial V₂ stems

The majority of the adverbial stems cannot function independently as the head of a verb complex. Of those that can, the stem in adverbial complex verbs diverges semantically from its independent counterpart. They also do not contribute to the valence of the construction, which takes its valence from that of the V₁ verb.¹⁶⁷

6.3.8.1 *Wogiyawe* ‘properly’

The adverbial stem *wogiyawe* indicates that the event of the preceding verb is done ‘properly’ or ‘well’. The stem generally cannot occur as an independent verb. All complex verbs with *wogiyawe* ‘properly, well’ are presented in Table 6.28.

V ₁ -V ₂	V ₁ gloss	combined meaning	V ₁ transitivity	tokens
<i>ghavatha-wogiyawe</i>	‘dress’	‘dress properly/well’	INTR	1
<i>ghena-wogiyawe</i>	‘sleep’	‘sleep well’	INTR	1
<i>kaiwo-wogiyawe</i>	‘work’	‘work well’	INTR	1
<i>me-wogiyawe</i>	‘live, stay’	‘live well’	INTR	1
<i>yaku-wogiyawe</i>	‘live, stay’	‘live well’	INTR	1
<i>nda-wogiyawe</i>	‘burn’	‘cook properly’	INTR	2
GET- <i>wogiyawe</i>	‘get’	‘understand properly’	TR	1
<i>ghambi-wogiyawe</i>	‘give birth’	‘give birth safely’	TR	1
<i>ravu-wogiyawe</i>	‘know’	‘know well’	TR	1
<i>thuwe-wogiyawe</i>	‘see’	‘look properly’	TR	2
<i>vakatha-wogiyawe</i>	‘make, do’	‘do properly’	TR	2
<i>mwana-wogiyawe</i>	‘with hands’	‘put properly’	TR	1

Table 6.28 Adverbial constructions with *wogiyawe* ‘properly’

Examples (173) to (175) show *wogiyawe* ‘properly, well’ in intransitive complex verbs and examples (176) to (178) show the stem in monotransitive complex verbs.

¹⁶⁷ An alternative analysis is that some or all of the V₂ stems are their own class of adverbial suffixes that have grammaticalised from their V₂ position in complex verbs. This is a common grammaticalisation path for morphemes with adverbial semantics in Oceanic languages (Verkerk & Frostad 2013).

- (173) *nande ma=ghena-wogiyawe=re*
 NEG1 1SG.IMM.PST-sleep-properly=NEG2
 ‘I didn’t sleep well’ (last_night_181214 008, 16.680 19.810)
- (174) *i=nda-wogiyawe*
 3SG=be.burnt-properly
 ‘he is well cooked’ (crab_girl_081115 037, 91.754 94.327)
- (175) *noroke kero thi=yaku-wogiyawe wei-ye*
 today already 3PL=stay=properly PREP-3SG.POSS
levo=ke
 POSS.CLF2:young.woman=SPKR.PROX
 ‘today they live well with his wife’ (fp_stimuli_201015_01 115, 453.770
 456.380)
- (176) *i=vakatha-wogiyawe nggama=ma riwa-ye*
 3SG=make-properly child=DET body-3SG.POSS
 ‘she prepares the child’s body properly’ (marriage_111015 041, 133.010 135.710)
- (177) *ande i=kaiwo=re i=kaiwo-wogiyawe=re*
 NEG1 3SG=work=NEG2 3SG=work-properly=NEG2
 ‘it won’t work, it won’t work properly’ (kula_exchange_081215 051-2, 152.460 158.781)
- (178) *tina-e le-Ø kula=ko gha-Ø*
 mother-3SG.POSS POSS.CLF2-3SG.POSS call=DIST POSS.CLF1-3SG.POSS
rumwaru maa me=wo-wogiyawe=Ø
 straight NEG 3SG.IMM.PST=GET.SG.RIGD-properly=3SG
 ‘the clearness of her mother’s message, Ebeutu didn’t understand it (lit. get)’
 (crab_girl_081115 026-8, 66.130 71.970)

Wogiyawe ‘properly’ is also attested in combination with a manner-of causation prefix *mwana-* ‘by hand’, as in (179), and can be translated ‘he “properlied” with his hands’ referring an action in which the subject adjusts his hat. Neither *mwana-* ‘by hand’ nor *wogiyawe* ‘properly’ can function independently as a verb but, in this case, they appear to use each other as a crutch to build a grammatical verb together.

- (179) *i=li-ra umbali-ye ghae na i=mwana-wogiyawe=Ø*
 3SG=GET-put head-3SG.POSS cover and 3SG=w.hands-properly=3SG
 ‘he put his hat on and adjusts/places it properly’
 (put_stimuli_191015_01_01 229-30, 967.776 970.887)

6.3.8.2 *Vakatha* ‘carefully’

Adverbial complex verbs with *vakatha* specify that the event expressed by the V_2 is completed ‘carefully’. Its occurrence in the data is limited. The two attested complex verbs are listed in Table 6.29 and exemplified in (180) and (181).¹⁶⁸

V_1 - V_2	V_1 - V_2 gloss	combined meaning	V_1 transitivity	tokens
<i>momodi-vakatha</i>	‘pull-carefully’	‘pull carefully’	TR	1
<i>vathawo-vakatha</i>	‘bend-carefully’	‘bend carefully’	TR	EE/ES

Table 6.29 Adverbial constructions with *vakatha* ‘properly’

- (180) *Sylvester* *i=mwana-vathawo-vakatha* *nail*
 personal.name 3SG=w.hands-bend-carefully nail
 ‘Sylvester straightens the nail carefully (i.e., bends it properly)’
 (e_300915_01 122, 404.400 409.070)
- (181) *amala=ko* *i=momodi-vakatha* *gha-Ø* *kwaliko* *ghamba*
 man=DIST 3SG=pull-carefully POSS.CLF1-3SG.POSS clothing place
 ‘the man pulls the suitcase carefully’
 (put_stimuli_201015_01 166-7, 943.160 950.512)

6.3.8.3 *Roro* ‘in vain’

The frustrative adverbial stem *roro* ‘in vain’ indicates that the event expressed by V_1 is not fully realised and that the intended outcome of the action does not eventuate for some reason. It appears to be related to, but not identical in meaning to, the transitive stem *roro* ‘not know’:

- (182) *ra=roro* *thela* *i=njimbukiki*
 1INCL=not.know who 3SG=look.after
 ‘we don’t know who will look after it’ (dating_0810 057, 147.910 149.944)
- (183) *kero* *vethi=roro* *le=ko* *ida-e*
 already 3PL.INT=not.know person=DIST name-3SG.POSS
 ‘already they didn’t know (i.e., had forgotten) the person’s name’
 (mandumbunga_02_181016 227, 578.051 581.408)

The attested complex verb combinations with *roro* ‘in vain’ are given in Table 6.30.

V_1 - V_2	V_1 gloss	combined meaning	V_1 transitivity	tokens
<i>nanggo-roro</i>	‘ask for’	‘ask in vain for (s.th./s.o.)’	TR	EE
<i>ravagha-roro</i>	‘stop’	‘not be able to stop (s.th./s.o.)’	TR	1
<i>tamwe-roro</i>	‘look for’	‘look in vain for (s.th./s.o.)’	TR	1
<i>ten-roro</i>	‘cut’	‘try to cut (s.th./s.o.)’	TR	1
<i>vole-roro</i>	‘chop’	‘try to cut (s.th./s.o.)’	TR	1

Table 6.30 Adverbial complex verbs with *roro* ‘in vain’

¹⁶⁸ The stem may be related to the transitive verb *vakatha* ‘do, make’. When *vakatha* occurs in V_1 position in adverbial constructions or in other types of VCs, it has the reading ‘do, make’, as in example (176) in the previous section.

All complex verbs with *roro* ‘in vain’ are listed in examples (184) to (188).

- (184) *amala=ko i=vole-roro umbwa=ko*
 man=DIST 3SG=chop-in.vain tree=DIST
 ‘the man tries to chop the tree (but it doesn’t break)’
 (cb_stimuli_051016_02_02 099, 730.110 732.747)
- (185) *amala=ko i=taga-ten-roro thiyo=ko muyai vara amba*
 man=DIST 3SG=by.striking-break string=DIST later really then
i=riri-ten=Ø
 3SG=by.striking=break=3SG
 ‘the man tries to cut the string by striking (and) at last he breaks it by striking’
 (cb_stimuli_051016_02_02 109, 787.892 792.205)
- (186) *i=ravagha-roro=nggi*
 3SG=stop-in.vain=3PL
 ‘he wasn’t able to stop them’ [context: one man is attempting to break up a fight between two other men]
 (fp_stimuli_201015_04 023, 62.190 67.505)
- (187) *kero thi=tamwe-roro le-nji vwakirakira=ma*
 already 3PL=look.for-in.vain POSS.CLF2-3PL.POSS frog=DET
 ‘they looked in vain for their frog’
 (frogstory_161214 013, 32.410 36.810)
- (188) *i=nanggo-roro bwarogi*
 3SG=ask.for-in.vain fish
 ‘he asked in vain for fish (but there wasn’t any or no one would give him any)’
 (e_091215)

6.3.8.4 *Thavwi* ‘accidentally’

The adverbial stem *thavwi* indicates that the action of the V_1 was accidental or done by mistake.¹⁶⁹

The complex verbs with *thavwi* ‘accidentally’ are listed in Table 6.31.

V_1 - V_2	V_1 gloss	combined meaning	V_1 transitivity	tokens
<i>linggi-thavwi</i>	‘pour out’	‘tip over accidentally’	TR	1
<i>ngge-thavwi</i>	‘hit’	‘hit accidentally’	TR	1
<i>nggila-thavwi</i>	‘break’	‘break accidentally’	TR	1
<i>ten-thavwi</i>	‘break’	‘break accidentally’	TR	EE

Table 6.31 Adverbial complex verbs with *thavwi* ‘accidentally’

The examples in (189) and (190) both have a V_1 meaning ‘break’ and describe situations where someone accidentally cuts themselves.

¹⁶⁹ There is also an independent, homophonous verb *thavwi* ‘wash’. It is unclear if the two morphemes are diachronically related. See (166) in §6.3.6 for an example of *thavwi* ‘wash’ in a complex verb.

- (189) *i=nggila-thavwi* *nima-e*
 3SG=break- accidentally hand-3SG.POSS
 ‘he accidentally cut his finger’ (cb_stimuli_051016_02_01 161, 867.010 870.000)
- (190) *no=u=ki-ten-thavwi* *nima-n*
 ADM=2SG=by.cutting-break-accidentally hand-2SG.POSS
 ‘Don’t cut your hand accidentally’ (e_091215)

The examples in (191) and (192) describe the same stimulus video in which a woman accidentally tips over a bucket before continuing on her way.

- (191) *i=la-vuri-linggi-thavwi=∅*
 3SG=and.go-w.feet-pour-by.mistake=3SG
 ‘she accidentally kicked it over and kept walking’
 (put_stimuli_231015 053, 408.314 409.712)
- (192) *ande i=thuwe=re buket=ke i=la-ngge-thavwi=∅*
 NEG1 3SG=see=NEG2 bucket=DIST 3SG=and.go-hit-by.mistake=3SG
 ‘she didn’t see the bucket (and) she accidentally hits it and kept walking’
 (put_stimuli_201015_02 127-8, 732.040 735.726)

6.3.8.5 *Kubaro* ‘quietly’

In adverbial constructions the verb *kubaro* ‘hide’ specifies that the event expressed by the V_1 is completed ‘quietly’. As an independent verb, *kubaro* has the related meaning of ‘hide’, as in (193), or with the posture prefix *ro-* ‘sit and’ to mean ‘be quiet’, as in (194).

- (193) *nggama=ma i=kubaro Vuwo*
 child=DET 3SG=hide place.name
 ‘the child hides in Vuwo’ (e_171215_02)
- (194) “*u=ro-kubaro!*”
 2SG=sit.and-hide
 ‘be quiet (lit. stay and hide)’ (e_111116)

There are only two adverbial complex verbs with *kubaro* ‘hide’ in the data, These are listed in Table 6.32 and shown in examples (195) and (196).

V_1 - V_2	V_1 - V_2 gloss	combined meaning	V_1 transitivity	tokens
<i>ghena-kubaro</i>	‘sleep-hide’	‘sleep quietly,	INTR	1
<i>longga-kubaro</i>	‘walk-hide’	‘walk quietly, secretly’	INTR	1

Table 6.32 Adverbial complex verbs with *kubaro* ‘quietly’

- (195) *a=ghena-kubaro*
 1SG=sleep-hide
 ‘I slept quietly’ (last_night_181214 020, 47.430 49.609)

- (196) *i=nga* “*tha* *hu=longga-kubaro*
 3SG=say PROH 2PL=walk-hide
 ‘she said “don’t walk quietly”’
 (mandumbunga_061215 060, 170.640 172.180)

6.3.8.6 *thuwole* ‘secretly’

The stem *thuwole* ‘be hidden’ cannot occur independently. In an adverbial construction it indicates that the activity of V₁ is hidden from others or done ‘secretly’. The single construction attested in the corpus is presented in (197).

- (197) *i=ngamwe-thuwole=nggi=ya* *bwarogi=ke* *morouma=ke* *e*
 3SG=feed-be.hidden=3PL=YA fish=SPKR.PROX k.o.fish=SKR.PROX PREP
mbwa=ke *tine*
 water=SPKR.PROX inside
 ‘she fed the fish secretly in the water’ (mandumbunga_061215 134, 384.185 388.194)

6.3.8.7 *Thuwowa* ‘deeply’

According to speakers, the stem *thuwowa* only occurs in one complex verb with the stem *ghena* ‘sleep’ to specify that the subject is sleeping deeply, as in (198). It cannot function as an independent verb.

- (198) *boda=ko* *wolaghiye* *kero* *thi=ya-ghena-thuwowa*
 relative=DIST all/every already 3P=all-sleep-be.fast.asleep
 ‘all those relatives were already fast asleep’
 (mandumbunga_02_181016 491, 1235.755 1239.430)

6.3.9 Aspectual constructions

The final group of complex verbs have aspectual functions. They consist of an unrestricted V₁ slot and a restricted V₂ which may take one of three aspectual stems: *kai* ‘inceptive’, *vao* ‘completive’ or *vun* ‘be finishing’.¹⁷⁰ The aspectual stems do not contribute to the valence of the construction. Although Lynch et al. (2002) do not mention aspectual SVCs in regards to Oceanic languages, Cleary-Kemp (2015: 136-7) finds SVCs with aspectual semantics in many Oceanic languages.

¹⁷⁰ Anderson and Ross (p. 338) propose that the Sudest aspectual stems are enclitics which follow the directional enclitics =*ma* ‘hither’ and =*wo* ‘thither’, however, the current corpus data show that the deictic enclitics follow the aspectual stems, as in (209). The different order of the morphemes does not preclude a suffix analysis of the aspectual morphemes and, like the adverbial stems discussed in the previous section, an alternate analysis of the aspectual stems is that they are grammaticalised suffixes.

6.3.9.1 *Kai* ‘inceptive’

The inceptive stem *kai* indicates that the action expressed by the V_1 is just beginning, is undertaken for the first time, or is the first in a series of actions. It cannot function as an independent verb.¹⁷¹

The inceptive stem is attested in constructions with intransitive, monotransitive and ditransitive verbs, which are listed in Table 6.33.

V_1 - V_2	V_1 gloss	combined meaning	V_1 transitivity	tokens
<i>ghena-kai</i>	‘sleep’	‘sleep for the first time (with s.o.)’	INTR	1
<i>thari-kai</i>	‘dance’	‘start dancing’	INTR	1
GET- <i>kai</i>	‘get’	‘get first’	TR	1
<i>lawe-kai</i>	‘catch’	‘catch for the first time’	TR	3
<i>mun-kai</i>	‘drink’	‘start to drink’	TR	4
<i>thuwe-kai</i>	‘see’	‘see first’	TR	4
<i>utu=nga-kai</i>	‘talk=TR’	‘talk about (s.th.) first’	TR	2
<i>vaidi-kai</i>	‘find’	‘findfirst’	TR	1
<i>vakatha-kai</i>	‘do/make’	‘do first’	TR	2
<i>vanjo-kai</i>	‘cast (spell)’	‘start to cast’	TR	1
<i>vaghare-kai</i>	‘teach’	‘teach first (s.th. to s.o.)’	DITR	1

Table 6.33 Aspectual complex verbs with *kai* ‘inceptive’

In (199) to (201), the inceptive is used to specify that the action of V_1 is just starting.

- (199) *va i=thari-kai vara ghe=ko*
 REM.PST 3SG=dance-INC really LOC=DIST
 ‘he started dancing there’ (feast_of_the_fish_271015 072, 171.858 174.354)

- (200) *thi=mun-kai=ya rogibo gha-Ø umbwa-umbwa*
 3PL=drink-INC=YA refuse POSS.CLF1-3SG.POSS RED-tree
 ‘they start to drink the preparation/start to drink the preparation for the first time’
 (kula_exchange_081215 015, 49.390 51.350)

- (201) *amala=ko i=vanjo-kai kukura*
 man=DIST 3SG=cast-(spell)-INC spell
 ‘the man starts casting spells’ (kula_exchange_081215 009-10, 29.240 33.810)

The inceptive stem is also used to indicate that the event expressed by the V_1 is performed for the first time. The example in (202) describes what happens when a young woman sleeps with a young man for the first time.

¹⁷¹ The morpheme *kai* is also a noun meaning ‘thing’ and as an independent verb means something like ‘to thingy’, typically used as a placeholder to avoid a particular word or when a lexical item is not remembered.

- (202) *thonggo i=ghena-kai wei-ye umoru umoru=ko*
 if 3SG=sleep-INC ACC-3SG.POSS young.man young.man=DIST
tina-e na rama-e na le-Ø
 mother-3SG.POSS and father-3SG.POSS and POSS.CLF2-3SG.POSS
boda-boda thi=li=ya nambo...
 RED-relative 3PL=GET.SG.FLEX=YA basket
 ‘if she sleeps with a boy for the first time, the boy’s mother and father and relatives get
 a basket...’ (first_time_251214 008-12, 18.360 32.670)

In (203), the inceptive specifies that the police are arresting a particular person for the first time.

- (203) *polis thi=lawe-kai=Ø*
 police 3PL=catch-INC=3SG
 ‘the police catch/arrest him for the first time’ (fp_stimuli_191015_05 058, 95.762 97.250)

The stem *kai* ‘INC’ is also used to describe the first in a series of generally similar events. In (204), the speaker is describing the different things she learned at vocational college, beginning with the first thing she learnt, which was sewing. The verb *vaghare* is one of the three ditransitive verbs attested in the language. Like the stem *ve* ‘give’, the recipient of *vaghare* ‘teach’ is encoded by the object enclitic and the thing being taught is encoded by a lexical NP.

- (204) *va thi=vaghare-kai=nggo nggiyanggia...*
 REM.PST 3PL=teach-INC=1SG sewing
 ‘they first taught me sewing...’ (education_241214 018-9, 59.801 65.762)

In (205), the speaker is asking the hearer about which picture (out of several pictures) they saw first.

- (205) *angga iya mara=thuwe-kai=Ø=ma?*
 which DEM 1INCL.IMM.PST=see-INC=3SG=DET
 ‘which one (picture) did we see first?’ (fp_stimuli_191015_03 021, 35.380 36.790)

6.3.9.2 *Vao* ‘completive’

The completive stem *vao* indicates that the event expressed by the preceding verb is completed or finished. The stem cannot function independently and only occurs in complex verbs. Like all the aspectual *V*₂ stems, *vao* ‘COMPL’ occurs with both intransitive and transitive *V*₁ stems. The intransitive verbs attested in complex predicates with *vao* are listed in Table 6.34.

V₁-V₂	V₁ gloss	combined meaning	V₁ transitivity	tokens
<i>ghawi-vao</i>	‘chew (betel nut)’	‘finish chewing (betel nut)’	INTR	1
<i>kiwak-vao</i>	‘make sago pudding’	‘finish making sago puding’	INTR	1
<i>koghane-vao</i>	‘make (cooking pit)’	‘finish making (cooking pit)’	INTR	1
<i>kot-vao</i>	‘attend court’	‘finish attending court’	INTR	1
<i>mwaritau-vao</i>	‘fish’	‘finish fishing’	INTR	2
<i>nda-vao</i>	‘burn, cook (roast)’	‘finish burning/ cooking’	INTR	EE
<i>sikulu-vao</i>	‘attend school’	‘finish school’	INTR	1
<i>thavi-vao</i>	‘beat (sago)’	‘finish beating’	INTR	1
<i>thithu-vao</i>	‘bathe’	‘finish bathing’	INTR	1
<i>utu-vao</i>	‘speak’	‘finish speaking’	INTR	2
<i>voi-vao</i>	‘open sago tree’	‘finish opening sago tree’	INTR	1

Table 6.34 Intransitive aspectual complex verbs with *vao* ‘completive’

The sentences in (206) and (207) show intransitive complex verbs with the completive stem.

- (206) *ok wo=ra=utu-vao vara*
 ok HORT=1INCL=speak-COMPL really
 ‘ok, we’re finished talking’ (c_031116 276, 510.950 512.880)

- (207) *i=thithu-vao*
 3SG=bathe-COMPL
 ‘he finished bathing’ (mandumbunga_02_181016 139, 343.554 345.642)

The monotransitive complex verbs with *vao* ‘COMPL’ are given in Table 6.35, with tokens presented in (208) to (210).

V ₁ -V ₂	V ₁ gloss	combined meaning	V ₁ transitivity	tokens
<i>dowe-vao</i>	‘load (canoe)’	‘finish loading’	TR	1
<i>ge-vao</i>	‘cook’	‘finish cooking’	TR	1
<i>GET-vao</i>	‘get’	‘finish getting’	TR	1
<i>ghan-vao</i>	‘eat’	‘finish eating’	TR	5
<i>iwon-vao</i>	‘cover (s.th. with leaves)’	‘finish covering’	TR	1
<i>keli-vao</i>	‘grate’	‘finish grating’	TR	3
<i>mun-vao</i>	‘drink’	‘finish drinking’	TR	1
<i>njanggi-vao</i>	‘clean’	‘finish cleaning’	TR	1
<i>rumbo-vao</i>	‘make/light (a fire)’	‘finish lighting’	TR	1
<i>tam-vao</i>	‘cream (food)’	‘finish creaming’	TR	1
<i>tara-vao</i>	‘pour’	‘finish pouring’	TR	1
<i>tawoi-vao</i>	‘have diarrhoea’	‘stop having diarrhoea’	TR	1
<i>ten-vao</i>	‘break’	‘finish getting (w. tongs)’	TR	1
<i>thatha-vao</i>	‘tear’	‘finish tearing’	TR	1
<i>the-vao</i>	‘serve (food)’	‘finish serving’	TR	1
<i>thiki-vao</i>	‘peel (with blade)’	‘finish peeling’	TR	1
<i>thuwo-vao</i>	‘get (with tongs)’	‘finish covering’	TR	1
<i>vakatha-vao</i>	‘make, do’	‘finish making’	TR	1
<i>vaona-vao</i>	‘read’	‘finish reading’	TR	ES
<i>va-ranggi-vao</i>	‘CAUS-go in’, ‘feel inside (s.th., with e.g., hands)’	‘finish inside’	TR	1
<i>vatha-vao</i>	‘gather’, meaning with ‘farewell’	‘farewell, bid goodbye’	TR	1
<i>vivatha-vao</i>	‘prepare’	‘finish preparing’	TR	2
<i>wathi-vao</i>	‘wrap’	‘finish wrapping’	TR	1
<i>wi-vao</i>	‘grind’	‘finish grinding’	TR	1
<i>yaghara-vao</i>	‘smoke (food)’	‘finish smoking’	TR	1

Table 6.35 Monotransitive aspectual complex verbs with *vao* ‘completive’

- (208) *maa me=mwana-thatha-vao kwama=ko*
 NEG 3SG.IMM.PST=w.hands-tear-COMPL cloth=DIST
 ‘she doesn’t finish tearing the cloth by hand’
 (cb_stimuli_071116 083, 795.681 798.777)

- (209) *gamagai thi=mban-vao=ma lo bigi-bigi*
 children 3PL=GET.PL-COMPL=hither POSS.CLF2.1SG RED-thing
 ‘the children finished bringing (me) my things’
 (e_080118)

- (210) *mbanga=va ma i=la-vatha-vao=nggi vara bwarogi*
 time=REM.PST already 3SG=and.go-gather-COMPL=3PL really fish
 ‘one time, she finished gathering the fish’
 (mandumbunga_02_181016 001-2, 640 12.899)

As discussed in §6.2.1, the complex verbs with the completive stem *vao* ‘COMPL’ frequently occur in a larger, independently inflected construction. These constructions consist of an initial aspectual complex verb with the completive stem followed by a second VC with the intransitive verb *ko* ‘finish’ with a third-person subject marker. The independently inflected sequencing constructions

like the one above have discourse-linking function and form comparable to tail-head linkage with the initial completive complex verb repeating the verb of the previous clause as in (211).

- (211) *ra=vuri=∅* *ra=vuri-vao=∅* *i=ko*
 1INCL=squeeze.sago=3SG 1INCL=squeeze.sago-COMPL=3SG 3SG=COMPL
 ‘we squeeze it (sago), we finish squeezing it’ (sago_101214 030, 79.320 81.970)

Completive complex verbs also have a sequencing, tail-head linkage function without the separately inflected VC with *ko* ‘finish’, as illustrated by the examples shown in (212) to (214). In these examples, the last clause is repeated in a complex verb with the completive stem.

- (212) *a=tam* *tapioka=ma* *a=tam-vao=∅* *a=nja*
 1SG=cream cassava=DET 1SG=cream-COMPL=3SG 1SG=go.down
a=rumbo=∅...
 1SG=make(fire)=3SG
 ‘I cream the cassava, I finish creaming it, I go down, I light it (a fire)...’
 (stone_cooking_251015 047-49, 124.210 130.331)

- (213) *a=ge=ya* *bwarogi=ko* *a=ge-vao* *bwarogi=ko*
 1SG=cook=YA fish=DIST 1SG=cook-COMPL fish=DIST
a=thin-ranggi=∅ *a=the=∅...*
 1SG=GET-go.out=3SG 1SG=serve=3SG
 ‘I cook the fish, I finish cooking the fish, I take it out (the cooking pot from the fire) I serve it...’
 (fishing_071015 014-6, 36.465 43.741)

- (214) *i=thithu* *i=thithu-vao* *i=voro* *i=poka-pokau...*
 3SG=bathe 3SG=bathe-COMPL 3SG=go.up 3SG=RED-paint.body
 ‘he bathed, he finished bathing, he went up, he painted (his body)...’
 (mandumbunga_02_181016 138-40, 343.554 348.275)

6.3.9.3 *Vun* ‘be finishing’

The final aspectual verb is *vun* ‘be finishing’. A related independent transitive verb ‘extinguish, turn off’ also exists. Examples (215) and (216) show *vun* ‘extinguish’ used as a transitive verb. In (215), the traders are extinguishing the trade magic upon returning home. Example (216) discusses the more prosaic activity of putting out a fire.

- (215) *thi=vun=a* *gha-nji* *waiwai=ko*
 3PL=extinguish=YA POSS.CLF1-3PL.POSS beauty=DIST
 ‘they turn off their beauty’ (kula_exchange_081215 085, 246.280 249.440)

- (216) *wanakau* *thi=vun=a* *ndighe=ma*
 young.women 3PL=put.out=YA fire=DET
 ‘the young women put out the fire’ (e_181016)

In complex verbs, *vun* indicates that the event encoded by the preceding verb stem is coming to an end or is about to finish. As an aspectual stem, *vun* is not transitive. This is evidenced by the fact that when it occurs with an intransitive V_1 verb, the resulting complex verb is also intransitive. Table 6.36 lists attested complex verbs with *vun* ‘be finishing’ in complex verbs.

V_1 - V_2	V_1 gloss	combined meaning	V_1 transitivity	tokens
<i>kaiwo-vun</i>	‘work’	‘be finishing working’	INTR	ES
<i>utu-vun</i>	‘speak’	‘be finishing talking’	INTR	1
GET- <i>vun</i>	‘get’	‘be finishing brining’	TR	ES
<i>uthighe-vun</i>	‘shit’	‘fart (lit. be finishing shitting)’	TR	1
<i>vaona-vun</i>	‘read’	‘be finishing reading’	TR	ES

Table 6.36 Aspectual complex verbs with *vun* ‘be finishing’

There are only two tokens of *vun* ‘be finishing’ in the corpus, shown in (217) and (218). In (217), the speaker talks about his plans to finish telling a long story the next day.

- (217) *evole* *amba* *a=mena* *a=utu-vun*
tomorrow then 1SG=come 1SG=speak-be.finishing
‘tomorrow then I’ll come (and) be finishing speaking (telling the story)’
(mandumbunga_02_181016 547, 1375.513 1377.882)

In (187), the combination of *uthighe* ‘shit’ and *vun* ‘be finishing’ combine in a less obviously compositional and more opaque construction to mean ‘fart’.

- (218) *i=ro-taodo-ghembe* *i=ro-uthighe-vun* = \emptyset
3SG=stay.and-crawl-towards 3SG=stay.and-shit-be.finishing=3SG
‘seated he crawled towards it (the fire) (and) he farted (lit. was finishing shitting)’
(child_and_giant_201015 087, 220.390 223.604)

Further, elicited complex verbs with *vun* ‘be finishing’ are presented in (219) to (221).

- (219) *nggama=ko* *i=wo-vun=ma* *ghelethi*
child=DIST 3SG=GET.SG.RIGD-be.finishing=hither betel.nut
‘the child is finishing brining (me) betel nut’ (e_151217)
- (220) *i=vaona-vun* *buku*
3SG=read-be.finishing book
‘he’s finishing reading a book’ (e_161215)
- (221) *thi=kaiwo-vun*
3SG=work=be.finishing
‘they are finishing working’ (e_171215_01)

6.3.10 Nested complex verb constructions

The discussion thus far has been restricted to two-stem complex verbs. There are, however, a small number of complex verbs containing three verb stems in the corpus and elicitation data. In many

languages, multi-verb sequences with more than two stems are best analysed as nested constructions, where one complex verb fills a single slot within another complex verb (Aikhenvald 2006: 35). In languages where complex verbs can be understood as nested constructions, there are usually language-specific constraints regulating which types of multi-stem sequences can contain a nested construction (Dixon 2006: 344). Cleary-Kemp (2015: 147) contends that almost all ‘poly-verbal’ SVCs in Oceanic are nested in this manner with the exception of directional constructions. Dixon (2006: 344) comes to a similar conclusion from a crosslinguistic perspective.

The Sudest three-stem complex verbs can also be best understood as nested constructions, where the V_1 of the construction is itself a complex verb. This means they are all left-nested, which is the most common type of nesting cross-linguistically (Dixon 2006: 344). In the schema of the nested complex verbs presented below, the initial nested position in the complex verb is represented in the round brackets, and I label the two stems V_{1a} and V_{1b} . The second slot of the macro construction is located outside the round brackets and is labelled V_2 :

$$[(V_{1a} - V_{1b}) - V_2]$$

Adopting a nested analysis, the logical argument sharing patterns and valence of the complex verbs can also be understood by analysing them step-by-step. Argument sharing and valence of the embedded construction (V_{1a} - V_{1b}) is analysed first and then combined with the V_2 stem as part of the macro construction. In Sudest, the attested types of multi-verb constructions that can take a nested slot as V_1 (i.e., V_{1a} - V_{1b}) are the directional, handling, PUT, and aspectual constructions; although other types are likely possible. Nearly all complex verbs that fill the V_1 slot are handling complex verbs, but PUT and benefactive complex verbs are also attested in the nested slot. There are eight distinct three-stem constructions attested in the corpus and an additional dozen or so combinations from elicitation data.

6.3.10.1 Directional nested constructions

Directional complex verbs are attested with a number of embedded complex verbs in V_1 position in the corpus. The directional macro construction can take a nested handling complex verb or a PUT complex verb in V_1 position. The attested constructions are presented in Table 6.37.

V _{1a} -V _{1b}	V _{1a} -V _{1b} gloss	V _{1a} -V _{1b} transitivity	V ₂	V ₂ gloss	V ₂ transitivity	combined meaning	tokens
GET- <i>kitho</i>	‘get-hang’	TR-TR	<i>njogha</i>	‘go back’	INTR	‘hang back’	1
GET- <i>thithi</i>	‘get-insert	TR-TR	<i>njogha</i>	‘go back’	INTR	‘insert back in’	1
GET- <i>utu</i>	‘get-immersed	TR-TR	<i>njogha</i>	‘go back’	INTR	‘immerse back’	1
GET- <i>yathu</i>	‘get-throw away’	TR-TR	<i>ru</i>	‘go in’	INTR	‘throw in’	SE
GET- <i>yathu</i>	‘get-throw away’	TR-TR	<i>voro=nga</i>	‘go up=TR’	TR	‘throw up’	SE
GET- <i>mban</i>	‘get-put’	TR-TR	<i>njogha</i>	‘go back’	INTR	‘put back’	SE

Table 6.37 Directional complex verbs with nested complex verbs of handling and putting

The attested three constructions with an embedded handling complex verb contain the directional verb *njogha* ‘go back’ in V₂ position, as in (222) to (224). Elicitation data shows further three-stem sequences with different directional verbs in V₂, as in (225) and (226).

- (222) *ela=ma* *i=[(li-thithi)-njogha]* *wevo=ma*
 woman=DET 3SG=GET.SG.FLEX-insert-go.back young.woman=DET
umbali-ye *gha-Ø* *njin*
 head/hair-3SG.POSS POSS.CLF1-3SG.POSS flower
 ‘the woman puts the flower back in the young woman’s hair (lit. the young woman’s hair’s flower)’
 (put_stimuli_191015_02_02 010, 72.941 75.423)
- (223) *amala=ma* *i=[(li-kitho)-njogha]* *thiyo=ma*
 man=DET 3SG=GET.SG.FLEX-hang-go.back rope=DET
 ‘the man hangs back the rope’ (put_stimuli_191015_01_02 194, 758.683 762.968)
- (224) *ela=ma* *i=wo* *ndeghi=ma* *e* *mbwa* *variye*
 woman=DEM 3SG=GET.SG.RIGD cup=DET PREP water container
tine na kero *i=[(wo-utu)-njogha]=Ø=va*
 inside and already 3SG=GET.SG.RIGD-immersed-go.back=3SG=again
 ‘the woman takes the cup from inside the water container and immerses it back again’
 (put_stimuli_191015_02_02 086-9, 592.593 611.800)
- (225) *nggama=ko* *i=[(li-yathu)-ru]=wo* *kwama=ko* *e*
 child=DIST 3SG=GET.SG.FLEX-throw.away-go.in=thither cloth=DIST PREP
nggolo=ko *tine*
 house=DIST inside
 ‘the child throws the cloth into the house’ (e_120917)
- (226) *nggama=ko* *i=[(li-yathu)-voro=nga]* *kwama=ko* *e*
 child=DIST 3SG=GET.SG.FLEX-throw.away-go.up=TR cloth=DIST PREP
tebol=ko *vwata-e*
 table=DIST top-3SG.POSS
 ‘the child throws the cloth up on the table’ (e_120917)

There is also a token in which a directional complex verb contains a PUT construction in the V_1 slot, as in (227).

- (227) *vari=ma* *thi=[(wo-mban)-njogha=Ø]* *e* *bilikan=ma* *tine*
stone=DET 3PL=GET.SG.RIGD-put-go.back=3SG PREP pot=DET inside
‘the stone, they put it back inside the pot’
(put_stimuli_191015_01_02 009-10, 34.120 38.060)

As discussed in §6.3.3, the various PUT stems are interchangeable in some complex constructions but not in others. In three-stem directional complex verbs containing a nested PUT construction, the V_1 slot may only be filled by a PUT construction containing *mban* ‘put’ in V_{1b} . The use of one of the other PUT stems, such as *ra* ‘put’, is ungrammatical. Compare (228) with (227).

- (228) **wevo=ma* *i=[(wo-ra)-njogha]* *vari* *e* *bilikan=ma*
young.woman=DET 3SG=GET.SG.RIGD-put-go.back stone PREP pot=DET
tine
inside
Intended: ‘the girl puts the stone back in the pot’ (e_280917)

6.3.10.2 Handling nested constructions

There is a three-stem construction attested in the corpus that involves two handling multi-stem constructions, one nested inside the other:

- (229) *amala=ma* *i=mwana-ten-ten=a* *thiyo=ma*
man=DET 3SG=w.hands-RED-break=YA string=DET
i=[(tako-yathu)-vala]=Ø *e* *tebol=ma*
3SG=GET.PL-throw.away-be.on.top=3SG PREP table=DET
‘the man is breaking the string and throwing it over the table’
(cb_stimuli_071116 080, 769.600 773.155)

6.3.10.3 PUT nested constructions

PUT macro constructions can take a nested complex verb in V_1 position. In contrast to the directional macro construction in (227) with *mban* ‘put’ nested in the V_{1a} slot, the macro PUT sequences with a nested construction can only take *ra* ‘put’ as V_2 . There are just two instances of this type attested in the corpus (one token each in the corpus): GET-*vala-ra* ‘get-be on top-put’ or ‘put on top’ in (230), and GET-*yathu-ra* ‘get-throw away-put’ or ‘throw away onto’ in (231).

- (230) *ela=ma* *i=[(wo-vala)-ra]* *vari* *e* *buku=ma*
 woman=DET 3SG=GET.SG.RIGD-be.on.top-put stone PREP book=DET
vwata-∅
 top-3SG.POSS
 ‘the woman puts the stone on top of the book’
 (put_stimuli_191015_02_02 111-2, 774.260 779.364)

- (231) *i=mwana-thatha* *kwama=ma* *na* *i=[(tako-yathu)-ra]=∅*
 3SG=w.hands-tear cloth=DET and 3SG=GET.PL.GNRL-throw.away-put=3SG
e *pulo*
 PREP floor
 ‘she tears the cloth with her hands and throws it on the floor’
 (cb_stimuli_071116 003-5, 35.480 40.860)

6.3.10.4 Aspectual nested constructions

The final attested three-stem sequence in (232) involves an aspectual complex verb with the completive stem *vao* ‘finish’ and a nested benefactive construction.

- (232) *i=[(utu-giya)-vao]=∅* *we* *tina-e* *na* *rama-e*
 3SG=speak-give-finish=3SG PREP mother-3SG.POSS and rather
 ‘he tells everything/finishes telling it to his mother and father’
 (child_and_giant_201015 130, 344.000 349.490)

7 Encoding strategies of three-participant events

7.1 Introduction

This chapter presents an analysis of the morphosyntactic strategies used in Sudest to encode three-participant events (3PEs). The investigation takes Margetts et al.'s (2019a) list of target events as a starting point (see §2.3 for a full list of the events and §2.5 for methodology). The description of 3PEs presented in this chapter aims to exhaustively account for all 3PEs attested in the corpus (both the text and stimuli subcorpora) and to supplement gaps in the corpus with elicitation data.

As discussed in chapter 2 (§2.4), Margetts et al. (2019b) identify seven types of encoding strategies used to express 3PEs across a variety of languages, each with two or more substrategies. Table 7.1 re-presents these encoding strategies with those not attested in Sudest in grey. At least one substrategy from each of the encoding strategies is attested in Sudest excluding the incorporation strategy. The absence of the incorporation strategy is not surprising given that there is no (attested) noun incorporation in Sudest. As well as 3PEs expressed by a single encoding strategy, it is also common for them to be encoded by a combination of two (or sometimes three) strategies, or to include a fourth, instrument participant.

Table 7.1 Three-participant event encoding strategies in Sudest (adapted from Margetts et al. 2019b)

encoding strategy	strategy code
1. Three-place predicate strategy All three participants are expressed as syntactic core arguments of the verb.	
(a) Direct-argument strategy All three arguments are expressed as direct arguments of the verb (which does not carry valence increasing morphology).	1a
(b) Causative strategy The verb stem is restricted to two arguments, with a third argument added by a causative affix.	1b
(c) Applicative strategy The verb stem is restricted to two arguments, with a third argument added by an applicative affix.	1c
2. Oblique and adjunct strategies The verb takes two arguments. A third participant is expressed as an oblique argument or an adjunct.	
(a) R-type obliques and adjuncts The verb takes two arguments, and a third, R-type participant is expressed as an oblique argument or an adjunct.	2a
• “Oblique applicative”: The verb includes an applicative-like marker:	2a-APPL
• “Oblique causative”: The verb includes a causative-like marker.	2a-CAUS
	2b

(b)	T-type obliques and adjuncts	The verb takes two arguments and a third, T-type participant (includes instruments) is expressed as an oblique argument or an adjunct.	2b-APPL
		• “Oblique Applicative”: The verb includes an applicative-like marker.	2b-CAUS
		• “Oblique Causative”: The verb includes a causative-like marker.	
3.	Serial verb strategy	Two (or more) verbs combine in a complex construction and share the three participants as arguments (or adjuncts) between them.	
	(a) R-type serialized Participant	The serialized verb introduces a R-type participant.	3a
	(b) T-type serialized Participant	The serialized verb introduces a T-type participant.	3b
4.	Incorporation strategy	One participant is expressed by an incorporated nominal.	
	(a) R-type incorporated nouns		4a
	(b) T-type incorporated noun		4b
		• Argument status of the incorporated noun can be marked as a sub-annotation, e.g. 4c-1.	
5.	Adnominal strategy	The verb takes two arguments. A third participant is expressed as an adnominal dependent of one argument.	
	(a) Possessive strategy (R-type)	The R-type participant is expressed as the possessor of the theme.	5a
	(b) Proprietary strategy (T-type)	The T-type participant is expressed as the dependent of the agent.	5b
6.	Directional strategy	An adverbial directional marker or serialized verb indicates transactional orientation.	6
7.	Absorption strategy	The verb stem (typically the verbal lexeme) includes information about one of the participants.	
	(a) Direct lexicalization	The verb is formally distinct from any noun denoting the event participants, but its semantics include reference to one of the participants.	7a
	(b) Zero derivation	The verb derives by zero-conversion from a noun denoting one of the participants.	7b
	(c) Denominal derivation	The verb derives by overt derivation from a noun denoting one of the participants.	7c
	(d) Absorbed classifiers or object markers	The verb takes two arguments, but the verb stem has absorbed what used to be a classifier, or an object marker which conveys information about a further participant.	7d
	(e) Participant-based event classification	The verb stem carries information about one of the participants and characterises the event with respect to one of the participants.	7e
	(f) Affix-based classification	A participant is evoked by a non-pronominal, non-valence-increasing affix (e.g. instrument or manner of causation affixes).	7f

Each example presented in this chapter also includes a coding reference for the construction. The coding can be used to search for 3PEs of this type in the Sudest corpus. For example, the 3PE in (1)

Table 7.2 shows the two events encoded by the three-place predicate strategy in the data. It indicates the event type (see Table 2.1 for a complete list) and the encoding strategy (see Table 7.1). The table also lists the token frequencies of each event in the text and stimuli subcorpora. If no token number is included in the text token or stimuli token columns, the construction is only attested in elicitation data. As Table 7.2 show, the verb *vaghare* ‘teach’ occurs in the corpus eight times (all in the same text), while *va-ravu* ‘teach’ only occurs in elicitation.¹⁷³

event	verb	gloss	event type	encoding strategy	text tokens	stimuli tokens
teach	<i>vaghare</i>	‘teach’	C	1a	8	-
teach	<i>va-ravu</i>	‘CAUS-know’	C	1b	-	-
				total	8	0

Table 7.2 Verbs in three-place predicate constructions

The two ‘teach’ verbs can be used interchangeably without any apparent semantic difference, as illustrated in (2) and (3):

- (2) *thi=vaghare=nggo* *nangge-nangge*
 3PL=teach=1SG RED.weave
 ‘they taught me weaving’
 (education_241214 026-27)
 C(teach-vaghare)1a
- (3) *elisari=ma* *i=va-ravu=nggo* *nangge-nangge*
 old.woman=DET 3SG=CAUS-know=3SG RED-weave
 ‘the old woman teaches me weaving’
 (e_051217)
 C(teach-ravu)1b

Both verbs share the same argument structure, as shown in (4) and (5). The A (the teacher) is minimally indexed on the verb by the subject marker. R (the student) is marked by an object enclitic and/or lexical NP. Finally, T (the thing being taught) is expressed by a bare NP.¹⁷⁴ The T-type participant in (4) is a possessive NP headed by the noun *vakavakatha* ‘making’ (as discussed in §3.3.3.1.1, reduplication can be a nominalised process).

- (4) *thi=vaghare=nggo* *ghamba* *ghena* *gha-Ø* *vaka-vakatha*
 3PL=teach=1SG place sleep POSS.CLF1-3SG.POSS RED-make
 ‘they taught me bed making (lit. sleeping place’s making)’
 (education_241214 060-61)
 C(teach-vaghare)1a
- (5) *Lydia* *i=va-ravu* *Michael* *vanga* *lumo*
 pers.name 3SG=CAUS-know pers.name language white.person
 ‘Lydia teaches Michael English’
 (e_041215_01)

¹⁷³ Interestingly, the underived base forms show the reverse pattern: *ravu* ‘know’ is far more frequent than *ghareghare* ‘know’ in the corpus (25 tokens to 5 tokens).

¹⁷⁴ As stated in chapter 4, the absence of an adposition is one of the criteria that establishes argumenthood.

One further ditransitive construction meaning ‘give’ is attested in the language. The construction is a complex verb (see §2.4.3 for further discussion).

The oblique and adjunct strategies involve a two-place predicate with two arguments, with the third participant expressed as an oblique or adjunct (see §2.4.2). Margetts and Austin (2007: 88) suggest that these strategies could be a universal or nearly-universal encoding strategy for 3PEs; and the strategies are certainly widespread in the Oceanic languages (Margetts 2007). The Sudest constructions have been categorised as the adjunct strategy. This is because the attested verbs do not subcategorise for the third participant (typically a PP), which only optionally occurs in the clause. Adjunct-strategy constructions are one of the most common types of 3PEs in the corpus, in terms of both the number of constructions and the number of tokens in the corpus (see §8.2 and §8.3 for discussion).

The strategy is used to express a wide range of 3PEs; it is attested with all target event types, with the exceptions of events J to L.¹⁷⁵ Both the R-type and T-type adjunct substrategies are attested in Sudest, although the latter is far more limited in both the target event types encoded by it and the overall number of tokens; event types A to F are expressed by the R-type substrategy, and A, G and H type events are encoded by the T-type substrategy. Examples (6) and (7) illustrate type A events in which the agent causes the recipient to receive the theme. Example (6) shows an R-type adjunct strategy in which R is encoded by a PP *weya le bodaboda* ‘to her relatives’. The 3PE in (7) is a T-type adjunct construction and it is T that is expressed by a PP *e mbathi* ‘mango’.

- (6) *menda=va* *i=variye* *ghaningga* *lemoyo* *we=ya*
yesterday=REM.PST 3SG=send food many PREP=YA
le-Ø *boda-boda*
POSS.CLF2-3SG.POSS RED-relative
‘she sent plenty of food to her relatives’ (e_021115_02 064-65)
A(send)2a

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- (7) *ela=ma i=ngamwe=nggo e mbathi*
 woman=DET 3SG=feed=1SG PREP mango
 ‘the woman feeds me mango (lit. the woman feeds me with mango)’ (e_261016)
 A(feed)2b

This section describes the three types of R-type adjunct 3PEs in §7.3.1 and the T-type adjunct 3PEs in §7.3.2. Adjunct-strategy constructions also occur in a range of combination 3PEs, discussed later in this chapter. Combination-strategy 3PEs include constructions in which the adjunct strategy combines with directional verbs (§7.8.1), directional associated motion prefixes (§7.8.1.2), and absorption affix-based classification constructions. It also occurs in constructions with a fourth participant; for these, see §7.8.2 to §7.9.2.2.

7.3.1 R-type adjunct substrategy

This section presents all R-type adjunct constructions attested in the text and stimuli data, with supplementary data from elicitation. The elicitation data are used in cases where it can contribute further insight or clarity to the expression of the participants, or in instances where an event type is not attested in the corpus. The underived-adjunct strategy 3PEs are discussed first, followed by a discussion of the derived-adjunct strategy 3PEs. The final part of this section describes the R-type adjunct-strategy constructions that optionally take a classificatory verb without any formal or semantic change.

7.3.1.1 Underived R-type adjunct

There are 15 attested verbs that occur in underived R-type adjunct strategy 3PEs, shown in Table 7.3.

event	verb	gloss	event type	strategy code	text tokens	stimuli tokens
give (gift)	<i>vaghavagha</i>	‘give (gift)’	A	2a	2	-
send	<i>variye</i>	‘send’	A	2a	1	-
lead	<i>vanggu</i>	‘lead’	B	2a	1	-
plant	<i>kabu</i>	‘plant’	B	2a	-	-
pour	<i>linggi</i>	‘pour’	B	2a	-	-
pull	<i>momodi</i>	‘pull’	B	2a	-	-
ask for	<i>nanggo</i>	‘ask for’	C	2a	1	1
show	<i>vatomwe</i>	‘show’	C	2a	-	-
hear	<i>longwe</i>	‘hear’	D	2a	-	-
get	GET	‘get’	D	2a	-	-
get	GET	‘get’	E	2a	1	18
pull	<i>gita</i>	‘pull’	E	2a	1	-
steal	<i>kaivi</i>	‘steal’	E	2a	-	-
catch	<i>lawe</i>	‘catch’	F	2a	-	-
cook	<i>ge</i>	‘cook’	F	2a	-	-
total					7	19

Table 7.3 Verbs in underived R-type adjunct constructions

There are two verbs attested in underived R-type adjunct constructions from the type A events. An example of a 3PE with the verb *variye* ‘send’ is shown above in (6). The second verb that expresses a type A event, *vaghavagha* ‘give (gift)’, specifies a giving event in which the theme is a gift (usually in the context of intra- and inter-island exchange networks). While it is potentially unclear that *vaghavagha* ‘give (gift)’ is a monotransitive verb with an object argument from (8), the elicited example in (9) shows that the verb is indeed monotransitive, with the object referent expressed by both the object enclitic *=nggi* ‘3PL’ and the following conominal *mbombo* ‘pig(s)’.

- (8) *thi=vaghavagha=Ø we=nggi*
 3PL=give(gift)=3SG PREP=3PL
 ‘they give it (a slaughtered pig) to them’
 (kula_exchange_081215 062, 177.890 180.874)
 A(give.gift)2a
- (9) *a=vaghavagha=nggi=ya mbombo we=ngge*
 1SG=give(gift)=3PL=YA pig PREP=2SG
 ‘I gift the pigs to you’
 (e_21116_02)
 A(give.gift)2a

There is a somewhat larger group of five underived R-type adjunct constructions that encode type B events. The examples in (10) to (13) show the monotransitive verbs *vanggu* ‘lead’, *momodi* ‘pull’, *linggi* ‘pour’, and *kabu* ‘plant’. Because R takes the semantic role of goal (rather than recipient, as in the two type A events above), the PPs are headed by the general preposition *e* ‘to, from, with’.

- (10) *gha-nda* *ra-vanggu-vanggu* *thi=mena* *thi=vanggu=inda*
 POSS.CLF1-1INCL.POSS AG-RED-lead 3PL=come 3PL=lead=1INCL
e *garowo=ko*
 PREP shore=DIST
 ‘our ancestors come (and) lead us to the shore’
 (engginas_story_231016 019, 40.680 44.033)
 B(lead)2a
- (11) *nggama=ma* *i=momodi* *yambiya=ma* *ndamwa* *e* *nggolo=ko*
 child=DET 3SG=pull/drag sago=DET leaf PREP hosue=DIST
 ‘the child drags the sago leaf to the house’
 (e_261116_02)
 B(pull-momodi)2a
- (12) *nggama=ma* *i=linggi=ya* *mbwa* *e* *bilikan* *tine*
 child=DET 3SG=pour=YA water PREP metal.pot inside
 ‘the child pours the water into the pot’
 (e_261117)
 B(pour-linggi)2a
- (13) *a=kabu* *samuwa* *e* *uma* *tine*
 1SG=plant k.o.taro PREP garden inside
 ‘I plant taro in the garden’
 (e_021115_02 085)
 B(plant)2a

The sentences in (14) and (15) show the two attested R-type adjunct 3PEs expressing events of communication (type C events): *nanggo* ‘ask for’ and *vatomwe* ‘show’.¹⁷⁶

- (14) *i=nanggo* *ndighe=ke* *we=nggi*
 3SG=ask.for fire=PROX PREP=3PL
 ‘he asked for fire from them’
 (skeleton_181015 041)
 C(ask.for)2a
- (15) *wo=vatomwe* *mbombo=na* *we=nggi=ya* *gha-nda*
 1EXCL=show pig=ADDR.PROX PREP=3PL=YA PSS.CLF1-1INCL.POSS
une=ko
 friends=DIST
 ‘we showed the pig to our friends’
 (e_021115_01 022)
 C(show-vatomwe)2a

Example (16) shows one of two type D adjunct strategy verbs, *longwe* ‘hear’:

- (16) *thi=longwe=ya* *toto* *we=ya* *le=nji* *bubu*
 3PL=hear=YA message PREP=YA POSS.CLF2=3PL.POSS grandparent
 ‘they hear the message from their grandparent’
 (e_261116_02)
 D(hear)2a

¹⁷⁶ It is possible that *vatomwe* ‘show’ was diachronically bimorphemic, with an initial causative prefix and intransitive verb stem. However, no form *tomwe* meaning ‘see’ or similar is in use today. The synchronic verb for ‘see’ is *thuwe* ‘see (TR)’. There is also the verb *mara* ‘look (INTR)’ which is related to *mara* ‘eye’ and occurs in a causativised complex verb with a CLFV which also means ‘show’ (see §7.4.2).

Underived R-type adjunct events with classificatory verbs (CLFVs, §5.3) can express either type D events, as in (17) where R is an animate source ('get something from someone'), or type E events, as in (18) and (19) in which R is an inanimate source ('get something from somewhere').

- (17) *i=thin* *we=nggo* *lo* *nambo*
 3SG=GET.SG.CNTR PREP=1SG POSS.CLF.2.1.SG basket
 'he gets from me my basket' (e_021115_02)
 D(get)2a

- (18) *i=wo=∅* *e* *mbwa=ko* *tine*
 3SG=GET.SG.RIGD=3SG PREP water=DIST inside
 'she gets it (a fish) from the water' (mandumbunga_061215 028, 85.946 88.522)
 E(get)2a

- (19) *ela=ke* *i=thin=a* *karton=ke* *e*
 woman=SPKR.PROX 3SG=GET.SG.CNTR=YA box=SPKR.PROX PREP
table=ke
 table=SPKR.PROX
 'the woman gets the box from the table'
 (put_stimuli_201015_02 092-94, 558.500 563.880)
 E(get)2a

The verb *gita* 'pull (from)' can also express a type E event. The verb specifies motion from a source; it contrasts with the verb *momodi*, also 'pull', which indicates motion towards a goal. This can be observed by comparing the two PPs headed by *e* 'to, from, with' in (20) with *gita* 'pull (from)', and the example of *momodi* 'pull', above in (11).

- (20) *ghino* *ma=gita=∅* *e* *denga=ko*
 1SG 1SG.IMM.PST=pull PREP stone.cooking.tripod=DIST
 'I pulled it (a pot of food) from the stone cooking tripod'
 (cooking_111015 024, 74.040 75.870)
 E(pull-gita)2a

Elicitation data show that at least two type F events can be expressed by the R-type adjunct substrategy, using the postposition *kaiwa* 'for' to indicate a beneficiary/future recipient R participant. Example (21) shows a 3PE with *ge* 'cook', while (22) shows a 3PE with *lawe* 'catch'.

- (21) *va* *i=ge* *bwarogi=ma* *le-∅* *umoru*
 REM.PST 3SG=cook fish=DET POSS.CLF2-3SG.POSS man
kaiwa-e
 for-3SG.POSS
 'she cooks fish for her husband' (e_021115_01 088)
 F(cook)2a

- (22) *i=lawe* *ma* *manda* *kaiwa-nggu*
 3SG=catch bird one for-1SG.POSS
 'he caught a bird for me' (e_251115_01 62)

F(catch)2a

7.3.1.2 Derived R-type adjunct

There are four derived transitive verbs which occur in the R-type adjunct substrategy, listed in Table 7.4.

event	verb	gloss	event type	strategy code	text tokens	stimuli tokens
sell	<i>va-marketi=nga</i>	‘CAUS-market=TR’	A	2a-CAUS-APPL	-	-
take up	<i>va-voro=nga</i>	‘CAUS-go up=TR’	B	2a-CAUS-APPL	1	-
hang	<i>va-kote</i>	‘CAUS-hang’	B	2a-CAUS	1	-
tell	<i>utu=nga</i>	‘speak=TR’	C	2a-APPL	-	-
total					1	0

Table 7.4 Verbs in derived R-type adjunct constructions

For two of the four derived verbs, the predicate is formed through the addition of both the causative prefix *va-* and transitive enclitic *=nga* (§4.3.8.2.1). As illustrated in (23), the verb *marketi* ‘attend market’ (from the English noun) takes the valency-increasing morphology to derive a monotransitive predicate meaning ‘sell’:

- (23) *a=va-marketi=nga* *yambiya* *we=nggi*
 1SG=CAUS-attend.market=TR sago PREP=3PL
 ‘I sell the sago to them’
 (e_261116_02)
 A(sell)2a-CAUS-APPL

In the second case, the monotransitive verb ‘take up’ is derived from the intransitive directional verb *voro* ‘go up’, as in (24).

- (24) *thi=va-voro=nga* *thari=ko* *e* *thaga=ko* *righe*
 3PL=CAUS-go.up=TR dance=DIST PREP feast=DIST base
 ‘and they take up that dance to the feasting place’ (feast_of_the_fish_271015_053)
 B(take.up-voro)2a-CAUS-APPL

In one case, the derived monotransitive verb only takes the causative prefix *va-*, as in (25),

- (25) *ra=va-kote=nggi* *e* *kewe*
 1INCL=CAUS-hang=3PL PREP carrying.stick
 ‘we hang them (sago bundles) on a carrying stick’
 (sago_101214_065, 171.310 174.090)
 B(hang-kote)2a-CAUS

The final derived verb takes the intransitive stem *utu* ‘speak’ and combines it with only the transitivity-enclitic *=nga* to mean ‘talk about’, as shown in (26).

- (26) *i=utu=nga* *utu=na* *we=ime*
 3SG=speak=TR story=ADDR.PROX PREP=1EXCL
 ‘he tells/talks about a story to us’
 (e_021115_01 032)
 C(tell-utu)2a-APPL

7.3.1.3 R-type adjunct with classificatory verbs

In at least seven cases (listed in Table 7.5), a single event can be encoded by either a construction with a single monotransitive verb stem, or by a complex verb with a CLFV in V_1 slot and the same monotransitive verb stem in V_2 position (CLFVs are discussed in §5.2 and complex verbs with CLFVs are analysed in §6.3.2).

event	verb	gloss	event type	strategy code	text tokens	stimuli tokens
give	<i>giya</i>	‘give’	A	2a	10	3
give	GET- <i>giya</i>	‘get-give’	A	2a-CLFV	9	6
hang	GET- <i>va-kote</i>	‘GET-CAUS-hang’	B	2a-CAUS-CLFV	-	-
hang	<i>kitho</i>	‘hang’	B	2a	-	-
hang	GET- <i>kitho</i>	‘get-hang’	B	2a-CLFV	-	2
leave	<i>iteten</i>	‘leave’	B	2a	1	-
leave	GET- <i>iteten</i>	‘get-leave’	B	2a-CLFV	-	1
load	<i>dowe</i>	‘load’	B	2a	-	-
load	GET- <i>dowe</i>	‘get-load’	B	2a-CLFV	-	1
throw away	<i>yathu</i>	‘throw away’	B	2a	-	-
throw away	GET- <i>yathu</i>	‘get-throw away’	B	2a-CLFV	-	5
steal	<i>kaivi</i>	‘steal’	E	2a	-	-
steal	GET- <i>kaivi</i>	‘get-steal’	E	2a-CLFV	1	-
total					21	18

Table 7.5 Verbs in R-type adjunct constructions with optional CLFV

Both the simple VCs with a single verb stem and their complex-verb counterparts with CLFVs are analysed as instances of the R-type adjunct substrategy. This is because the presence or absence of the CLFV in the expression of the 3PE does not change the event type encoded, the verb valence, or the expression of the participants. Like all the other R-type adjunct constructions, A and T are encoded as the subject and object of the verb, and R is an adjunct. Consider the clauses in (27) and (28), in which *giya* ‘give’ is the only verb stem in the VC, with (29) and (30), in which *giya* is the second verb in a complex verb with a CLFV:¹⁷⁷

- (27) *levo=ke* *i=giya-giya* *sapu* *we=nggi*
 POSS.CLF2:young.woman=SPKR.PROX 3SG=RED-give goodness PREP=3PL
 ‘his wife is giving the good (testimony/account) to them’
 (fp_stimuli_191015_05 429-31, 970.960 974.580)

¹⁷⁷ While the presence of a CLFV with these verbs does not change the strategy the 3PE is assigned to in the current analysis, they are distinguished from each other in the corpus annotation by the addition of ‘CLFV’ to the event code, so ‘A(give-give)2a’ becomes ‘A(give-give)2a-CLFV’.

A(give-giya)2a

- (28) *thi=giya we=nggi ghaningga dayagha*
 3PL=give PREP=3PL food be.hot
 ‘they give them hot food’ (hunting_261214 017-8, 37.440 40.430)
 A(give-giya)2a

- (29) *amba methi=li-giya nambo we=Ø*
 then 3PL.IMM.PST=GET.SG.FLEX-give basket PREP=3SG
 ‘then they give a (empty) basket to him’ (dating_081015 074, 201.500 204.860)
 A(give-giya)2a-CLFV

- (30) *...na thi=thin-giya=Ø we=ya wevo=ko*
 and 3PL=GET.SG.CNTR-give=3SG PREP=YA young.woman=DIST
tina-e na rama-a
 mother-3SG.POSS and father-3SG.POSS
 ‘...and they give it (a full basket) to the girl’s mother and father’
 (first_time_251214 021-23, 58.230 64.780)
 A(give-giya)2a-CLFV

The examples in (31) to (35) show examples of this type of strategy encoding type B events. While simple VCs without a CLFV are grammatical, complex verbs appear to be preferred in terms of usage. There are 14 tokens of simple verbs without a CLFV and 25 of complex verbs with a CLFV.

- (31) *Jaclyn i=li-va=kote=ya towel e umbwa yangga*
 Jaclyn 3SG=GET.SG.FLEX-CAUS-hang=YA towel PREP tree branch
 ‘Jaclyn hangs the towel on the tree branch’ (e_300915_01 135)
 B(hang-hang)2a-CAUS-CLFV

- (32) *lolo=ko i=thin-kitho thiyo=ma e umbwa=ma yangga*
 person=DIST 3SG=GET.SG.CNTR-hang rope=DET PREP tree=DET branch
 ‘the person hangs the rope on the tree branch’
 (put_stimuli_231015 010, 114.420 118.430)
 B(hang- kitho)2a-CLFV

- (33) *i=li-iteten=a wangga lumo=ko e*
 3SG=GET.SG.FLEX-leave=YA boat white.person=DIST PREP
mara-e
 in.front-3SG.POSS
 ‘he leaves it (a box) in front of the car (lit. white-person’s boat)’
 (put_stimuli_191015_02_02 123-4, 834.305 840.061)
 B(leave)2a-CLFV

- (34) *wevo regha i=nde-wo bigi regha*
 young.woman one 3SG=stand.and-GET.SG.RIGD thing one
i=njimbu kero i=wo-dowe=Ø e gha-Ø
 3SG=look.closely already 3SG=GET-load=3SG PREP POSS.CLF1-3SG.POSS
poket
 pocket
 ‘a lady holds something she looks at it and puts it in her pocket’
 (put_stimuli_231015 056, 443.220 447.126)
 B(load-dowe)2a-CLFV

- (35) *amala=ma i=thin-yathu buku=ma e vwara=ma*
 man=DET 3SG=GET.SG.CNTR-throw.away book=DET PREP floor=DET
vwata
 top
 ‘the man throws the book on the floor’
 (put_stimuli_191015_02_02 082-3, 565.023 569.409)
 B(throw.away)2a-CLFV

Examples (36) and (37) show the only attested type E event encoded by this strategy with *kaivi* ‘steal’. In (37), the CLFV *mban* ‘get (pl. rigid entity)’ specifies that the agent is stealing more than one fish while the number of fish stolen remains unspecified in (36).

- (36) *ve= kaivi bwarogi=ma we=ya gh-e une*
 3SG.INT=steal fish=DET PREP=YA POSS.CLF1-3SG.POSS friends
 ‘he steals (the) fish from his friends’
 (e_311016)
 E(steal)2a
- (37) *ve=mban-kaivi bwarogi=ma gha-Ø une=ko*
 3SG.INT=GET.PL.RIGD-steal fish=DET POSS.CLF1-3SG.POSS friends=DIST
e le=nji ghata
 PREP POSS.CLF2=3PL.POSS drying.rack
 ‘he steals his friend’s fish from the drying rack’
 (lizard_and_possum_121015 019-20, 52.509 57.380)
 E(steal)2a-CLFV

Classificatory verbs occur with a range of other verbs of handling in similar constructions to the ones outlined in this section. However, they are analysed as instances of the serial verb strategy (§7.4.2), as either they are intrinsic to the grammaticality of the VC, or the handling verbs are not attested in simple VCs without a CLFV. It is also possible that some of the R-type adjunct constructions with underived handling verbs (described in §7.3.1) may also occur in complex verbs with CLFVs but are currently not attested. Classificatory verbs also occur with directional elements including directional verbs, directional adverbial enclitics, and associated motion prefixes, all of which are analysed as directional strategy constructions (§7.4).

7.3.2 T-type adjunct substrategy

T-type adjunct strategy constructions are uncommon in Sudest. Two type A events encoded by T-type adjunct constructions are attested, as well as a number of type G and H events.

The two attested T-type constructions expressing type A events are listed in Table 7.6:

event	verb	gloss	event type	strategy code	text tokens	stimuli tokens
make drink	<i>va-mun</i>	‘CAUS-drink’	A	2b-CAUS	1	-
feed	<i>(va-)ngamwe</i>	‘(CAUS-)feed’	A	2b(-CAUS)	-	-
				total	1	0

Table 7.6 Verbs in T-type adjunct constructions (type A events)

The monotransitive stem *mun* ‘drink’ may be causativised to produce a predicate meaning ‘cause to drink’ or ‘make drink’. The derived verb remains monotransitive while the argument structure changes. The A and O arguments of the underived construction become the object and adjunct respectively of the derived verb, and a causer is introduced as A. An A type event with the causativised verb is shown in (38), in which prospective traders are made to drink particular herbs in preparation for a trading expedition.

- (38) *thi=va-mun=nggi* *e* *yee*
 3PL=CAUS-drink=3PL PREP herbs
 ‘they make them drink the herbs’
 (funeral_feasting_081015 021)
 A(drink)2b-CAUS

The other attested T-type adjunct construction that expresses a type A event takes the verb *ngamwe* ‘feed’, as in (39) and (40). As can be observed when comparing the two examples below, the causative prefix can occur in the construction without any semantic or formal changes in the clause. This variation is also attested in corpus tokens of *ngamwe* that do not qualify as 3PEs because there is no overt reference to the item being consumed; that is, there is no adjunct.

- (39) *ela=ma* *i=ngamwe=nggo* *e* *bwarogi*
 woman=DET 3SG=feed=1SG PREP fish
 ‘the woman feeds me (with) fish’
 (e_261016)
 A(feed)2b

- (40) *Lydia* *i=va-ngamwe=ya* *Michael* *e* *mbathi*
 pers.name 3SG=CAUS-feed=YA pers.name PREP mango
 ‘Lydia feeds Michael (with) mango’
 (e_191015)
 A(feed)2b-CAUS

This variation does not appear to be linked to extra-linguistic factors such as speaker age, gender, education etc., as speakers switch between constructions. The variation may be a result of analogy with *va-mun* ‘make drink’. The VC with the causative prefix, however, is not used as frequently as

the underived form and only accounts for just over 10 percent of all tokens across both the corpus and the elicitation data.

Type G and H events are also commonly encoded by the adjunct strategy in Sudest. In these constructions, an agent uses a body part or other instrument to impact or change a patient participant. In these constructions, the patient is encoded as the object of the verb and the instrument is expressed by an adjunct PP. Margetts et al. (2019b) group adjunct-strategy constructions with instrument adjuncts together with T-type adjunct substrategy constructions. The list of attested type G and H T-type adjunct events is given in Table 7.7.

3PE	verb	gloss	event type	strategy code	text tokens	stimuli tokens
break	<i>ten</i>	‘break’	G	2b	-	4
break	<i>vole</i>	‘break’	G	2b	-	4
break	<i>vole-ten</i>	‘chop-break’	G	2b	-	1
cover	<i>ghavo</i>	‘cover’	G	2b	1	-
hit	<i>ngge</i>	‘hit’	H	2b	-	1
tear	<i>thatha</i>	‘tear’	H	2b	-	1
total					1	11

Table 7.7 Verbs in T-type adjunct constructions (type G and H events)

T-type adjunct-substrategy 3PEs with non-body part instrument adjuncts are presented in (41) and (42). Examples with body-part instruments are given in (43) and (44).

- (41) *amala=ma i=ten=a wevo=ma umbali-ye e*
 man=DET 3SG=break=YA young.woman=DET hair-3SG.POSS PREP
sises=ma
 scissors=DET
 ‘the man cuts the woman's hair with scissors’
 (cb_stimuli_101116 040, 497.490 501.810)
 G(break-ten)2b

- (42) *va thi=ghavo=Ø e da*
 REM.PST 3PL=cover=3SG PREP mat
 ‘they covered him with a mat’
 (feast_of_the_fish_271015 052)
 G(cover-ghavo)2b

- (43) *ela=ma i=thatha manjarin=ma e nima-e*
 woman=DET 3SG=tear mandarin=DET PREP hand-3SG.POSS
 ‘the woman peels (lit. tears) the mandarin with her hands’
 (cb_stimuli_101116 044, 571.830 576.274)
 H(tear-thatha)2b

- (44) *umoru=ko i=wo ghaningga umbwa-ra na*
 young.man=DIST 3SG=GET.SG.RIGD food NUM.CLF-one and
i=ngge=Ø e nima-e
 3SG=hit=3SG PREP hand-3SG.POSS
 ‘the man gets a piece of food and hits it with his hand’
 (cb_stimuli_051016_01 152, 1726.616 1731.660)

H(hit-ngge)2b

The complex verb *vole-ten* ‘chop-break’ is classed as an adjunct-strategy construction. This is because both monotransitive verb stems individually have the same argument structure. Additionally, the combination of the two stems does not significantly alter the meaning of the predicate. Compare the two examples presented in (45), in which the same stimulus video is described by two different speakers. In (45a), only the verb stem *vole* ‘chop’ is used, while in (45b) the complex verb *vole-ten* ‘chop-break’ is used.

- (45) a. *i=vole=ya umbwa e kelumo*
 3SG=chop=YA stick/tree PREP axe
 ‘he chops the stick with an axe’ (cb_stimuli_051016_03 461, 1981.040 1983.906)
 G(chop)2b
- b. *amala=ma i=vole-ten=a umbwa=ma yangga e kelumo=ma*
 man=DET 3SG=chop-break=YA stick/tree=DET branch PREP axe=DET
 ‘the man chops the tree branch with the axe’
 (cb_stimuli_071116 010, 115.590 118.802)
 G(chop_break-vole_ten)2b

Three-participant events of breaking, tearing, smashing, and so forth are also frequently expressed by the affix-based classification substrategy of the absorption strategy (§7.7.2) or a combination of the adjunct and absorption substrategies (§7.8.2).

7.4 Serial verb strategy

Serial verb constructions combine two or more verb stems in a complex construction. The construction shares the three participants as arguments, or as two arguments and an adjunct (see §2.4.3). While it is called the ‘serial verb strategy’, it also includes constructions with two (or more) verbs, not just constructions that have been analysed as serial verb strategy constructions (Margetts et al. 2019b). For example, constructions with a verb stem that does not function independently in simplex clauses are also analysed as serial verb strategy constructions. Along with the adjunct strategy, the serial verb strategy is the second most common encoding strategy in Sudest. All of the Sudest serial verb strategy constructions are monotransitive, with the third participant expressed by an adjunct, with the exception of three ditransitive constructions with the verb stem *ve* ‘give’. Nearly all of the constructions fall under the R-type serialised-participant substrategy, with only a single T-type construction. Directional complex verbs also play a prominent role in the expression of 3PEs, but they are not classified as straightforward instance of the serial verb strategy. Those without an overt expression of R are analysed as a type of directional strategy construction (see

§7.6.2), while those with an overt expression of the third participant are analysed as a combination adjunct-directional verb strategy (see §7.8.1).

The majority of serial-strategy tokens in Sudest fall into three categories, which are presented in order of their frequency in the corpus in §7.4.1 to §7.4.4. These are constructions with a PUT stem (§7.4.1), constructions with a CLFV V_1 and monotransitive V_2 denoting a handling action (§7.4.2), and constructions with a ‘give’ verb stem (§7.4.1). There are also three attested constructions of the serial strategy that do not fall into these groupings; these are discussed in §7.4.4.

7.4.1 Serial verbs with PUT

Constructions expressing events of ‘putting’ with one of the four PUT stems are the most common type of 3PE to be expressed by the serial strategy, in terms of both number of distinct types of constructions and token frequency in the corpus. These constructions are discussed in detail in Chapter 6 (see §6.3.3). As noted in §6.3.3, the PUT verb stems cannot function independently in simplex VCs; thus, they only occur in complex verbs. The constructions nearly always take a transitive V_1 , most frequently a CLFV, and one of the four stems that mean ‘put’ in V_2 , which introduces an R-type goal adjunct – making them R-type serial-verb strategy constructions. The different combinations and their frequencies are listed in Table 7.8.

event	verb	gloss	event type	strategy code	text tokens	stimuli tokens
put	GET- <i>ra</i>	‘get-put’	B	3a	17	48
put	GET- <i>mban</i>	‘get-put’	B	3a	3	21
put	GET- <i>nda</i>	‘get-put’	B	3a	3	17
put	GET- <i>kura</i>	‘get-put’	B	3a	2	5
total					25	91

Table 7.8 PUT serial verb constructions with CLFV V_2

All four PUT stems occur in basic putting events with a CLFV, although only the CLFV *wo* ‘get (sg. rigid entity)’ is grammatical in constructions with *kura* ‘put’. Examples (46) to (49) exemplify each of the PUT stems *ra*, *mban*, *nda*, and *kura* in serial-verb strategy constructions with GET verbs in V_1 .¹⁷⁸

- (46) *va* *ve=yengge=∅* *Rogha* *na* *i=vutha*
 REM.PST 3SG.INT=GET.SG.FIRE=3SG place.name and 3SG=arrive
i=yengge-ra=∅ *e* *ndamwa*
 3SG=GET.SG.FIRE-put=3SG PREP leaf
 ‘she got fire from Rossel/Yele and she arrived (and) put it (the fire) in the leaves’
 (mandumbunga_061215 079-80, 218.340 224.570)

¹⁷⁸ As noted previously, the verb stem *mban* ‘put’ is likely historically related to the CLFV *mban* ‘get (pl. rigid entity)’. The two verbs never occur in complex verbs together.

B(put-CLFV_ra)3a

- (47) *lolo regha i=wo-mban=a umbwa une e ndeghi*
 person one 3SG=GET.SG.RIGD-put=YA tree fruit PREP cup
 ‘a person puts the tree fruit in a cup’ (put_stimuli_191015_01_02 001-2, 6.680 11.620)
 B(put-CLFV_mban)3a

- (48) *thi=thin-nda ndavari e yamwa=nda*
 3PL=GET.SG.CNTR- shell.money PREP forehead=1INCL.POSS
 put
 ‘they put shell money on our forehead (when we die)’
 (engginas_story_231016 040, 80.390 83.080)
 B(put-CLFV_nda)3a

- (49) *ra=wo-kura pilet e tebol=ko vwata-e*
 1INCL=GET.SG.RIGD-put plate PREP table=DIST on.top-3SG.POSS
 ‘we put a plate on the table’ (education_241214 053-6, 186.750 196.214)
 B(put-CLFV_kura)3a

In some cases, the goal of the putting event is left unexpressed, usually in instances where it is retrievable from the wider context. For the current analysis, such implied goals are counted as event participants. These tokens are, therefore, considered examples of the serial verb strategy and are tagged accordingly in the corpus. Table 7.9 lists the frequencies of R-less tokens in the corpus.

event	verb	gloss	event type	strategy code	text tokens	stimuli tokens
put	GET- <i>ra</i>	‘get-put’	B	3a-R	9	11
put	GET- <i>mban</i>	‘get-put’	B	3a-R	-	2
put	GET- <i>nda</i>	‘get-put’	B	3a-R	2	2
put	GET- <i>kura</i>	‘get-put’	B	3a-R	2	-
total					13	15

Table 7.9 PUT serial verb constructions with CLFV V₁ and unexpressed R

The example in (50) comes from a text that describes baking cassava cakes between layers of heated stones. While the goal location (the hot stones where the cassava cake is cooked) is not explicitly mentioned in the putting clause, it is recoverable from the wider context. The subsequent clause explicitly refers to the cassava cake being ‘stone-baked’; along with real-world knowledge about how such cakes are usually cooked (i.e. between hot stones), this means that the hearer can easily deduce the goal of the putting event.

- (50) *menda wo=mbombwa moli wo=wo-kura*
 yesterday 1EXCL=make.round.baked.item INT 1EXCL=GET.SG.RIGD-put
 S
gethi-ra wo=vwala gethi-ra
 NUM.CLF-one 1EXCL=bake(w.hot.stones) NUM.CLF-one
 ‘yesterday we made a round baked item (cassava cake), we put one (in the stone oven),
 we stone-baked one’ (stone_cooking_251015 069-71, 193.060 200.460)

B(put-CLFV_kura)3a-R

The examples in (51) and (52) are descriptions of short video sequences. Thus, the goal is easily identifiable when considered in conjunction with the stimulus video.

- (51) *ela regha i=thin-nda gha-Ø kap*
 woman one 3SG=GET.SG.CNTR-put POSS.CLF1-3SG.POSS cup
 ‘a woman puts her cup (on a table)’
 (put_stimuli_191015_01_02 192-3, 747.658 751.340)
 B(put-CLFV_nda)3a-R

- (52) *mbwa ina-Ø e bilikan tine i=wo=mban=a*
 water be.located-3SG.POSS PREP pot inside 3SG=GET.SG.RIGD-put=YA
vari
 stone
 ‘water in a pot, she puts a stone (in the pot with water)’
 (put_stimuli_201015_01 022-3, 168.180 173.061)
 B(put-CLFV_mban)3a-R

The second group of PUT complex verbs take a verb other than a CLFV in the V₁ slot, shown in Table 7.10. In these complex verbs, the V₁ verb specifies the manner in which the putting event is performed, e.g., by pouring, opening, or throwing. As noted in §6.3.3, the combinations appear to be lexicalised; each of the V₁ stems can only occur with either *ra* or *mban* (*nda* and *kura* only occur with CLFVs).

event	verb	gloss	event type	strategy code	text tokens	stimuli tokens
put by leading	<i>vanggu-ra</i>	‘lead-put’	B	3a	2	-
put by opening	<i>tate-ra</i>	‘open-put’	B	3a	1	-
chop and put	<i>vole-ra</i>	‘chop-put’	B	3a	-	1
put by pouring	<i>linggi-mban</i>	‘pour-put’	B	3a	-	6
put by throwing	<i>du-mban</i>	‘throw-put’	B	3a	-	2
throw down	GET- <i>yathu-ra</i>	‘get-throw away-put’	B	3a	-	1
put on/over	GET- <i>vala-ra</i>	‘get-cover-put’	B	3a	1	2
promise	<i>dage-ra</i>	‘speak-put’	I	3a	-	-
				total	4	12

Table 7.10 PUT serial verb constructions with lexical V₁

The constructions with *ra* ‘put’ expressing type B events are presented in (53) to (57). The complex verb *vanggu-ra* ‘lead-put’, shown in (53), describes an event in which a person (T) is taken and left somewhere (R). Like the previous complex verbs with *vanggu* ‘lead’ in (74) and (75) above, the verb takes only human, self-moving objects.

- (53) *i=voro i=vanggu-ra=Ø we=Ø*
 3SG=go.up 3SG=lead-put=3SG PREP=3SG
 ‘he goes up (and) leads her there’
 (mandumbunga_02_181016 523, 1314.704 1316.398)

B(lead_put-vanggu_ra)3a

- (54) *ela=ma i=tate-ra bogisi=ma nasiye e tebol=ma vwata*
 woman=DET 3SG=open-put box=DET small PREP table=DET on.top
 ‘the woman opens and puts the small box on the table top’
 (cb_stimuli_101116 060, 778.527 782.906)
 B(open_put-tate_ra)3a

- (55) *gha-nji ndighe iya=ke thi=vole-ra=∅*
 POSS.CLF1-3PL.POSS fire(wood) DEM=SPKR.PROX 3PL=chop-put=3SG
we=∅
 PREP=3SG
 ‘that’s their firewood, they chopped and put it there’
 (fp_stimuli_191015_01 015-6, 73.966 76.840)
 B(chop_put-vole_ra)3a

The complex verbs in (56) and (57) contain three verb stems. In these constructions, a handling complex verb fills the V₁ position of the PUT construction (see §6.3.2 and §7.4.3). In (56), the handling complex verb *tako-yathu* ‘get (general plural)-throw away’, meaning ‘throw away’ is nested in the V₁ slot of the PUT construction, which specifies that T-type participant *kwama* ‘cloth’ is put on the floor. See §6.3.10 for discussion of nesting in complex verbs.

- (56) *i=mwana-thatha kwama=ma na i=tako-yathu-ra=∅*
 3SG.w.hands-tear cloth=DET and 3SG=GET.PL.GNRL-throw.away-PUT=3SG
e pulo
 PREP floor
 ‘she tears the cloth with her hands and throws them on the floor’
 (cb_stimuli_071116 003-4, 35.480 40.860)
 B(put-get_yathu_ra)2a+3a

The handling complex verb in V₁ position in (57) specifies that the stones (T) are placed on top of a cassava cake (R).

- (57) *kero wo=mban-vala-ra=∅ e mbombwa=ma*
 already 1EXCL=GET.PL.RIGD-cover-put=3SG PREP round.baked.item=DET
vwata-e
 on.top-3SG.POSS
 ‘already we put them (stones) over the round baked good (a cassava cake)’
 (stone_cooking_251015 078, 214.290 219.370)
 B(put-wo_vala_ra)3a

The stem *ra* ‘put’ is also attested in combination with the intransitive stem *dage* ‘speak’ to mean ‘promise’. In this instance, the putting is not achieved by physical means, but by speaking. In (58) the *ndavari* ‘shell money’ (T) is promised to ‘her sister’ (R).

- (58) *me=dage-ra ndavari ghagha-ye we=∅*
 3SG.IMM.PST=speak-put shell.money sibling.same.sex-3SG.POSS PREP=3SG
 ‘she promised shell money/riches to her sister’
 (e_261116_01)

I(promise-dage_ra)3a

There are two complex PUT verbs with *mban* ‘put’ in V₂ position. In (60), *mban* ‘put’ combines with *du* ‘throw’ and in (56) it combines with *linggi* ‘pour’, to indicate that T is put somewhere by throwing and pouring respectively.

- (59) *amala=ma i=du-mban=a vari e le-Ø*
 man=DET 3SG=throw-put=YA stone PREP POSS.CLF2-3SG.POSS
sisikwa=ma tine
 k.o.bag=DET inside
 the man throws a stone into the bag’
 (put_stimuli_191015_02_02 100-2, 702.077 708.317)
 B(throw_put-du-mban)3a

- (60) *wevo=ke i=linggi-mban=a mbwa e bilikan tine*
 young.woman=SPKR.PROX 3SG=pour-put=YA water PREP pot inside
 ‘the girl pours the water into the pot’
 (put_stimuli_191015_01_02 037-8, 151.460 157.553)
 B(pour_put-linggi_mban)3a

7.4.2 Serial verbs with classificatory verbs

The second type of serial-verb strategy construction resembles the R-type adjunct-strategy constructions with CLFVs, discussed in §7.3.1.3. It takes a CLFV in V₁ position followed by a V₂ that specifies the activity expressed by the VC. The constructions are analysed as serial-strategy constructions because, unlike the adjunct-strategy verbs with a CLFV, the valence and/or semantics of the VC changes when the CLFV is removed, or they are ungrammatical as independent verbs (see §6.3.2 for an overview of complex verbs of handling and transfer with a CLFV). The serial-verb strategy constructions with a CLFV are listed in Table 7.11.

event	verb	gloss	event type	strategy code	text tokens	stimuli tokens
insert	GET- <i>thithi</i>	‘get-insert’	B	3a	-	1
put to cook	GET- <i>ge</i>	‘get-cook’	B	3a	2	-
lean	GET- <i>vadede</i>	‘get-lean’	B	3a	-	-
put over	GET- <i>vala</i>	‘get-be on top’	B	3a	-	3
throw over	GET- <i>yathu-vala</i>	‘get-throw away- be on top’	B	3a	-	1
show	GET- <i>va-mara</i>	‘get-CAUS-see’	C	3a	-	1
lift	GET- <i>vairi</i>	‘get-lift’	E	3a	-	1
hide	GET- <i>thuwole</i>	‘get-be hidden’	L	3a	-	-
cover	GET- <i>vagumo</i>	‘get-cover’	G	3b	-	2
				total	2	9

Table 7.11 Serial verb constructions with CLFV V₂

The majority of 3PEs of this type express type B events of caused motion to or towards a location. In (61) and (62), the CLFV combines with the monotransitive verb stems *thithi* ‘insert’ and *ge* ‘cook’ respectively. The verb stem *thithi* ‘insert’ only occurs in complex verbs, or in simplex constructions with a manner-of-causation prefix.

- (61) *wanakau=ma theun-iwo regha i=nde-ghathi*
 young.women=DET NUM.CLF-two one 3SG=stand.and-stand?
gherei-ye na i=li-thithi=Ø e umbali-ye
 behind-3SG.POSS and 3SG=GET.SG.RIGD-insert=3SG PREP head-3SG.POSS
gha-Ø flowa
 POSS.CLF1-3SG.POSS flower
 ‘(there are) two girls, one stand behind (the other) and pushes into her hair a flower’
 (put_stimuli_231015 038-9, 318.822 326.462)
 B(insert-CLFV_thithi)3a

The complex verb with *ge* ‘cook’ (62) is different from the other serial-strategy constructions with a CLFV, in that the CLFV adds caused-motion semantics to an event that otherwise would not express caused motion, i.e. *thin-ge* ‘put to cook’ not *ge* ‘cook (s.th.)’.

- (62) *ghino ma=thin-ge=Ø e denga=ko*
 1SG 1SG.IMM.PST=GET.SG.CNTR-cook=3SG PREP cooking.stones=DIST
 ‘I put it on to cook on the cooking stones’ (cooking_111015 022, 66.820 69.733)
 B(put.to.cook-CLFV_ge)3a

The CLFVs also combine with the intransitive verbs *vadede* ‘be leaning, lean’ (63), *vala* ‘be on top’ (64), and *thuwole* ‘be hidden, hide’ (65). In these constructions, the CLFV has a function comparable to the causative prefix *va-* (§4.3.8.2); the S of the intransitive verb becomes the O (i.e. the T-type participant) of the complex verb. The verbs *vadede* ‘be leaning, lean’ and *thuwole* ‘be hidden, hide’ can only function as simplex verbs in conjunction with a posture prefix (§4.3.5). The complex verb in (65) with *thuwole* ‘be hidden, hide’ is the only type L 3PE attested in the corpus.

- (63) *thi=wo-vadede=ya umbwa e baba*
 3PL=GET.SG.RIGD-lean=YA stick PREP wall
 ‘they lean the stick against the wall’ (e_191015 112, 374.760 378.773)
 B(lean-CLFV_vadede)3a
- (64) *i=li-vala thiyo=ke e umbwa=ke*
 3SG-GET.SG.FLEX-cover rope=SPKR.PROX PREP tree=SPKR.PROX
yangga
 branch
 ‘she places the rope over the tree branch’
 (put_stimuli_201015_01 012, 105.480 107.980)
 B(put_over-CLFV_vala)3a

- (65) *i=wo-thuwole* *gha-Ø* *ghelethi* *we=nggo*
 3SG=GET.SG.RIGD-be.hidden POSS.CLF1-3SG.POSS betelnut PREP=1SG.POSS
 ‘he hides his betelnut from me’
 (e_261116_01)
 L(hide-CLFV_thuwole)3a

The construction in (66) is one of the few serial-verb constructions with three verb stems. Such complex verbs are analysed as containing a nested construction within the complex verb in the initial position (see §6.3.10). In (66), the nested complex verb *tako-yathu* ‘get (plural)-throw away’ is incorporated into a second handling verb with *vala* ‘be on top’ to create the macro-construction ‘throw over/on top’.

- (66) *amala=ma* *i=mwana-ten-ten=a* *thiyo=ma*
 man=DET 3SG=w.hands-RED-break=YA string=DET
i=tako-yathu-vala=Ø *e* *tebol=ma*
 3SG=GET.PL.GNRL-throw.away-cover=3SG PREP table=DET
 ‘the man is breaking the string and throws it over the table’
 (cb_stimuli_071116_080, 769.600 773.155)
 B(throw_over-CLFV_yathu_vala)3a

In (67), the V_2 stem is a derived monotransitive verb *va-mara* ‘CAUS-see’, which combines with a CLFV to mean ‘show’. It appears to be interchangeable with the verb *vatomwe* ‘show’ (see (15) above in 7.3.1.1). While the underived intransitive verb *mara* ‘see’ can function as an independent verb, the causativised verb alone is ungrammatical; it always follows a CLFV.

- (67) *thi=la-thin-va-mara* *bia* *we=Ø*
 3PL=and.go-GET.SG.CNTR-CAUS-see beer-PREP PREP=3SG
 ‘they show the beer to him (on the way past)’
 (fp_stimuli_191015_07 130-1, 315.990 317.880)
 C(show-CLFV_CAUS_mara)3a

There is a substrategy of the serial verb strategy where the serialised participant is a T-type rather than a R-type. This construction is rare and is only attested with *vagumo* ‘cover’. The construction takes a CLFV in V_1 and *vagumo* ‘cover’ in V_2 . The patient participant *ndeghi* ‘cup’ is expressed as a core argument of the predicate and the item covering it (the instrument) is indicated by a PP.

- (68) *i=wo* *pilet na* *i=wo-vagumo* *ndeghi* *we=Ø*
 3SG=GET.SG.RIGD plate and 3SG=GET.SG.RIGD-cover cup PREP=3SG
 ‘she gets a plate and she covers the cup with it’
 (put_stimuli_191015_01_01 156-157, 640.602 644.302)
 G(cover-CLFV_vagumo)3b

7.4.3 Serial verbs with ‘give’

Verb stems meaning ‘give’ occur in a range of serial-strategy constructions, both in verbs expressing straightforward events of giving but also in benefactive constructions in which the V_1

expresses an action and the ‘give’ V_2 introduces a recipient or beneficiary. The serial constructions with ‘give’ verbs are listed in Table 7.12.

event	verb	gloss	event type	strategy code	text tokens	stimuli tokens
give	GET- <i>ve</i>	‘get-give’	A	3a	4	2
give	<i>giya-ve</i>	‘give-give’	A	3a	-	-
give	GET- <i>giya-ve</i>	‘GET-give-give’	A	3a	-	-
give (a person)	<i>vanggu-giya</i>	‘lead-give’	A	3a	1	-
cut and give	<i>ten-giya</i>	‘break-give’	A	3a	2	-
tell	<i>utu-giya</i>	‘speak-give’	C	3a	2	-
fetch (water)	<i>gudu-giya</i>	‘fetch(water)-give’	F	3a	-	-
				total	9	2

Table 7.12 Serial verb constructions with ‘give’

There are three distinct ‘give’ constructions. Basic giving events with the monotransitive verb *giya* ‘give’ can also be expressed by R-type adjunct strategy constructions (see (29) and (30) above in §7.3.1.3 for examples) and by possessive strategy constructions (see (82) and (83) below in §2.4.4). The serial-strategy constructions all contain a second ‘give’ stem: *ve* ‘give’. As discussed in the previous chapter (§6.3.2 and §6.3.8), the stem *ve* ‘give’ cannot function independently in simplex predicates; it only occurs in complex verbs. It is attested in three distinct constructions with (i) a CLFV (69); (ii) *giya* ‘give’ (70); or (iii) with both a CLFV and *giya* ‘give’ in a three-stem construction (71). While the only serial-strategy ‘give’ construction with *ve* produced in the corpus is with a CLFV, speakers produce all three in elicitation, along with the adjunct strategy ‘give’ constructions, and find them interchangeable.

- (69) *nambo=ko iya=ko thi=mban=a bigi-bigi=ko wolaghiye*
 basket=DIST DEM=DIST 3PL=GET.PL.RIGD=YA RED-thing=DIST all
e tine=ko thi=thin-ve wevo=ko
 PREP inside=DIST 3PL=GET.SG.CNTR =give young.woman=DIST
le-Ø boda-boda
 POSS.CLF2-3SG.POSS RED-relative
 ‘that basket, they get all the things in it, (and) they give it to that girl’s relatives’
 (dating_081015 075-78, 204.860 214.520)
 A(give-CLFV_ve)3a
- (70) *i=giya-ve=nggo mbombo umbwe-iwo*
 3SG=give-give=1SG pig NUM.CLF-two
 ‘he gives me two pigs’ (e_251115_01 060, 196.798 199.103)
 A(give-giya_ve)3a
- (71) *ela=ko i=wo-giya-ve=nggo tobotobo*
 woman=DIST 3SG=GET.SG.RIGD-give-give=1SG greenstone.axe
 ‘the woman gives me a greenstone axe’ (e_231116_02)
 A(give-giya_ve)3a-CLFV

Along with the three-place predicates meaning ‘teach’ (see §2.4.1), complex verbs with *ve* ‘give’ are the only attested ditransitive verbs in Sudest. Like the ‘teach’ verbs, ‘give’ constructions with *ve* show primary objectivity (Dryer 1986); R is treated like the single object O of a monotransitive verb, R is indexed on the verb by the object enclitic and/or a lexical NP, and T is expressed by a free NP object. In complex verbs with both *ve* ‘give’ and a CLFV, the CLFV is still selected based on the properties of the T referent, even though T is encoded as the secondary object in this instance and R is the primary object (i.e. the object indexed on the verb). Consider the example in (72): the CLFV *li* ‘get (sg. flexible entity)’ ‘classifies’ *kwama* ‘cloth’, the T-type participant and not *lo bodaboda* ‘my relatives’. If it were to agree with R, the CLFV selected would be *mban* ‘get (pl. rigid entity)’.

- (72) *a=li-ve=nggi* *lo* *boda-boda* *kwama*
 1SG=GET.SG.FLEX-give=3PL POSS.CLF2:1SG RED-relative cloth
 ‘I give my relatives the cloth’
 (e_041215_02)
 A(give-ve)3a-CLFV

The remaining four serial-strategy constructions with ‘give’ are a group of benefactive complex verbs with *giya* ‘give’ (§6.3.5). The constructions are similar to complex verbs with cause-effect semantics; V₁ encodes an action and the V₂ stem *giya* ‘give’ specifies that the action of V₁ results in an exchange that is directed towards a recipient or beneficiary expressed by an adjunct PP.

The first benefactive complex verb is the verb *ten-giya* ‘break-give’ (73), used to describe the activity of preparing and distributing food to community members:

- (73) ...*amba* *wo=ten-giya-giya=∅* *we=nggi=ya* *gha-ma*
 then 1EXCL=break-RED-give=3SG PREP=3PL=YA POSS.CLF1-1EXCL
une=ko
 friends=DIST
 ‘...then we cut and were giving it (cassava cake) to our friends’
 (stone_cooking_251015 119, 321.040 323.260)
 A(cut_give)3a

The complex verb *vangu-giya* ‘lead-give’ is used to mean ‘give (person)’ when referring to situations in which a person is ‘given’ in marriage (74) or is adopted (75). Such permanent transfer events of a human cannot be expressed by any of the constructions meaning ‘give’ already described in this section, or by adjunct strategy constructions with only *giya* ‘give’ (§7.3.1.3). The verbs *giya* ‘give’, *wo-giya* ‘GET (sg. rigid entity)-give’, and *wo-ve* ‘GET (rigid singular)-give’, however, can be used to describe non-permanent transfer of, e.g., babies or children being passed between people.

- (74) *i=nga* “*noroke* *a=vanggu-giya* *we=ngge* *iya=ke* *iya*
 3SG=say today 1SG=lead-give PREP=2SG DEM=SPKR.PROX DEM
tamwasa-kurikuri”
 one.with-k.o.diseased.skin
 ‘she said “today I give to you this one, the one with skin disease”’ (context: a
 grandmother gives one of her granddaughter’s in marriage to a visitor)
 (mandumbunga_02_181016 382, 958.928 962.268)
 A(give_person-vanggu_giya)3a

- (75) *rama=nggu* *i=vanggu-giya=nggo* *we=ya* *le-Ø*
 father=1SG.POSS 3SG=lead-give=1SG PREP=YA POSS.CLF2-3SG.POSS
boda-boda
 RED-relative
 ‘my father gave me to his relatives (to adopt)’ (e_041116)
 A(give_person-vanggu_giya)3a

The verb *giya* ‘give’ combines with an intransitive V_1 *utu* ‘speak’ to express a type C event meaning ‘tell (something to someone)’, as in (76) and (77).

- (76) *amala=ma* *i=utu-giya* *toto* *we=ya* *ra-mbaro-mbaro*
 man=DET 3SG=speak-give message PREP=YA AG-RED-law/custom
 ‘the man tells the news to the police officer’ (e_151217)
 C(tell-utu_giya)3a

- (77) *i=utu-giya=Ø* *we=ya* *ra-mbaro-mbaro*
 3SG=speak-give=3SG PREP=YA AG-RED-law/custom
 ‘he tells it to the judge’ (fp_stimuli_191015_07 083, 207.650 211.430)
 C(tell-utu_give)3b

There is one type F serial-strategy benefactive complex verb *gudu-giya* ‘fetch (water)-give’ (78) in which the fetching of water is specifically completed in order to give it to someone else.

- (78) *u=gudu-giya* *mbwa* *we=nggo*
 2SG=fetch-give water PREP=1SG
 ‘you fetch water for me’ (e_251115_01 010, 39.586 41.900)
 F(fetch.water)3a

7.4.4 Cause-effect and sequential serial verbs

The final group of three serial constructions, listed in Table 7.13, express iconically the temporal substructure of the macro-event, with the event encoded by V_1 temporally preceding that of V_2 .

event	verb	gloss	event type	strategy code	text tokens	stimuli tokens
break and throw away	<i>ten-yathu</i>	‘break-throw away’	B	3a	-	1
wash and immerse	<i>thavwi-utu</i>	‘wash-immersed’	B	3a	1	-
pour away	<i>linggi-yathu</i>	‘pour-throw away’	E	3a	-	2
				total	1	3

Table 7.13 Cause-effect and sequential serial verb constructions

The cause-effect constructions *ten-yathu* ‘break-throw away’ (79) and *linggi-yathu* ‘pour-throw away’ (80) express temporally-iconic events in which the V₂ event of ‘throwing away’ is the direct consequence of the ‘cutting’ and ‘pouring’ V₁ events (see §6.3.4 for cause-effect complex verbs).

- (79) *i=ten-yathu=∅* *e* *pulo* *vwata*
 3SG=break-throw.away=3SG PREP floor top
 ‘he cuts and throws it (hair) away on the floor’
 ‘he cuts it (hair) away on the floor’ (cb_stimuli_051016_01 137, 1520.660 1523.494)
 B(break_throw.away)3a

- (80) *lolo=ma* *i=linggi-yathu* *mbwa=ma* *e* *ndeghi=ma*
 person=DET 3SG=pour-throw.away water=DET PREP cup=DET
 ‘the person pours out the water from the cup’
 (put_stimuli_191015_02_02 063-4, 433.611 437.756)
 E(pour_throw_away)3a

Similarly, the complex verb *thavwi-utu* ‘wash-immersed’ (81) describes a sequential series of sub-events (§6.3.7). The VC depicts a common everyday series of related events where an agent washes the dirt off peeled vegetables and immerses them in water to avoid oxidation.

- (81) *a=thavwi-utu* *ghaningga=ko* *e* *uye=ko* *tine*
 1SG=wash-immersed food=DIST PREP clay.pot=DIST inside
 ‘I rinse the food and immerse it in the pot’ (cooking_111015 0145-6, 48.710 55.665)
 B(wash_immersed)3a

7.5 Adnominal possessive strategy

In the possessive strategy, a substrategy of the adnominal strategy, the third participant, R, is expressed as the possessor of T (see §2.4.4). The strategy is attested in Sudest but is uncommon, with just eight distinct 3PEs attested. The verbs attested in adnominal possessive constructions are given in Table 7.14. The verb *giya* ‘give’ and the complex verbs with a CLFV and *giya* and *kaivi* ‘steal’ are also attested expressing 3PEs in R-type adjunct constructions (§7.3.1.3).

event	verb	gloss	event type	strategy code	text tokens	stimuli tokens
give	<i>giya</i>	‘give’	A	5a	1	2
give	GET- <i>giya</i>	‘get-give’	A	5a-CLFV	-	1
steal	GET- <i>kaivi</i>	‘get-steal’	E	5a-CLFV	-	-
catch	<i>lawe</i>	‘catch’	F	5a	-	-
cook	<i>ge</i>	‘cook’	F	5a	1	-
fish	<i>kosi</i>	‘fish’	F	5a	-	-
prepare	<i>vivatha</i>	‘prepare’	F	5a	1	-
				total	3	3

Table 7.14 Verbs in possessive constructions

In type A events with *giya* ‘give’, R has the semantic role of beneficiary and is understood to be the future possessor of T. As with the adjunct strategy 3PEs with *giya* (§7.3.1.3), possessive strategy constructions with *giya* can take the form of a simplex verb (82) or complex verb with a CLFV (83).

- (82) *e ghemba-ghemba mbombo=ko i=giya la=ma*
 PREP RED-village pig=DIST 3SG=give POSS.CLF2=1EXCL.POSS
gogomwau
 riches
 ‘In our villages, the pig gives us our riches (lit. gives our riches)’
 (pigs_251214 007-9, 12.849 20.409)
 A(give)5a

- (83) *Mei i=wo-giya Kieran le-Ø ghamba*
 pers.name 3SG=GET.SG.RIGD-give pers.name POSS.CLF2-3SG.POSS place
yaku
 stay
 ‘Mei gives Kieran a seat’ (lit. Mei gives Kieran’s seat)
 (e_300915_01 030, 92.097 97.865)
 A(give-giya)5a-CLFV

The R-type participant again has the semantic role of beneficiary in type F events of creation and preparation, as in (84) to (86). In (84) and (85), the lexical object *gha* ‘food’ is a directly-possessed noun.¹⁷⁹ In Sudest, 3PEs expressed by the possessive strategy with directly-possessed NPs appear to be limited to the noun *gha* ‘food’. This is unsurprising, given the link between inalienable possession and direct possessive constructions.

- (84) *thi=ge=ya gha-e*
 3PL=cook=YA food-3SG.POSS
 ‘they cooked food for him (lit. his food)’
 (mandumbunga_02_181016 288, 727.004 729.785)
 F(cook-ge)5a

¹⁷⁹ The noun *gha* ‘food’ is the presumed origin of the possessive classifier *gha*, used in direct possessive constructions in which the possessed item is food, drink or a small number of other non-comestible items such as clothing, see chapter 3, §3.4.4 for a description of possession.

- (85) *tina-e* *i=vakatha* *nggoreiye* *i=vivatha* *gha-ye*
 mother-3SG.POSS 3SG=do/make correct 3SG=prepare food-3SG.POSS
 ‘his mother did it like that/correctly, she prepared food for him (lit. his food)’
 (mandumbunga_02_181016 078, 208.489 211.357)
 F(prepare)5a

The choice of possessive classifier in indirectly-possessed constructions can also indicate the purpose for which the T-type participant is intended (§3.4.4.2). In (86), the use of the possessive classifier 1 *wo* ‘POSS.CLF1.1SG’ indicates that the fish is intended for eating, while in (87) the use of classifier 2 *lo* ‘POSS.CLF2.1SG’ specifies that the pig is intended for another purpose, e.g. to be domesticated and raised or traded.

- (86) *le-n* *umoru* *me=kosi=ya* *wo*
 POSS.CLF2-2SG.POSS young.man 3SG.IMM.PST=fish=YA POSS.CLF1.1SG
bwarogi
 fish
 ‘your husband caught fish for me (to eat)’
 (e_031116)
 F(fish-kos)5a
- (87) *i=lawe* *lo* *mbombo* *mbwajam*
 3SG=catch POSS.CLF2.1SG pig wild
 ‘he catches a wild pig for me (to raise)’
 (e_251115_02)
 F(catch)5a

In the type E event with *kaivi* ‘steal’ (88), R is the previous possessor (maleficiary) of T.

- (88) *umoru=ko* *i=mban-kaivi* *gha-Ø* *une=ko*
 young.man=DIST 3SG=GET.PL.RIGD-steal POSS.CLF1-3SG.POSS friends=DIST
gha-nji *bwarogi*
 POSS.CLF1-3PL.POSS fish
 ‘the man stole fish from his friends (lit. his friends fish)’
 (e_261117)
 E(steal-CLFV_steal)5a

7.6 Directional strategy

The directional strategy involves a monotransitive verb plus a directional marker that indicates the transactional orientation of the verb and implicates a third, R-type participant (§2.4.5). Margetts et al. (2019b) distinguish two substrategies: the adverbial-directional strategy and the directional-verb strategy. Sudest utilises both substrategies to encode 3PEs, as well as a third construction-type involving the use of the associated motion prefixes. This third substrategy with associated motion prefixes is not identified as an encoding strategy in previous 3PE literature but examples from the Sudest corpus show that it is a productive way of encoding 3PEs in the language. The adverbial-directional strategy is discussed first in §7.6.1, followed by the directional-verb strategy in §7.6.2 and the associated motion directional strategy in §7.6.2.1.

7.6.1 Adverbial directionals

The two adverbial directional enclitics *=ma* ‘hither’ and *=wo* ‘thither’ indicate movement towards and away from the deictic centre (§4.4.2). Table 7.15 shows the three verbs with which they are attested in 3PEs. The pattern of indicating a third participant solely by directional adverbials is not as widely attested in the Sudest data as other encoding strategies. The adverbials also occur in conjunction with other encoding strategies, particularly with the directional-verb strategy (§7.6.2.1)

event	verb	gloss	event type	strategy code	text tokens	stimuli tokens
bring/take	GET	‘get’	A	6-D	3	-
build	<i>nggina</i>	‘build’	B	6-D	-	-
lead/bring	<i>vangu</i>	‘bring’	B	6-D	3	-
				total	6	0

Table 7.15 Verbs in adverbial constructions

The adverbial directional *=ma* ‘hither’ is used in 3PEs to indicate that an event is oriented towards the deictic centre, nearly always the speaker. It is used in commands and requests with a CLFV to mean ‘bring (to me)’, as in (89) and (90).

- (89) *u=wo=ma* *lou-n=na*
 2SG=GET.SG.RIGD=hither sibling.opp.sex-2SG.POSS=ADDR.PROX
 ‘you bring (me) your brother!’ (crab_girl_081115 057, 141.740 143.830)
 A(bring/take-CLFV)6-D

A verb complex headed by a CLFV with the subsequent associated motion prefix *la-* ‘and go’ expresses a type E event, i.e. caused motion *from* a location. In (90), the addition of the adverbial modifies the event expressed by the verb from ‘get’ to ‘bring’, which combines with *la-* to mean ‘bring’ and go’ rather than ‘get and go’ (see (106) and (107) below in §7.6.2.1 for the type E event).

- (90) *vo-hu=la-nde-thin=ma=engge* *lo* *plastik*
 NEC-2PL=and.go-stand.and-GET.SG.CNTR=hither=just POSS.CLF2.1SG plastic.bag
 ‘Just bring me my plastic (bag), before going/continuing’
 (c_031116 064, 125.490 129.499)
 A(bring/take-CLFV)6-D

In (91), the enclitic *=ma* ‘hither’ is used with *vangu* ‘lead’ to again indicate directionality towards the speaker (R):

- (91) *i=nga* *“hu=njogha=wo* *vohu=vangu=ma=∅* *ra=thuwe=∅”*
 3SG=say 2PL=go.back=thither 2PL.INT=lead=hither=3SG 1INCL=see=3SG
 ‘she says “you go back thither (and) lead/bring him hither (to me and) we’ll look at him’
 (mandumbunga_02_181016 273, 686.632 691.112)
 B(lead)6-D

In (94), a nearly-identical VC takes the transitivity enclitic *=nga*. As discussed in §6.3.1.2, the absence or presence of the transitive enclitic *=nga* in these types of constructions with the directional verb *nja* ‘go down’ (or *voro* ‘go up’), signals that the event is an accompanied or non-accompanied caused-motion event (see e.g. Margetts et al. forthcoming; Sheppard forthcoming). Those VCs without the transitivity enclitic encode events in which A physically accompanies T somewhere, e.g. ‘taking down (to somewhere)’ as in (93). In events with the transitivity enclitic, A remains stationary while moving T, e.g. ‘putting down’ as in (94). See §7.8.1 for further examples of this type in combined adjunct-directional verb constructions.

- (94) *ela=ma i=wo-njo=nga umbali-ye*
 woman=DET 3SG=GET.SG.RIGD-go.down=TR head-3SG.POSS
 ‘the woman puts the (teapot) lid down (on a table)’
 (cb_stimuli_101116_082, 1013.671 1019.757)
 B(bring/take)6-V

The constructions with *njogha* ‘go back’ in (95) and (96) express caused motion back to a location where T was previously located. The complex verb in (96) contains a nested complex verb of handling: *li-kitho* ‘get (sg. flexible entity)-hang’ meaning ‘hang’.

- (95) *iya=ke ra=li-njogha=Ø*
 DEM=SPKR.PROX 1EXCL=GET.SG.FLEX-go.back=3SG
 ‘this, we put it back (where it was)’ (context: two speakers are organising picture cards in order a narrative out of them) (fp_stimuli_201015_02_130, 453.440 455.220)
 B(take_back)6-V

- (96) *amala=ma i=li-kitho-njogha thiyo=ma*
 man=DET 3PL=GET.SG.FLEX-hang-go.back rope=DET
 ‘the man hangs the rope back (on the branch)’
 (put_stimuli_191015_01_02_194, 758.683 762.968)
 B(hang-CLFV_kitho)6-V

The verb *mena* ‘come’ is the only deictic directional, specifying movement towards the deictic centre, as in (97) where the speaker is requesting that an item be brought to her.

- (97) *wo-u=thin=mena nambo=na*
 NEC-2SG=GET.SG.CNTR-come basket=ADDR.PROX
 ‘bring the basket (to me)’
 (e_101116)
 A(bring-CLFV_mena)6-V

In (98), the deictic centre is the foreground in a stimulus video. The speaker describes a video in which a man walks into the frame with a stack of books, then walks towards the foreground of the shot.

- (98) *amala=ma regha i=bigi-mena buku=na*
 man=DET one 3SG=GET.PL.CNTR-come book=ADDR.PROX
 ‘one man brings books’ (put_stimuli_191015_01_01_181-2, 758.826 762.744)
 339

B(bring-CLFV_mena)6-V

The directional verb *ranggi* ‘go out’ indicates movement away from an enclosed source. It is one of the few directional verbs that typically specifies movement *from* a location rather than *to* a location. In (99), *ranggi* ‘go out’ specifies that the stones are being taken out from a fire; in (100) it specifies that the teapot lid is taken ‘out’ of the teapot.

- (99) *wo=mban-ranggi=ya* *vari-vari*
 1EXCL=GET.PL.RIGD-go.out=YA RED-stone
 ‘the take the stones out (of the fire)’ (stone_cooking_251015 100, 274.147 276.256)
 E(take_out)6-V

- (100) *i=wo-ranggi=ya* *tipot=ko* *umbali-ye*
 3SG=GET.SG.RIGD-go.out=YA teapot=DIST head-3SG.POSS
 ‘she takes off (lit. out) the teapot lid (from the teapot)’
 (cb_stimuli_051016_01 230, 2480.815 2487.050)
 E(take_out)6-V

7.6.2.1 Combination adverbial and directional verb strategies

The adverbial-directional and directional-verb substrategies can combine in a single 3PE. Constructions of this type are listed in Table 7.17.

event	verb	gloss	event type	strategy code	text tokens	stimuli tokens
lead up	<i>vangu-voro</i>	‘lead-go up’	B	6-V+6-D	1	-
put in	<i>GET-ru</i>	‘get-go in’	B	6-V+6-D	4	1
unload	<i>vanja-ru</i>	‘unload’	B	6-V+6-D	1	-
total					6	1

Table 7.17 Combination adverbial and directional verb constructions

Tokens of the three combination constructions of this kind are shown in (101) to (103). It is common for VCs with the directional verb *ru* ‘go in’ to include the directional adverbial =*wo* ‘thither’, as in (102) and (103).

- (101) *thi=vangu-voro=ma=∅*
 3PL=lead-go.up=hither=3SG
 ‘they lead him up hither (to the village)’
 (mandumbunga_02_181016 280, 705.949 707.949)
 B(lead)6-V+6-D

- (102) *iya e uye=ko tine, ma=thin-ru=wo=∅*
 DEM PREP pot=DIST inside 1SG.IMM.PST=GET.SG.CNTR-go.in=thither=3SG
 ‘he’s inside the pot, I put him in (it)’ (crab_girl_081115 077-9, 188.170 195.410)
 B(take_in)6-V+6-D

- (103) *thi=vanja-ru=wo yawudo=ko*
 3PL=unload-go.in=thither thing=DIST
 ‘they unloaded those things in (to the inlet)’
 (bwaindiya_151115 036-9, 114.040 122.351)
 B(unload)6-V+6-D

7.6.3 Associated motion prefixes

Sudest has a third type of directional substrategy involving two of the associated motion prefixes (see §4.3.4 and §4.3.5). Encoding strategies involving associated motion morphemes have not been identified in previous literature on 3PEs (c.f. Margetts 2007; M&A; Margetts et al. 2019b). As discussed in chapter 4 (§4.3.), the associated motion prefixes introduce a motion subevent to the VC. The Sudest associated motion prefixes *yo-* ‘while going’ and *la-* ‘and go’ encode a motion event that occurs concurrently with or following the event encoded by the verb(s). The Sudest prefixes also specify directionality of the event, a common feature of associated motion morphemes cross-linguistically (see e.g. Koch 1984; Guillaume 2016). Only CLFVs are attested with associated motion prefixes in the corpus encoding 3PEs; these are listed in Table 7.18. At least one of the ‘carry’ verbs can also occur in an associated motion directional strategy 3PE (§7.9.2.2).

event	prefix	verb	gloss	event type	strategy code	text tokens	stimuli tokens
carry, take	<i>yo-</i>	GET	‘while going-get’	B	6-AM	5	1
take	<i>la-</i>	GET	‘and go-get’	E	6-AM	4	-
total						9	1

Table 7.18 Verbs in associated motion constructions

The concurrent associated motion prefix *yo-* ‘while going’ combines with a CLFV to mean ‘carry, take (something somewhere)’. While there are a number of verbs that mean ‘carry’ in Sudest, they are typically only used when highlighting a specific manner in which an item is being held, and do not encode the actual transport event of taking the item somewhere (see §5.3.5). In 3PEs with *yo-*, the concurrent prefix implies motion to(wards) R which is also optionally expressed by an adjunct in a combination adjunct-associated motion construction (§7.8.1.2). Instances without an adjunct are analysed as tokens of the associated motion directional strategy. In such cases, R is generally retrievable from the context, as in (167), in which a speaker describes trade between islands. The goal (R) of the 3PE in the second clause, *Saisai* ‘Calvados Chain’,¹⁸¹ is the same as the goal in the first clause.

¹⁸¹ The Calvados Chain are the group of islands that run from Pana Varavara in the west to Nigaho, a tiny island off the northwest tip off of Panatinani.

- [illegible]

In (105), a woman prepares sago pudding and leaves to take it to feed a snake living in a cave. While the cave is not overtly expressed, it is retrievable from an earlier part of the text.

- (105) *i=ro-kiwak* *na* *i=wareri* *na*
 3SG=sit.and-make.sago.pudding and 3SG=leave and
i=yo-thin=∅ *na* *ve=ngamwe=∅*
 3SG=while.going-GET.SG.CNTR=3SG and 3SG.INT=feed=3SG
 ‘she stays and makes sago pudding and leaves and she carries it and feeds her (the
 snake in the cave)’ (snake_passage_061215 046-9, 108.950 118.866)
 B(take-CLFV)6-AM

The subsequent associated motion prefix *la-* ‘and go’ can also have a 3PE reading when it occurs in VCs with a CLFV. The prefix implies movement away from the location where the event encoded by the verb takes place. It is used to express type E events in the corpus, in which T is removed from a location. Consider the situation presented in (106), taken from the same text as the example above in (105). It follows on from the feeding of the snake; the snake repays the woman for the sago pudding by excreting shell money, the woman then gathers the pieces of shell and takes them away from the cave the snake is living in.

- (106) *i=uthighe=∅ kero i=la-bigi=ya ndava-ndavari*
 3SG=shit=3SG already 3SG=and.go-GET.PL.CNTR=YA RED-shell.money/disks
 ‘(the snake) shat it, (the woman) already takes away/gets the shell money and goes’
(snake_passage_061215 083-4)
E(take-CLFV)6-AM

In (107), the speaker describes people getting supplies before leaving their village to go trade for ceremonial goods. The use of the subsequent associated motion prefix with *bigi* ‘get (pl. container-and-contents)’ means ‘take away’ or ‘get and go (from somewhere)’

- (107) *mbanga=niye* *thi=raka-ranggi* *na* *thi=ghiva=va* *thi=rumbo* *ndighe*
time=DET 3PLall-go.out and 3PL=trade=REP 3PL=make(fire) fire
ranggi=ko *kaiwa-Ø* *amba=ma* *thi=la-mban=a*
go.out=DIST for-3SG.POSS then=already 3PL=and.go-GET.PL.RIGD=YA
amba=ma *thi=la-mban=a* *le-nji* *bwadi bwadi*
then=already 3PL=and.go-GET.PL.RIGD=YA POSS.CLF2-3PL.POSS coconut
le-nji *bunama=nggi* *le-nji*
POSS.CLF2-3PL.POSS ceremonial.coconut.oil=3PL POSS.CLF2-3PL.POSS
nambo-nambo=nggi
RED-basket=3PL
‘at the time for them to all go out and trade, they make a fire for (planning) the trip,
then they take away their coconuts, ceremonial coconut oil and baskets (from the
village to trade)’ (funeral_feasting_081015_02 091-6, 233.850 246.865)
E(take-CLFV)6-AM

7.7 Absorption strategy

In the absorption strategy, a two-place predicate takes two arguments. The third participant is evoked by the lexical semantics of the verb, or by a morphological component of the verbal predicate (§2.4.6). Because the strategy looks beyond the argument structure and syntactic expressions of participants, 3PE expressions involving the absorption strategy can be harder to systematically investigate. This is because it can be harder to rigorously classify what counts as an ‘evoked’ participant.

Two absorption substrategies are attested in Sudest: the direct lexicalisation substrategy and the affix-based classification substrategy. These are discussed in §7.7.1 and §7.7.2 respectively.

7.7.1 Direct lexicalisation strategy

The third participant in the direct lexicalisation substrategy is evoked in the semantics of the verb (§2.4.6). A small number of verbs identified indicate an additional participant in their semantics (listed in Table 7.19). It is highly likely that there are further verbs that could classify as showing the direct lexicalisation strategy; however, a detailed lexico-semantic analysis is beyond the scope of the current study. Also, given the current number of attested verbs, it does not appear to be a dominant strategy in Sudest. Indeed, many events which are expressed by the absorption strategy in other languages (e.g. *cut*, *kick*, *kill*), are expressed by predicates with a manner-of-causation prefix in affix-based classification strategy constructions (§7.7.2).

There are four attested direct lexicalisation verbs, listed in Table 7.19. These verbs are transitive, taking a patient as direct object; the third participant, an instrument, is indicated in the predicate's semantics.

event	verb	gloss	event type	strategy code	text tokens	stimuli tokens
stone	<i>biri</i>	‘stone’	G	7a	-	-
spear	<i>nggau</i>	‘spear’	G	7a	5	-
spear	<i>vwe</i>	‘spear’	G	7a	-	-
bite	<i>ghari</i>	‘bite’	H	7a	-	-
				total	5	0

Table 7.19 Verbs in direct lexicalisation constructions

The verb *biri* means ‘stone (someone/something)’ and clearly evokes a hard projectile, typically an actual stone (108).

- (108) *a=wo* *vari* *a=biri=ya* *ma*
 1SG=GET.SG.RIGD stone 1SG=stone=YA bird
 ‘I get a stone (and) stone a bird’
(e_021115_02 111)

The two verbs *nggau* (109) and *vwe* (110) both mean ‘spear’. The verb *nggau* ‘spear’ is the only one that occurs in the corpus. The verb *vwe* ‘spear’ is presumably the origin of the manner-of-causation prefix *vo-* ‘by spearing’ (§5.5.1.9). The independent verb form does not occur in the corpus and only occurs in elicitation with older speakers, suggesting that it may be archaic.

- (109) ...*amba* *ne* *u=ranggi* *u=nggau* *morouma*
 then FUT 2SG=go.out 2SG=spear k.o.fish
 ‘...then you will go out (and) spear morouma fish’
(mandumbunga_061215_164, 470.459-472.884)
G(spear-nggau)7a
- (110) *umoru=ma* *i=vwe* *mwata=ma*
 young.man=DET 3SG=spear snake=DET
 ‘the man spears the snake’
(e_081116_02)
G(spear-vwe)7a

The final direct lexicalisation verb identified is the stem *ghari* ‘bite’, shown in (111).

- (111) *njigha* *i=ghari=nggo*
 red.ant 3SG=bite=1SG
 ‘a red ant bit me’ (dem_quest_201015)
 H(bite)7a

7.7.2 Affix-based classification strategy

In the affix-based classification substrategy, the third participant is evoked by a non-pronominal, non-increasing affix (§2.4.6).¹⁸² The manner-of-causation prefixes (§5.2) specify the manner in which an action is completed and thereby often evoke an instrument participant. Because of this, they play a prominent role in the encoding of 3PEs that involve an instrument, most commonly type G and H events. The manner-of-causation prefixes also frequently occur in combination adjunct-affix-based classification strategy construction (§7.8.2).

The verbs that occur in affix-based classification constructions are listed in Table 7.20. The verbs attested in group G and H events overlap and are only distinguished by the manner-of-causation prefix they take, as some evoke a non-body part instruments but others a body part instrument.

event	verb	gloss	event type	strategy code	text tokens	stimuli tokens
break	<i>bebe</i>	‘break’	G	7f	-	22
break	<i>nggila</i>	‘break’	G	7f	-	9
break	<i>ten</i>	‘break’	G	7f	2	58
break	<i>vole</i>	‘break’	G	7f	-	24
break (partial)	<i>bebe-ra</i>	‘break-put’	H	7f	-	1
break (partial)	<i>nggila-ra</i>	‘break-put’	H	7f	-	1
bruise	<i>va-uu=nga</i>	‘CAUS-be bruised=TR’	G	7f	1	-
kick	<i>vewo</i>	‘push’	H	7f	-	-
kill	<i>va-mare</i>	‘CAUS-die’	H	7f	1	-
poke	<i>kothe</i>	‘poke’	G	7f	3	-
poke	<i>kum</i>	‘poke’	G	7f	1	-
poke	<i>kum</i>	‘poke’	H	7f	1	-
smash	<i>ughi</i>	‘smash’	G	7f	-	4
smash	<i>vithi</i>	‘smash’	G	7f	-	1
split	<i>viya</i>	‘split’	G	7f	-	10
tear	<i>nggangga</i>	‘tear’	H	7f	-	4
tear	<i>thatha</i>	‘tear’	G	7f	-	5
tear	<i>thatha</i>	‘tear’	H	7f	-	21
break	<i>bebe</i>	‘break’	G	7f	-	22
				total	9	182

Table 7.20 Verbs in affix-based classification constructions

Many 3PEs expressed by this strategy consist of a relatively unspecific verb stem that expresses an action that causes a change in the ‘material integrity’ (Hale & Keyser 1987 cited in Levin 1993: 242) of the patient participant (e.g. ‘break’, ‘split’, ‘tear’, etc.), and a manner-of-causation prefix. Examples of the affix-based classification constructions are given in (112) to (118). In (112), the

¹⁸² When the prefixes occur with monotransitive verbs, they do not increase the valence of the VC but when they occur with intransitive directional verbs, they have a causativising function, see §7.9.1.1 for 3PEs with a causativising manner-of-causation prefix as well as §5.2 for further discussion.

prefix *vo-* evokes a pointed instrument and combines with *bebe* and *nggila*, both ‘break’, to mean ‘spear (something)’. The prefix *mwana-* ‘by hand’ combines with *bebe* (113) and *nggila* (114), again both meaning ‘break’, to specify that the stick is broken using the hands. Note that the use of the stem *ra* ‘put’ in (114) specifies that the action is only partially completed (§6.3.3).

- (112) *i=vo-bebe=∅* *o i=vo-nggila=∅*
 3SG=by.spearing-break=3SG or 3SG=by.spearing-break=3SG
 ‘he breaks it by stabbing or he breaks it by stabbing/with a pointed implement
 (cb_stimuli_051016_03 009, 60.220 62.930)
 G(break-bebe)7f, G(break-nggila)7f

- (113) *wevo=ma* *i=mwana-bebe=ya* *umbwa*
 young.woman=DET 3SG=w.hands=break=YA tree/stick
 ‘the woman breaks the stick with her hands’
 (cb_stimuli_051016_02_01 163, 883.096 885.260)
 H(break-bebe)7f

- (114) *i=mwana-nggila-ra* *umbwa*
 3SG=w.hands-break-PUT stick/tree
 ‘she partially breaks the stick’ (cb_stimuli_051016_03 332, 1248.910 1250.935)
 H(partial_break-nggila_ra)7f

The manner-of-causation prefixes modify the change-of-state verb *ten* ‘break’ in (115) and (116). In (115), *ki-* ‘by cutting’ specifies that the instrument participant is a blade. In (116), *mwana-* ‘by hand’ specifies the use of the hands in the action, just like in (113) and (114) above.

- (115) *thi=ki-ten=a* *njimwa-e*
 3PL=by.cutting-break=YA skin-3SG.POSS
 ‘they cut the umbilical cord with a blade’
 (new_mother_2512 05714, 137.914 140.450)
 G(break-ten)8

- (116) *amala=ko* *i=mwana-ten* *thiyo=ko*
 man=DIST 3SG=w.hands-break string=DIST
 ‘the man breaks the string with his hands’
 (cb_stimuli_051016_02_02 057-8, 445.770 460.222)
 H(break-ten)H

Examples (117) and (118) show the prefixes *vo-* ‘by spearing’ and *mwana-* ‘by hand’ with *thatha* and *ngggangga*, both meaning ‘tear’.

- (117) *i=vo-thatha* *kwama=ma*
 3SG=by.spearing-tear cloth=DET
 ‘she tears the cloth by stabbing/with a pointed instrument’
 (cb_stimuli_051016_01 195-6, 2119.670 2127.200)
 G(tear-thatha)8

- (118) *ela=ko i=mwana-nggangga kwali=ko*
 woman=DIST 3SG=w.hands-tear cloth=DIST
 ‘the woman tears the cloth (with her hands)’
 (cb_stimuli_051016_02_02 048, 400.580 404.283)
 H(tear-thatha)7f

As discussed in §5.2.8, the two prefixes *taga-* and *riri-* both indicate that the event occurs as the result of a striking motion similar to a karate chop. In these events, the manner-of-causation prefix indicates the involvement of a third participant. However, whether it is a body part or non-body part instrument can only be determined by the wider context. In (119) and (120), the instrument is referred to in the clause immediately preceding the 3PE clause; in (121), however, the last overt mention of the referent is nearly 40 IUs prior.

- (119) *i=wo umbwa na i=taga-kothe righe=ko*
 3SG=GET tree/stick and 3SG=by.striking-poke tree.trunk=DIST
 ‘she got a stick and she struck the tree trunk’
 (bush_betelnut_011115 029-30, 71.590 76.830)
 G(poke-kothe)7f

- (120) *i=li=ya nima-e na i=taga-ten=a thiyo*
 3SG=GET.SG.FLEX=YA hand-3SG.POSS and 3SG=by.striking-break=YA rope/string
 ‘he takes his hand and breaks the string by striking it’
 (cb_stimuli_051016_01 246, 2625.850 2630.792)
 H(break-ten)7f

- (121) *i=wo umbwa laghiye na i=ghivi=∅ [...]*
 3SG=GET.SG.RIGD stick/tree big and 3SG=belt=3SG
me=taga-va-uu=nga riwa-e=na
 3SG.IMM.PST=w.arm-CAUS-bruise=TR body-3SG.POSS=ADDR.PROX
 ‘she got a big stick and belted (her daughter) [...], she bruises her (daughter’s) body by striking her (with a stick)’
 (crab_girl_081115 83-118, 206.010 285.888)
 G(bruise)7f-CAUS-APPL

In (122) the use of *taga-* is ambiguous: it is never specified whether Monitor Lizard is beaten to death with an instrument such as a stick, or with fists.

- (122) *time=ko iya=ko amba=ma thi=ngge yenggiyenggi and*
 time=DIST DEM=DIST then=DET 3PL=hit monitor.lizard and
thi=taga-va-mare
 3PL=by.striking-CAUSE-die
 ‘at that time, then they hit Monitor Lizard and they killed him by striking’
 (lizard_and_possum_121015 050)
 G?H(kill)7f-CAUS

As discussed in (§5.1.8), *va-mare* ‘CAUS-die’ obligatorily takes a manner-of-causation prefix. This is most frequently *taga-* ‘by striking’, which can specify that the referent was beaten to death as in (122) above. However, it can also be used as a default prefix when the cause of death is unknown

or unspecified. Further examples with *va-mare* CAUS-die' are given in (123) and (124). In the first example, the manner-of-causation prefix *vuri-* 'with feet' specifies that feet are used to crush the cockroach. In the second, the prefix *ri-* 'with teeth, mouth' indicates that the instrument used to kill the person was the crocodile's mouth/teeth.

- (123) *nggama i=vuri-va-mare yamboyambo*
 child 3SG=w.feet-CAUS-die cockroach
 'a child kills a cockroach by crushing it with their feet' (e_021215_01)
 H(kill)7f

- (124) *waragoi i=ri-va-mare lolo=ko*
 crocodile 3SG=w.teeth-CAUS-die person=DIST
 'the crocodile killed the person with its teeth' (e_041215_02)
 H(kill)7f

Kicking events are not lexicalised by a single verb in Sudest. Instead, they are expressed by combining the prefix *vuri-* 'with feet' and the verb *vewo* 'push', as in (125).

- (125) *a=vuri-vewo bal=ke*
 1SG=w.feet-push ball=SPKR.PROX
 'I kick the ball/I push the ball with my foot' (e_211116_02)
 H(kick)7f

7.8 Combination encoding strategies

Combination strategies where two (or three) encoding strategies combine in a single 3PE construction are common in Sudest. Adjunct and directional combinations are discussed in §7.8.1, followed by adjunct and absorption combinations in §7.8.2, serial-verb and directional combinations in §7.8.3, and finally adnominal-possessive, directional, and absorption combinations in §7.8.5.

7.8.1 Adjunct and directional strategies

The adjunct strategy is attested in combination with the directional verb (§7.8.1.1) and associated motion prefix (§7.8.1.2) directional substrategies.

7.8.1.1 Adjunct and directional verb

The constructions in this group consist of a monotransitive complex verb with an intransitive directional verb in V_2 position. The adjunct-directional verb strategy is one of the most common combination strategies. In these constructions, the transactional orientation of the event towards R

is indicated by the directional verb and simultaneously overtly expressed by an adjunct that follows the VC. In a number of cases, directionality is additionally marked by way of one of the adverbial directionals. In principle, either of the two combined strategies is sufficient to encode the 3PE that are expressed by the combination. The verbs attested in this combination strategy are listed in Table 7.21.

event	verb	gloss	event type	strategy code	text tokens	stimuli tokens
bring	GET- <i>mena</i>	‘get-come’	A	2a+6-V	-	-
give back	GET- <i>njogha</i>	‘get-go back’	A	2a+6-V	2	-
bring	GET- <i>mena</i>	‘get-come’	B	2a+6-V	1	-
put/take back	GET- <i>njogha</i>	‘get-go back’	B	2a+6-V	1	2
put/take back	GET- <i>njogha</i>	‘get-go back’	B	2a+6-V+6-D	-	1
put down	GET- <i>njo=nga</i>	‘get-go down=TR’	B	2a+6-V	-	3
put/take in	GET- <i>ru</i>	‘get-go in’	B	2a+6-V	3	-
take up	GET- <i>voro</i>	‘get-go up’	B	2a+6-V+6-D	-	1
put up	GET- <i>voro=nga</i>	‘get-go up=TR’	B	2a+6-V-APPL	-	1
catch and take in	<i>lawe-ru</i>	‘catch-go.in’	B	2a+6-V+6-D	1	-
pour out	<i>linggi-ranggi</i>	‘pour-go out’	B	2a+6-V	-	1
lead/take in	<i>vangu-ru</i>	‘lead-go in’	B	2a+6-V+6-D	2	-
put/take down	GET- <i>njaniya</i>	‘get-go down’	E	2a+6-V	-	4
put down	GET- <i>njo=nga</i>	‘get-go down=TR’	E	2a+6-V-APPL	-	3
take out	GET- <i>ranggi</i>	‘get-go out’	E	2a+6-V	-	19
pull out	<i>gita-ranggi</i>	‘pull-go out’	E	2a+6-V	-	1
total					10	36

Table 7.21 Verbs in combination adjunct and directional-verb constructions

The majority of 3PEs encoded by this type of combined strategy take a CLFV in V₁ and express directed events of taking, bringing and putting. Examples of constructions with a CLFV are presented in (126) to (139). Many of these complex verbs can occur in both type A and type B events and are only distinguished by the referent of the R. This is the case with (126) and (127), with CLFV-*mena* ‘get-come’ meaning ‘bring’ and (128) to (130) with CLFV-*njogha* ‘get-go back’ or ‘take back’.

- (126) *i=wo-mena* *lo* *kaina* *we=nggo*
 3SG=GET.SG.RIGD-come POSS.CLF2.1SG knife PREP=1SG
 ‘she brings my knife to me’
(e_161215)
 A(bring-CLFV_mena)2a+6-V

- (127) *thambwa* *bigi-bigi* *menda=va* *a=mban-mena=∅*
 what RED-thing yesterday=REM.PST 1SG=GET.PL.RIGD-come=3
iya=ke *ina-∅* *ghe=ke*
 DEM=SPKR.PROX be.located-3SG.POSS LOC=SPKR.PROX
 ‘those things during the past, I brought them here’
(child_and_giant_201015 115, 305.500 308.712)
 B(bring-CLFV_mena)2a+6-V

- (128) *thi=wo* *ghena=ko* *na* *thi=wo-njogha=∅*
 3PL=GET.SG.RIGD limestick=DIST and 3PL=GET.SG.RIGD-go.back=3SG
we=∅
 PREP=3SG
 ‘they got the limestick and they returned it to him (its owner)’
 (bwaindiya_151115 109, 285.120 288.064)
 A(take_back)2a+6-V-CLFV

- (129) *thi=bigi-njogha* *le-nji* *bigi-bigi=ko* *e*
 3PL=GET.PL.CNTR-go.back POSS.CLF2-3PL.POSS RED-thing=DIST PREP
le-∅ *ghamba* *yaku*
 POSS.CLF2-3SG.POSS place stay
 ‘they put back/return their things to their place’
 (kula_exchange_081215 083-4, 242.160 246.280)
 B(take_back)2a+6-V

In some cases, the directional verb is combined with the adverbial directional (marked with the strategy code ‘+6-D’) as in (130) with the directional verb *njogha* ‘go back’ and the adverbial directional *=ma* ‘hither’. Tokens like (129) and (130) without and with the adverbial directional are counted separately in the corpus. However, they are discussed here in this section as the presence or absence of an adverbial enclitic does not alter the event type of these constructions.

- (130) *iya=ko* *u=li-njogha=ma=∅* *ghe=ke*
 DEM=DIST 2SG=GET.SG.FLEX-go.back=thither=3SG DEM=SPKR.PROX
 ‘that one, you bring it back here’ (fp_stimuli_191015_03 247, 620.670 622.760)
 B(take/bring)2a+6-V+6-D

The directional verbs *ranggi* ‘go out’ and *njaniya* ‘go down (from)’ in (131) to (133) express events in which T is taken from a source R (type E events): ‘take out (from)’ and ‘take down (from)’ respectively.

- (131) *kero* *thi=bigi-ranggi=ya* *ghaningga=ke* *e* *uma=ko*
 already 3PL=GET.PL.PL.CNTR-go.out=YA food=SPKR.PROX PREP garden=DIST
tine
 inside
 ‘they are already taking the food out from the garden’
 (fp_stimuli_201015_01 138, 556.430 559.109)
 E(take_out)2a+6-V

- (132) *lolo=ke* *i=wo-njaniya* *pilet=ke* *e*
 person=SPKR.PROX 3SG=GET.SG.RIGD-go.down plate=SPKR.PROX PREP
kap=ke *vwata-e*
 cup=SPKR.PPROX top-3SG.POSS
 ‘the person takes the plate down from on top of the cup’
 (put_stimuli_201015_02 140-2, 832.140 837.307)
 E(take_down-CLFV_njaniya)2+a+6-V

- (133) *ela=ma ma i=mena i=thin-njaniya=∅=va*
 woman=DET already 3SG=come 3SG=GET.SG.CNTR=go.down=3SG=REP
e buku=ma ghamba-e
 PREP book=DET place-3SG.POSS
 ‘the woman came and took it (a box) down from the bookshelf’
 (put_stimuli_201015_01 072-3, 452.409 455.650)
 E(take_down-CLFV_njaniya)2+a+6-V

As discussed earlier, (§6.3.1.2, §7.6.2), most complex verbs with a CLFV and a directional verb can express either events in which A moves along the same trajectory with T (i.e. events of taking to/from somewhere), or events in which only T is moved and A remains more or less stationary (i.e. events of putting or taking from). In such cases, context generally specifies whether the event involves accompanied or non-accompanied motion, as in (134) and (135) with the directional verb *ru* ‘go in’. In (134), a young woman (A) moves with a box (T) in order to take it into a house (R), but in (135), the protagonist (A) remains stationary as she cannot put herself in the pot (R) along with the wooden bowl (T).

- (134) *wevo=ma i=thin=a le-∅ bogisi=ma*
 young.woman=DET 3SG=GET.SG.CNTR=YA POSS.CLF2-3SG.POSS box=DET
ve=thin-ru=∅ e nggolo=ko tine
 3SG.INT=GET.SG.CNTR-go=3SG PREP house=DIST inside
 ‘the girl gets her box (and) takes it into the house’
 (put_stimuli_191015_02_02 054-5, 365.152 369.635)
 B(take_in)2a+6-V
- (135) *i=thin-ru=wo=∅ e uye=ko tine*
 3SG=GET.SG.CNTR-go.in=thither=3SG PREP clay.pot=DIST inside
 ‘she put it (a wooden dish with a baby) into the clay pot’
 (crab_girl_081115 045, 113.744 118.180)
 B(take_in)2a+6-V+6-D

In §6.3.1.2 and §7.6.2, it was noted that the absence or presence of the transitivity marker =*nga* in directional complex verbs with *nja* ‘go down’ and *voro* ‘go up’ does differentiate these two types of event (taking events with a moving A vs. putting events with a stationary A). This can be seen in the two pairs of examples shown in (136) and (137), and (138) and (139). Events in which the A remains stationary take the transitivity enclitic =*nga*, as in (137) and (139), while events in which A moves along with T do not take the enclitic, as in (136) and (138).

- (136) *amala=ko i=wo-nja iya ghen a ngga=ko laghiye*
 man=DIST 3SG=GET.SG.RIGD=go.down DEM limestick ebony=DIST big
 ‘the man takes the ebony lime stick down (to the village)’ (bwaindiya_151115 041-2)
 B(take_down-CLFV_nja)2a+6-V

- (137) *elisari=ke* *i=thin-njo=nga* *ndeghi=ke* *e*
 old.woman=SPKR.PROX 3SG=GET.SG.CNTR-go.down=TR cup=SPKR.PROX PREP
ghamba ghaningga=ko vwata-Ø
 place food=DIST top-3SG.POSS
 ‘the old woman puts the cup down on top of the table (lit. place of food)’
 (put_stimuli_201015_01 160-2)
 B(take_down-CLFV_nja)2a+6-V-APPL
- (138) *nuwa-e* *iya* *ve=thin-voro* *thari* *Nju*
 desire- DEM 3SG.INT=GET.SG.CNTR-go.up dance place.name
 3SG.POSS
 ‘he wants to take the dance up to Nju’
 (feast_of_the_fish_271015 012-14, 33.277 45.200)
 B(take_down-CLFV_nja)2a+6-V+6-D
- (139) *amala=ma* *i=thin-voro=nga* *bogisi* *e* *buku=ma*
 man=DET 3SG=GET.SG.CNTR-go.up=TR box PREP book=DET
ghamba-e
 place-3SG.POSS
 ‘the man puts the box on the bookshelf’
 (put_stimuli_191015_02_02 027-9, 205.478 214.176)
 B(take_up-CLFV_voro)2a+6-V-APPL

While the majority of combined adjunct-directional verb constructions take a CLFV in V_1 position, not all of them do. Examples (140) to (142) show combination constructions with the monotransitive verbs *vanggu* ‘lead’, *gita* ‘pull’, and *lawe* ‘catch’ in V_1 position. In (140) and (142), the VCs include an additional directional element in the form of the directional enclitic *=wo* ‘thither’.

- (140) *thi=vanggu-ru=wo=Ø* *ina-Ø* *e* *sel* *tine*
 3PL=lead-go.in=thither=3SG be.located-3SG.POSS PREP cell inside
 ‘they lead him into a cell’ (fp_stimuli_191015_05 452, 1003.980 1006.060)
 B(lead_in)2a+6-V+6-D
- (141) *wevo=ma* *i=nde-wo* *kandel=ma* *mbe* *we=ya*
 young.woman=DET 3SG=stand.and-GET.SG.RIGD candle=DET still PREP=YA
vara une=ma na vali nima-e *i=gita-ranggi* *e*
 really fruit=DET and side hand-3SG.POSS 3SG=pull-go.out PREP
ghamba-e=ma
 place-3SG.POSS=DET
 ‘the girl holds the candle with the candlestick holder and one hand pulls it out from its place’
 (put_stimuli_231015 031-2, 267.394 274.368)
 E(pull-gita)2a+6-V

The complex verbs *vanggu-ru* ‘lead-go in’ meaning ‘lead in’ or ‘take in’ (140) and *gita-ranggi* ‘pull-go out’ or ‘pull out’ (141) in the above examples are quite predictable in their semantics. This is not the case for the combination of *lawe* ‘catch’ with *ru* ‘go in’ in (142). The combination does not appear to describe the act of catching T, but rather the act of taking the already-captured T-type

participant (in)to the prison cell – indeed, (142) comes from the same text as (140) and describes the same event using a different V₁ stem. Note also that in (142) R is encoded by the demonstrative =*na* ‘there (addressee-proximate)’ which is attached to the VC itself. Demonstratives occurring in the VC are discussed in §4.4.4. They are interchangeable with an adjunct with the locative base *ghe* ‘LOC’, and are thus considered adjuncts.

- (142) *kero* *methi=thinggari=∅* *e* *sel* *ma*
 already 3PL.IMM.PST=tie=3SG PREP cell already
thi=lawe-ru=wo=∅=na
 3PL=catch-go.in=thither=3SG=ADDR.PROX
 ‘they already tied him in the cell, they took him in there’
 (fp_stimuli_191015_05 446-7, 994.410 997.570)
 B(take_in-lawe_ru)3a+6-V+6-D

In a small number of cases, as already discussed in §6.3.1.2, a combination adjunct-directional verb construction that would typically express a type B (or A) event expresses a type E event. That is, the R has the semantic role of source, not goal. In at least some cases, the ‘unexpected’ semantic role of R appears to be due to a fixed (idiomatic) expression. For example, the construction *li-njo=nga* ‘get (sg. flexible entity)-go down=TR’ or ‘put/take down’ can be used to mean ‘take off (clothing/item worn on body)’ with the R-type participant understood to be the wearer’s body or specific body part. This is the case in (143) in which a woman removes a flower that a second woman is wearing in her hair.

- (143) *ela=ma* *regha* *i=li-njo=nga* *flowa* *wevo=ma*
 woman=DET one 3SG=GET.SG.FLEX-g.down=TR flower young.woman=DET
e *umbali-ye*
 PREP head/hair-3SG.POSS
 ‘the woman takes the flower down from the girl’s hair’
 (put_stimuli_201015_01 020-1, 150.940 155.080)
 E(take_down-CLFV_nja)2a+6-V-APPL

The reverse is also attested. The 3PE with *ranggi* ‘go out’ in (47) occurs with an R-type participant with the semantic role of goal (type B event), despite the fact that this directional verb typically specifies a transactional orientation from a source (type E event). As noted in §6.3.1.2, an interpretation of the adjunct PP as a source is pragmatically infelicitous (as one cannot ‘pour something out from the floor’) and the adjunct is therefore interpreted as having the semantic role of goal.

- (144) *ela=ke* *i=linggi-ranggi=ya* *gamagai* *le-nji*
 woman=SPKR.PROX 3SG=pour-go.out=DOC children POSS.CLF2-3PL.POSS
ghe-mwadi-mwadiwo *e* *pulo* *vwata*
 INS-RED-play PREP floor top
 ‘the woman pours out the children’s toy onto the floor’
 (put_stimuli_201015_02 039-42, 257.650 264.085)
 B(pour_out)2a+6-V

These explanations, however, do not appear to account for all instances in which combination constructions occur with an adjunct with an ‘unexpected’ semantic role. For example, it is unclear why (145) and (146) take the directional *njo=nga* ‘go down=TR’ to express type E events when one would expect the use of the directional *njaniya* ‘go down (from)’ to be used. In fact, *njaniya* ‘go down’ is used by other speakers to describe the same stimuli videos; compare (145) with example (132) above, which describes the same stimulus video using the directional verb *njaniya* ‘go down (from)’. This is also the case for (146) and example (133).

- (145) *amala=ke* *i=wo-njo=nga* *ghaningga=ke*
 man=SPKR.PROX 3SG=GET.SG.RIGD-go.down=TR food=SPKR.PROX
ghamba-e *e* *ndeghi* *vwata-e*
 place-3SG.POSS PREP cup top-3SG.POSS
 ‘the man takes down the plate (lit. food’s place) from on top of the cup’
 (put_stimuli_201015_01 131-3, 776.614 785.694)
 E(take_down-CLFV_nja)2a+6-V-APPL
- (146) *ela* *i=thin-njo=nga* *bogisi=ma* *e* *buku=ma*
 woman 3SG=GET.SG.CNTR-go.down=TR box=DET PREP book=DET
ghamba-nji
 place-3PL.POSS
 ‘the woman puts the box down on the bookshelf’
 (put_stimuli_191015_02_02 093-4, 656.764 662.584)
 E(take_down-CLFV_nja)2a+6-V-APPL

7.8.1.2 Adjunct and directional associated motion prefix

In this strategy, the associated motion prefix *yo-* ‘while going’ indicates the transactional orientation towards R which is simultaneously encoded by an adjunct. As shown in Table 7.22, the combination strategy is not common in the corpus, with only a single attested construction.

event	verb	gloss	event type	encoding strategy	text tokens	stimuli tokens
carry, take	GET	‘while going-get’	B	2a+6-AM	1	1

Table 7.22 Verbs in combination adjunct and associated motion prefix constructions

In the corpus, *yo-* ‘while going’ only combines with CLFVs to express a 3PE, as shown in (147) and (148). It can also occur with at least one other monotransitive verb *kewe* ‘carry (on stick)’ to express a four-participant event (see §7.9.2).

- (147) *thi=yo-bigi* *e* *market* *vethi=sel*
 3PL=while.going-GET.PL.CNTR PREP market 3PL.INT=sell
 ‘they carry/take them (baskets of produce) to market to sell’
 (fp_stimuli_191015_07 157)
 B(take-CLVF)2a+6-AM
- (148) *amba=ma* *i=yo-tako=nggi* *e* *mbwa=ko* *tine*
 then=DET 3PL=while.going-GET.PL.GNRL=3PL PREP water=DIST inside
 ‘then he takes them (a group of youths) to the water’
 (funeral_feasting_081015_02 068)
 B(take-CLFV)2a+6-AM

As discussed in §5.3.5, there is no manner-neutral ‘carry’ verb in Sudest. Combination constructions with a CLFV and *yo-* ‘while going’ are one of the most common elicitation responses speakers give when describing carrying events with a direction:

- (149) *a=yo-wo* *nggama=ke* *e* *nggolo*
 1SG=while.going-GET.SG.RIGD child=SPKR.PROX PREP house
 ‘I carry the child to the house’
 (e_081116_01)
 B(take-CLVF)2a+6-AM
- (150) *nggama=ko* *i=yo-li=ya* *ndiya=ko* *ndamwe*
 child=DIST 3SG=while.going-GET.SG.FLEX=YA mustard=DIST leaf
bubu *we*
 grandparent/child PREP
 ‘the child carries/takes the mustard leaf to her grandmother’
 (e_161116_01)
 B(take-CLVF)2a+6-AM

7.8.2 Adjunct and absorption strategies

These constructions combine the adjunct strategy and the absorption affix-based classification strategy. They only express 3PEs in which physical input by a non-body or body part is used (type G and H events). The verbs attested to occur in the combination strategy are listed in Table 7.23. This strategy is the most frequent combination strategy in terms of total tokens in the corpus. However, the high number of tokens nearly exclusively comes from CUT-BREAK stimuli data.

event	verb	gloss	event type	strategy code	text tokens	stimuli tokens
break	<i>nggila</i>	‘break’	G	2b+7f	-	3
break	<i>ten</i>	‘break’	G	2b+7f	-	36
break	<i>vole</i>	‘break’	G	2b+7f	-	5
smash	<i>ughi</i>	‘smash’	G	2b+7f	-	1
smash	<i>vithi</i>	‘smash’	G	2b+7f	-	2
split	<i>viya</i>	‘split’	G	2b+7f	1	13
tear	<i>thatha</i>	‘tear’	G	2b+7f	-	5
break	<i>bebe</i>	‘break’	H	2b+7f	-	3
break	<i>nggila</i>	‘break’	H	2b+7f	-	5
break	<i>ten</i>	‘break’	H	2b+7f	-	13
break	<i>vole</i>	‘break’	H	2b+7f	-	4
tear	<i>thatha</i>	‘tear’	H	2b+7f	-	1
total					1	91

Table 7.23 Verbs in combination adjunct and affix-based classification constructions

Examples of this strategy combination are given in examples (151) to (156).

- (151) *amala=ma i=go-ten=a thiyo=ma e kelumo=ma*
 man=DET 3SG=by.cutting-break=YA string=DET PREP axe=DET
 ‘the man cuts the string with an axe’ (cb_stimuli_101116 018, 251.199 254.988)
 G(break-ten)2b+7f

- (152) *i=mwana-ten-ten thiyo=ma e nima-nima=e*
 3SG=w.hands-RED-break string=DET PREP RED-arm/hand=3SG.POSS
 ‘he broke the string repeatedly with his hands’
 (cb_stimuli_051016_03 398, 1626.530 1629.120)
 H(break-ten)2b+7f

- (153) *i=vo-thatha kwama=ma e umbwa*
 3SG=by.spearing-tear cloth=DET PREP stick/tree
 ‘she tears the cloth with a stick by stabbing’
 (cb_stimuli_051016_03 432, 1865.012 1868.262)
 G(tear-thatha)2b+7f

- (154) *i=riri-thatha kwama=ma e nima=e*
 3SG=by.striking-tear cloth=DET PREP arm/hand=3SG.POSS
 she tears the cloth with arm (by striking it)
 (cb_stimuli_051016_03 397, 1606.430 1609.164)
 H(tear-thatha)2b+7f

- (155) *i=riri-viya levo umbali=ye e*
 3SG=by.striking-split POSS.CLF2:young.woman head=3SG.POSS PREP
undigethigethi
 chopped.firewood
 ‘cracks his wife's head with the firewood’
 (feast_of_the_fish_271015 088, 213.951 219.480)
 G(split)2b+7f

- (156) *amala=ma i=taga-ughi-ughi=a ghaningga=ma e*
 man=DET 3SG=by.striking-RED-smash=YA food=DET PREP
sledgehama=ma
 sledgehammer=DET
 ‘the man is smashing the food with a sledgehammer (by striking)’
 (cb_stimuli_071116_054, 488.740 493.265)
 G(smash-ughi)2b+7f

7.8.3 Serial verb and directional strategies

The serial verb strategy combines the directional verb (§7.8.3.1) and directional adverbial (§0) substrategies in combination constructions.

7.8.3.1 Serial verb and directional verb

The serial verb strategy is attested in combination with the directional-verb strategy in two instances in the corpus, listed in Table 7.24.

event	verb	gloss	event type	encoding strategy	text tokens	stimuli tokens
put back	GET- <i>mban-njogha</i>	‘get-put-go back’	B	3a+6-V	-	1
immerse back	GET- <i>utu-njogha</i>	‘get-immerse-go back’	B	3a+6-V	-	1
				total	0	2

Table 7.24 Verbs in combination serial verb and directional-verb constructions

In (157), the complex verb *wo-mban* ‘get (sg. rigid entity)-put’ combines with the directional verb *njogha* ‘go back’ to indicate the transactional orientation of the event. The token in (158) describes the same stimulus video as (157), but the speaker uses the more specific verb *utu* ‘immerse’, which implies the presence of a substance in which the T-participant can be immersed.

- (157) *vari=ma thi=wo-mban-njogha=Ø e bilikan tine*
 stone=DET 3PL=GET.SG.RIGD-put-go.back=3SG PREP pot inside
we=ya mbwa=ma
 PREP=YA water=DET
 ‘the stone, they put it back in the pot with the water’
 (put_stimuli_191015_01_02 009-11, 34.120 39.140)
 B(put-get_mban)3a+6-V

- (158) *lolo=ma i=wo-utu-njogha=ya vari=ma e*
 person=DET 3SG=GET.SG.RIGD-immersed-go.back=YA stone=DET PREP
bilikan tine
 pot inside
 ‘the person immerses the stone back in the pot’
 (put_stimuli_201015_02 063-5, 373.889 379.300)
 B(immerse-get_utu)3a+6-V

The two complex verbs are analysed as a combination serial verb-directional verb strategy rather than a combination adjunct-directional verb strategy. This is because the stem *mban* ‘put’, above in (157), and *utu* ‘immerse’, above in (158), only occur in complex verbs and require the first stem in the construction to be grammatical.

7.8.4 Serial verb, adnominal possessive, and directional verb strategies

There is a single attested construction in which the serial verb, adnominal-possessive, and directional-verb strategies combine.

event	verb	gloss	event type	strategy code	text tokens	stimuli tokens
insert back	GET- <i>thithi-njogha</i>	‘get-insert-go back’	B	3a+5a+6-V	-	1

Table 7.25 Verbs in combination adjunct, possessive, and directional verb constructions

Example (159) shows the single token of this combination construction found in the corpus. The first two verb stems *li-thithi* ‘get (sg. flexible entity)-insert’ are classified as the serial strategy. This is because *thithi* ‘insert’ is only grammatical in complex verbs or with a manner-of-causation prefix (see (159) below for an example of this kind). The directional strategy is represented by the verb *njogha* ‘go back’, which specifies directionality towards a previous location (in this case, the girl’s hair). Finally, R is overtly expressed using the adnominal-possessive substrategy, with R (the young woman’s hair) encoded as the possessor of T (a flower).

- (159) *ela=ma i=li-thithi-njogha wevo=ma*
 woman=DET 3SG=GET.SG.FLEX-insert-go.back young.woman=DET
umbali-ye gha-Ø jin
 head/hair-3SG.POSS POSS.CLF1-3SG.POSS flower
 ‘the woman inserts a flower back into the young woman’s hair (lit. the young woman’s hair’s flower)’
 (put_stimuli_191015_02_02 010-1, 72.941 77.625)
 B(insert-CLFV_thithi)3a+5a+6-V

7.8.4.1 Serial verb and directional adverbial

There is a single construction and token which combines the serial verb and directional adverbial strategies.

event	verb	gloss	event type	strategy code	text tokens	stimuli tokens
put	GET- <i>ra</i>	‘get-put’	B	3a-R+6-D	-	1

Table 7.26 Verbs in combination serial verb and adverbial constructions

In the single token, shown in (160), the speakers are discussing the order in which a series of pictures should be laid out. The R-type participant is not overtly expressed. Instead, the directionality of the event is indicated by the directional adverbial =*wo* ‘thither (away from speaker)’, as well as from context.

- (160) *wo=u=bigi-ra=∅=wo*
 HORT=2SG=GET.PL.CNTR-put=3=thither
 ‘put them away (there)’ (fp_stimuli_201015_02 081, 265.890 267.290)
 B(put-CLFV_*ra*)3a-R+6-D

7.8.5 Adnominal possessive, directional verb, and absorption strategies

In this combination strategy, the adnominal possessive, directional verb, and affix-based absorption strategies combine to encode a single type B event.

event	verb	gloss	event type	strategy code	text tokens	stimuli tokens
insert back	<i>thithi-njogha</i>	‘insert-go back’	B	5a+6-V+7f	-	1

Table 7.27 Verbs in combination possessive, directional verb, and affix-based classification constructions

The single token of this combination construction type is presented in (161). The goal is expressed as the possessor in ‘her daughter’s hair’s cover’. The manner-of-causation prefix, *vo-* ‘by spearing’ here does not refer to a separate instrument participant, but rather describes the pointed shape of the T-type participant that is being inserted (which is in fact a flower rather than a ‘cover’). See also example (159) above, which describes the same stimulus video using a combination serial verb, adnominal possessive, and directional verb construction.

- (161) *ela=ma* *i=vo-thithi-njogha=∅=va* *yawurumbu-ye*
 woman=DET 3SG=by.spearing-insert=3SG=REP daughter-3SG.POSS
umbali-ye *ghae*
 hair/head-3SG.POSS cover
 ‘the woman reinserts the flower (lit. cover) into her daughter’s hair’ (lit. inserts her
 daughter’s hair’s cover)’ (put_stimuli_201015_01 074-5, 461.492 466.550)
 B(insert_back)5a+6-V+7f

7.9 More than three participants: additional instrument

A small number of 3PE constructions include reference to a fourth participant. In these constructions, the fourth participant is an instrument and is expressed by one of the absorption substrategies (§7.7). The encoding strategies with a fourth participant can be divided into four groups. Adjunct constructions with a fourth participant are discussed in §7.9.1, followed by combination adjunct-directional constructions in §7.9.2, serial verb constructions in §7.9.3, adnominal constructions in §7.9.4, and directional constructions in §7.9.5.

7.9.1 Adjunct strategy with absorbed instrument

The adjunct-strategy constructions attested with a fourth participant can be divided into adjunct constructions with an absorbed instrument (§7.9.2.2) and adjunct constructions with a causativising manner-of-causation prefix that simultaneously evokes an instrument participant (§7.9.2.1).

7.9.1.1 Adjunct strategy with absorbed instrument

In these constructions, the 3PE is expressed by an R-type adjunct construction and a fourth participant is indicated by the absorption substrategy; either direct lexicalisation (§7.7.1) or affix-based classification (§7.7.2). The list of these constructions is given in Table 7.28.

event	verb	gloss	event type	strategy code	text tokens	stimuli tokens
get (w. tongs)	<i>thuwo</i>	‘get (w. tongs)’	B	2a-more-instr-7a	-	1
pull (ashore)	<i>bwata</i>	‘pull (ashore)’	B	2a-more-instr-7f	-	-
push	<i>vewo</i>	‘push’	B	2a-more-instr-7f	-	-
bring/take	GET	‘get’	D	2a-more-instr-7f	-	-
bring/take	GET	‘get’	E	2a-more-instr-7f	-	6
pull	<i>gita</i>	‘pull’	E	2a-more-instr-7f	-	3
lift/raise	<i>vairi</i>	‘lift’	E	2a+7f-more-instr-7f	-	1
total					0	11

Table 7.28 Verbs in adjunct constructions with an absorbed instrument

There is one construction with *thuwo* ‘get (with tongs)’ (162) in which information about the fourth participant is included in the semantics of the verb stem (i.e. the lexical-absorption strategy).

- (162) *lolo=ma* *i=thuwo* *kunumwana=ma* *nggwe-nggwe* *e*
 person=DET 3SG=get.w.tongs banana=DET RED-be.ripe PREP
tebol=ma *vwata-Ø*
 table=DET top-3SG.POSS
 ‘the person gets/picks up the the ripe banana with tongs from the table top’
 (put_stimuli_231015 025-6, 218.817 224.702)
 E(get_thuwo)2a-more-instr-7a

The remaining constructions indicate a fourth participant by way of a manner-of-causation prefix. The examples (163) to (165) show type B events with the verbs *vewo* ‘push’ and *bwata* ‘pull (ashore)’. In each example, the manner-of-causation prefix in the VC evokes an instrument as a fourth participant.

- (163) *i=mwana-vewo* *wangga=ma* *e* *to*
3SG=w.hands-push boat=DET PREP outside
'she pushes the canoe out (using hands)' (e_021115_02 098, 312.640 315.030)
B(push)2a-more-instr-7f
- (164) *va* *i=taga-vewo* *bali=ma* *gamagai* *we=nggi*
REM.PST 3SG=by.striking=push ball=DET children PREP=3PL
'he hit the ball (by striking with his hand and arm) to the children'
(e_021115_01 084, 324.280 330.021)
B(push)2a-more-instr-7f
- (165) *u=mwana-bwata* *wangga=ko* *e* *garawo*
2SG=w.hands-pull.ashore boat=DIST PREP shore/inlet
'pull the boat onto the shore with your hands' (e_021115_01 080, 307.990 311.260)
B(pull.ashore)2a-more-instr-7f

In (166) the verb *gita* ‘pull (from)’ specifies a type E event in which T is pulled from R.

- (166) *wevo* *i=mwana-gita* *kandel* *e* *ghamba-e*
 young.woman 3SG=by.hand-pull candle PREP place-3SG.POSS
 ‘the girl pulls the candle from the candlestick (lit. its place) with her hand’
 (put_stimuli_191015_01_02 085, 326.820 329.754)
 E(pull-gita)2a-more-instr-7f

The CLFVs can also take a manner-of-causation prefix that specifies the instrument used to ‘get’ the T participant. In (167) the prefix *vi-* ‘with fingers’ specifies that the toy is picked up using the fingers. In (168), the man takes the knife using his hands.

- (167) *i=vi-thin=a* *ghe-mwadi-mwadiwo* *we=ya*
 3SG=w.fingers-GET.SG.CNTR=YA INS-RED-play PREP=YA
lou-ye *o ghagha-ye*
 sibling.opp.sex-3SG.POSS or sibling.same.sex-YA
 ‘she gets the toy with her fingers from her brother or sister’ (e_021115_02 028)
 D(bring/take)2a-more-instr-7f
- (168) *amala=ma* *i=mwana-wo* *kaina=ma* *laghiye* *e*
 man=DET 3SG=by.hand-GET.SG.RIGD knife=DET big PREP
tebol=ma *vwata*
 table=DET top
 ‘the man picks up the big knife from the tabletop’
 (cb_stimuli_101116 076, 964.334 967.960)
 E(bring/take)2a-more-instr-7f

In (169), the stem *vairi* ‘lift’ takes the prefix *mwana-* ‘by hand’ to indicate that the young woman picks up the bottle using her hands. The stem *vairi* ‘lift’ is one of a number of transitive stems that only occur in complex verbs or in conjunction with a manner-of-causation prefix. Therefore, in (169), the prefix not only indicates the use of the hands in carrying out the action, but is also essential for the grammaticality of the VC.

- (169) *wevo* *i=mwana-vairi* *bwadila* *e* *tebol=ma* *vwata-e*
 young.woman 3SG=by.hand-lift bottle PREP table=DET top-3SG.POSS
 ‘a young woman lifts up a bottle from the table with her hands’
 (put_stimuli_191015_02_01 007-9, 55.650 62.650)
 E(lift)2a+7f-more-instr-7f

7.9.1.2 Causative adjunct with absorbed instrument

In these constructions a manner-of-causation prefix occurs in a VC headed by an intransitive directional verb. In addition to specifying the manner in which the action is carried out (and thus evoking a fourth, instrument participant), the prefix also functions as a causativiser (see §5.2). The resulting 3PEs are, therefore, classified as causative adjunct R-type strategy constructions with a fourth, instrument participant. The list of causative-adjunct constructions – all from elicitation - is given in Table 7.29.

event	verb	gloss	event type	strategy code	text tokens	stimuli tokens
push in	<i>ru</i>	‘go in’	B	2a-CAUS+6-D-more-instr-7f	-	-
pull in	<i>ru</i>	‘go in’	B	2a-CAUS+6-D-more-instr-7f	-	-
take out	<i>ranggi</i>	‘go out’	E	2a-CAUS-more-instr-7f	-	-
total					0	0

Table 7.29 Adjunct constructions with causativising manner-of-causation prefixes

The clauses presented in (7) to (172) show examples of the construction. Examples (7) to (8) show two of the prefixes that mean ‘by hand’ occurring with the directional *ru* ‘go in’ and the adverbial directional marker *=wo* ‘thither’ (with which the directional verb frequently collocates). The two prefixes indicate different manners of caused motion, with *mwana-* specifying a pulling event and *ghe-* a pushing event (§5.2.1).

- (170) *a=mwana-ru=wo* *daghata=ma* *e* *nggolo* *raberabe*
 1SG=w.hands-go.in=thither log=DET PREP house under
 ‘I pull the log under the house by hand’
 (e_021115_01)
 B(pull.in-ru)2a-CAUS+6-D-more-instr-7f
- (171) *i=ghe-ru=wo* *daghata=na* *e* *nggolo=ko* *raberabe*
 3SG=w.hands-go.in=thither log=ADDR.PROX PREP house=DIST under
 ‘I push the log in under the house by hand’
 (e_021115_01)
 B(pull.in-ru)2a-CAUS+6-D-more-instr-7f

In (172), the pseudo manner-of-causation prefix *thuwo* ‘with tongs’ causatives the intransitive verb *ranggi* ‘go out’.

- (172) *ela=ma i=thuwo-ranggi=ya ghaninggama e uye*
 woman=DET 3SG=w.tongs-move.out=YA food PREP clay.pot
 ‘the woman takes the food from the pot using tongs’ (e_111116)
 E(take.out-ranggi)2a-CAUS-more-instr-7f

7.9.2 Adjunct and directional strategies with absorbed instrument

Combination adjunct and directional constructions also occur in events with an additional participant. Combination adjunct-directional verb constructions with a fourth, instrument participant are discussed first (§7.9.2.1), followed by a discussion of an adjunct-associated motion construction with an instrument participant (§7.9.2.2).

7.9.2.1 Adjunct and directional verb with absorbed instrument

Table 7.30 lists the attested combination adjunct-directional verb constructions with a fourth, instrument participant evoked by an absorption-strategy construction.

event	verb	gloss	event type	encoding strategy	text tokens	stimuli tokens
carry up (on stick)	<i>kewe-voro</i>	‘carry (on stick)-go up’	B	2a+6-V+6-D-more-instr-7a	1	-
push out	<i>vewo-ranggi</i>	‘push-go out’	B	2a+6-V-more-instr-7f	-	1
take out	<i>GET-ranggi</i>	‘get-go out’	E	2a+6-V-more-instr-7f	-	1
pour out	<i>linggi-ranggi</i>	‘pour-go out’	E	2a+6-V-more-instr-7f	-	-

Table 7.30 Verbs in combination adjunct and directional verb constructions with an absorbed instrument

The 3PE with the monotransitive verb *kewe* ‘carry (on stick)’ combines with the directional verb *voro* ‘go up’ in (173) in a combination R-type adjunct-directional verb strategy. A fourth, instrument participant is specified by the verbal semantics (direct lexicalisation strategy) rather than a manner-of-causation prefix. The VC also includes the directional enclitic *=ma* ‘hither’.

- (173) *ma* *i=kewe-kewe-voro=ma=na* *yambiya*
 already 3SG=RED-carry.on.stick-go.up=hither=ADDR.PROX *sago*
 he's already carrying sago up (to) there' (marriage_111015 030, 92.980 98.150)
 B(carry_up-kewe_voro)2a+6-V+6-D-more-instr-7a

In (174) and (175) the fourth participant is indicated by the manner-of-causation prefixes *mwana-* ‘by hand’ and *vuri-* ‘by foot’ respectively. Both occur with the directional verb *ranggi* ‘go out’.

- (174) *i=mwana-thin-ranggi=ya* *bigi* *regha* *sosoro* *e* *pipe=ma*
 3SG=by.hand-GET.SG.CNTR-go.out=YA thing one red PREP pipe=DET
tine
 inside
 ‘he pulls out a red thing with his hands from the pipe’
 (put_stimuli_231015 020, 181.680 183.950)
 E(take_out)2a+6-V-more-instr-7f
- (175) *ela=ma* *i=mena=engge* *ma* *i=vuri-linggi-ranggi-thavwi*
 woman=DET 3SG=come=just already 3SG=w.foot-pour-go.out-by.mistake
mbwa=ma *ina-Ø* *e* *bilikan=ma*
 water=DET be.located-3SG.POSS PREP pot=DET
 ‘the woman came and accidentally poured out the water from in the pot with her
 foot/leg’
 (e_080118)
 E(pour)2a+6-V

The example in (176) includes a goal, as the R-type participant and the instrument participant is again evoked by the manner-of-causation prefix.

- (176) *kontena* *mbwata* *buda* *kai* *i=mwana-vewo-ranggi=ya* *seiwo* *e*
 container maybe what thing 3SG=w.hands-push-go.out=YA slowly PREP
to
 outside
 ‘a container, maybe whatever, he pushes it out slowly with his hands to the out(side)’
 (put_stimuli_231015 122, 1018.249 1022.754)
 B(push)2a+6-V-more-instr-7f

7.9.2.2 Adjunct and associated motion prefix with absorbed instrument

The monotransitive verb *kewe* ‘carry (on stick)’ can combine with the concurrent associated motion prefix *yo-* ‘while going’ in a combined adjunct-directional associated motion construction, with a fourth, instrument participant evoked by the verb stem itself.

event	verb	gloss	event type	encoding strategy	text tokens	stimuli tokens
carry (on stick)	<i>kewe</i>	‘carry (on stick)’	B	2a+6-AM-more-instr-7a	-	-

Table 7.31 Verbs in combination adjunct and associated motion prefix constructions with an absorbed instrument

The construction does not occur in the corpus but is used in elicitation by speakers when they describe directed carrying events that typically involve using a carrying stick, such as transporting a pig (177).

- (177) *gharighari* *thi=yo-kewe* *mbombo=ma* *e* *ghemba*
 people 3PL=while.going-carry.on.stick pig=DET PREP village
 ‘the people carry (on a stick) the pig to the village’
 (e_2611216_01)
 B(carry-kewe)2a+6-AM-more-instr-7a

7.9.3 Serial verb strategy with absorbed instrument

In this construction, one stem in a complex verb includes information about a fourth, instrument participant.

event	verb	gloss	event type	encoding strategy	text tokens	stimuli tokens
put (w tongs)	<i>thuwo-ra</i>	'get (w tongs)-put'	B	3a-more-instr-7a	-	3

Table 7.32 Verbs in serial verb constructions with an absorbed instrument

In (178), the serial strategy with *thuwo-ra* 'carry (on stick)-put' expresses a 3PE, while the stem *thuwo* 'get (with tongs)' indicates an additional instrument participant.

- (178) *ela=ma* *i=thuwo-ra* *kunumwana=ma* *nggwe-nggwe* *e*
 woman=DET 3SG=get.w.tongs-put banana=DET RED-be.ripe PREP
tebol=ma *vwata*
 table=DET on.top
 'the woman puts the ripe banana on the table with tongs'
 (put_stimuli_231015 084, 682.440 687.087)
 B(put_w.tongs-thuwo_ra)3a-more-instr-7a

7.9.4 Adnominal possessive strategy with absorbed instrument

In this strategy, the 3PE is expressed by the adnominal possessive strategy; the verb itself includes information about a fourth participant. There is only a single token of this strategy in the corpus, with the verb *vwala* 'bake (with hot stones)' which is listed in Table 7.33.

event	verb	gloss	event type	encoding strategy	text tokens	stimuli tokens
bake (w hot stones)	<i>vwala</i>	'bake (w. hot stones)	F	5a-more-instr-7a	1	-

Table 7.33 Verbs in possessive constructions with an absorbed instrument

The corpus example of this strategy is presented in (179):

- (179) *i=nga* "*ne* *u=vwala* *gha-nggu*"
 3SG=say FUT 2SG=bake.w.hot.stones food-1SG.POSS
 'he said "you will bake my food (in a stone oven)"'
 (mandumbunga_02_181016 073, 196.153 199.552)
 F(bake.hot.stones)5a-more-instr-7a

7.9.5 Directional strategy with absorbed instrument

Both the directional adverbial strategy (§7.9.5.1) and directional verb strategy (§7.9.5.2) occur in 3PEs with a fourth, instrument participant.

7.9.5.1 Directional adverbial strategy with absorbed instrument

A directional adverbial construction can take a manner-of-causation prefix and thereby indicate a fourth, instrument participant. The only example of this comes from elicitation:

event	verb	gloss	event type	encoding strategy	text tokens	stimuli tokens
push	<i>vewo</i>	‘push’	B	6-D-more-instr-7f	-	-

Table 7.34 Verbs in adverbial constructions with an absorbed instrument

In (180), the manner-of-causation prefix indicates that the hearer should use their hands to push the ball to the speaker.

- (180) *u=mwana-vewo=ma bali=na*
 2SG=by.hands-push=hither ball=ADDR.PROX
 ‘push (me) the ball with your hands’
 (e_311116)
 A(push)6-D-more-instr-7f

7.9.5.2 Directional verb with absorbed instrument

In a number of directional-verb construction constructions which are listed in Table 7.35, a manner-of-causation prefix evokes an additional instrument participant.

event	verb	gloss	event type	strategy code	text tokens	stimuli tokens
push (towards deictic centre)	<i>vewo-mena</i>	‘push-come’	B	6-V-more-instr-7f	-	1
take down	<i>tabe-njo=nga</i>	‘prise open-go down=TR’	E	6-V-APPL-more-instr-7f	-	1
pour down	<i>tara-njo=nga</i>	‘pour-go down=TR’	E	6-V-APPL- more-instr-7f	-	1
total					0	3

Table 7.35 Verbs with directional-verb constructions with an absorbed instrument

In (181), the prefix *mwana-* ‘by hand’ combines with the directional complex verb *vewo-mena* ‘push-come’ meaning ‘push (towards deictic centre)’ to specify that A should use their hands to complete the action.

- (181) *tene u=mwana-mwana-vewo-mena=Ø*
 later 2SG=RED-w.hands-push-come=3SG
 ‘later push it (to me) with your hands’ (fp_stimuli_1910_0315 079, 235.109 236.670)
 B(push-vewo_mena)6-V-more-instr-7f

The tokens in (182) and (183) also use the prefix *mwana-* ‘by hand’ to specify that A uses their hands to ‘take down’ a picture from where it was stuck (to a wall) and to ‘pour down (or out)’ some

counters from a cup. Because the events only involve the caused motion of T (while A remains stationary), the directional verb *nja* ‘go down’ takes the transitive enclitic (see §7.6.2 and §6.3.1.1).

- (182) *wevo=ma kero i=mwana-tabe-njo=nga=va piktur=ma*
 young.woman=DET already 3SG=by.hand-pry.open-go.down=TR=REP picture=DET
me=li-papa=Ø=ma
 3SG.IMM.PST=GET.SG.FLEX-stick=3SG=DET
 ‘the woman took down/pried off the picture that had been stuck (to the wall) with her hands’
 (put_stimuli_231015 073-4, 586.892 593.998)
 E(take_down-tabe_nja)6-V-APPL-more-instr-7f

- (183) *elisari=ma i=nde-thin=a kountas=ma e*
 old.woman=DET 3SG=stand.and-GET.SG.CNTR=YA counters=DET PREP
kap=ma tine na i=mwana-tara-njo=nga=Ø
 cup=DET inside and 3SG=by.hand-pour-go.down=TR=3SG
 ‘the old woman holds counters in a cup and pours them out (lit. down) with her hand’
 (put_stimuli_231015 015-6, 144.930 151.194)
 E(pour_out-tara_nja)6-V-APPL-more-instr-7f

7.10 More than three participants: adding a further R-type participant

There are no 3PE constructions in the corpus that express both a source and a goal location within a single clause. If both are expressed, the expressions of source and goal are typically distributed over separate clauses. However, in elicitation, a small number of clauses involving both a source and a goal participant are attested. These are listed in Table 7.36.

event	verb	gloss	event type	encoding strategy	text tokens	stimuli tokens
bring	GET	‘get’	A&E	6-D&2a	-	-
load	<i>dowe</i>	‘load’	B&F	2a&5a	-	-
load	<i>dowe</i>	‘load’	B&F	2a&2a	-	-
spear	<i>nggau</i>	‘spear’	F&G	5a&7a	-	-

Table 7.36 Constructions expressing more than one event

In (184), the directional adverbial *=ma* ‘hither’ specifies directionality towards the speaker (event type A). Because the referent of the PP *weya Bubu* is not the same referent as the speaker (the deictic centre), the PP headed by *we* ‘to, from’ is interpreted as indicating a source participant (event type E).

- (184) *u=wo=ma ghelethi we=ya bubu*
 2SG=GET=hither betel.nut PREP=YA grandparent/grandchild
 ‘get/bring me the betel nut from bubu’
 (e_031116)
 A&E(bring/take)6-D&2a

The two examples in (185) are functionally equivalent, both describing the customary practice of loading guests' boats with gifts of food. The two clauses simultaneously express events of discrete movement to a location (event type B) and indicate that the A makes the T available to an R (event type F). In both instances, the goal is indicated by the adjunct strategy, with the PP *e wangga=ko* 'on the boat'. In (185a), a beneficiary is encoded as the future possessor, while in (185b), the beneficiary is encoded by the PP *bwabwarima kaiwanji* 'for the guests'.

- (185) a. *gamagai thi=dowe bwabwari=ma gha-nji e wangga=ko*
 children 3PL=load guest=DET food-3PL.POSS PREP boat=DIST
 'the children load the food on the boat for the guests (lit. they load the guests' food onto the boat)'
 (e_261116_02)
 B&F(load)2a&5a
- b. *gamagai thi=dowe ghaningga=ma e wangga=ko bwarbwari=ma*
 children 3PL=load food=DET PREP boat=DIST guest=DET
kaiwa-nji
 reason-3PL.POSS
 'they load the food on the boat for the guests (lit. they load the guests' food onto the boat for the guests)'
 (e_261116_02)
 B&F(load)2a&2a

The final construction combines the possessive adnominal strategy and the lexical absorption strategy to express a combination of a type F and a type G event. The T-type participant is encoded as the object of the verb, while R is the possessor of T. The verb *nggau* 'spear' specifies the tool that is used catch the fish.

- (186) *ve=nggau gha-ma bwarogi*
 3SG.INT=spear.fish POSS.CLF1-1EXCL fish
 'he spears fish for us (lit. our fish)'
 (e_251115_01)
 F&G(spear_nggau)5a&7a

8 Overview and discussion

8.1 Introduction

Chapter 7 presented a categorisation of every 3PE identified in the corpus and elicitation data. The present chapter takes a step back and considers patterns (or the lack thereof) in the data, along with how the Sudest 3PEs compare to those of other Oceanic languages. The chapter also considers issues in capturing salient features of some languages in the coding (and categorisation) of 3PEs.

The chapter is structured as follows. Section 8.2 looks at the inventory of attested 3PE constructions in Sudest, including which encoding strategies and combinations are more or less common. Section 8.3 reviews the token frequencies of the encoding strategies: that is, which ones occur most frequently in the corpus itself. Next, Section 8.4 considers whether any correlations can be identified between the event types and encoding strategies. In §8.5, the Sudest findings are compared with previous research on 3PEs in Oceanic languages. Section 8.6 discusses limitations of the framework employed in the study: specifically, the exclusion of certain features from the framework that play a prominent role in the expression of 3PEs in some languages, including Sudest. Finally, §8.7 presents some concluding remarks as well as ideas for future and complementary research directions.

8.2 Inventory of 3PE constructions in Sudest

There are 182 3PE constructions attested across the corpus and elicitation data. The term ‘construction’ refers to each distinct 3PE, so *i=thin-voro* ‘3SG=get (sg. container-and-contents)-go up’ meaning ‘she takes it up’ and *i=thin-nja* ‘3SG=get (sg. container-and-contents)-go down’ meaning ‘she takes it down’ are counted as two distinct constructions. The two constructions *i=thin-voro* ‘get (sg. container-and-contents)-go up’ and *i=thin-nja* ‘get (sg. container-and-contents)-go down’ group together as a single type of encoding strategy: specifically, the directional verb substrategy. The 182 distinct constructions can be grouped by the encoding strategy combination to which they belong. The 182 constructions can, in turn, be grouped into 37 distinct 3PE encoding strategy combinations. It should be noted that neither the number of constructions nor the number of encoding strategy combinations relate to the token frequency of the constructions in the corpus; this is discussed in §8.3. Table 8.1 lists each of the 37 encoding strategy combinations and the

number of distinct constructions attested for each encoding strategy. The table divides single encoding strategy constructions from combination strategy constructions and encoding strategy constructions with a fourth participant. The table is organised from most common to least common constructions. In cases where two or more construction types occur equally in the dataset, the strategy with the lower code number is listed first, which is listed in the column ‘encoding strategy (code)’.¹⁸³

¹⁸³ For the purposes of corpus annotation, Margetts et al. (2019b) assign each strategy a number (1-7) so the three-place predicate strategy is assigned the label ‘1’, the oblique/adjunct strategy ‘2’, etc., see Table 2.2 for the complete list with numbers and §2.5 for discussion of corpus annotation practices.

Encoding strategy		4 th participant strategy	Code	Number of constructions	
				counts	%
1.	R-type serial verb		3a	34	18.68%
2.	R-type adjunct		2a	32	17.58%
3.	absorption affix-based classification		7f	19	10.44%
4.	R-type adjunct, directional verb		2a+6-V	12	6.59%
5.	T-type adjunct, absorption affix-based classification		2b+7f	12	6.59%
6.	T-type adjunct		2b	9	4.95%
7.	adnominal possessive strategy		5a	7	3.85%
8.	directional verb		6-V	6	3.30%
9.	R-type adjunct	absorption affix-based classification	2a-more-instr-7f	5	2.75%
10.	R-type adjunct, directional verb, directional adverbial		2a+6-V+6-D	4	2.20%
11.	absorption direct lexicalisation		7a	4	2.20%
12.	R-type adjunct, directional verb	absorption affix-based classification	2a+6-V-more-instr-7f	3	1.65%
13.	directional adverbial		6-D	3	1.65%
14.	directional verb applicative	absorption affix-based classification	6-V(-APPL)-more-instr-7f	3	1.65%
15.	directional verb, directional adverbial		6-V+6-D	3	1.65%
16.	R-type adjunct causative	absorption affix-based classification	2a-CAUS(-R)+7f-more-instr-7f	2	1.10%
17.	R-type adjunct causative, directional adverbial	absorption affix-based classification	2a-CAUS+6-D-more-instr-7f	2	1.10%
18.	R-type serial verb strategy, directional verb		3a+6-V	2	1.10%
19.	directional associated motion		6-AM	2	1.10%
20.	three-place predicate direct argument		1a	1	0.55%
21.	three place predicate causative		1b	1	0.55%
22.	R-type adjunct & R-type adjunct		2a&2a	1	0.55%
23.	R-type adjunct & adnominal possessive		2a&5a	1	0.55%
24.	R-type adjunct, directional associated motion		2a+6-AM	1	0.55%

Encoding strategy		4 th participant strategy	Code	Number of constructions	
				counts	%
25.	R-type adjunct, directional associated motion	absorption direct lexicalisation	2a+6-AM-more-instr-7a	1	0.55%
26.	R-type adjunct, directional verb, directional adverbial	absorption direct lexicalisation	2a+6-V+6-D-more-instr-7a	1	0.55%
27.	R-type adjunct causative		2a-CAUS-more-instr-7f	1	0.55%
28.	R-type adjunct	absorption direct lexicalisation	2a-more-instr-7a	1	0.55%
29.	R-type serial verb strategy, adnominal possessive, directional verb		3a+5a+6-V	1	0.55%
30.	R-type serial verb strategy, directional adverbial		3a+6-D	1	0.55%
31.	R-type serial verb strategy	absorption direct lexicalisation	3a-more-instr-7a	1	0.55%
32.	T-type serial verb strategy		3b	1	0.55%
33.	adnominal possessive & absorption direct lexicalisation		5a&7a	1	0.55%
34.	adnominal possessive, directional verb, absorption affix-based classification		5a+6-V+7f	1	0.55%
35.	adnominal possessive	absorption direct lexicalisation	5a-more-instr-7a	1	0.55%
36.	directional adverbial & R-type adjunct		6-D&2a	1	0.55%
37.	directional adverbial	absorption affix-based classification	6-D-more-instr-7f	1	0.55%
total				182	100%

Table 8.1 Inventory of distinct 3PE construction types by encoding strategy in corpus and elicitation (single and combination strategies, and constructions with a fourth participant)

The inventory attested in the corpus and elicitation data shown in Table 8.1 can be compared with Table 8.2, presented below, which shows the comparable list of construction types for the text subcorpus (the most naturalistic dataset available). There are 20 fewer 3PE construction types and 120 fewer distinct constructions attested in the text subcorpus than in the total dataset (consisting of the combined corpus (stimuli and texts) and elicitation). However, the encoding strategies that contribute more than 2% of the total constructions across both the combined dataset and text subcorpus remain relatively stable. For both datasets, the R-type serial verb strategy is the most common (18.68% in the combined corpus and 26.23% in the text subcorpus respectively), followed by the R-type adjunct strategy (17.58% and 19.67), the absorption affix-based classification strategy (10.44% and 9.84%), and the combination R-type adjunct-directional verb strategy (6.59% and 6.56%). The fact that the serial verb strategy is the most common construction type attested in both datasets can be attributed to the prevalence of the ‘put’ stems (discussed previously in §6.3.3 and §7.4.2). Not only are there four distinct ‘put’ stems – which are counted as four separate constructions here – but they are restricted to complex verbs. In the combined corpus, they account for 44.12% (or 15 of 34 constructions); in the text subcorpus, 62.5% (or 10 of 16 constructions) of the R-type serial verb strategy constructions.

Encoding strategy		4 th participant strategy	Code	Number of constructions	
				counts	%
1.	R-type serial verb		3a	16	26.23%
2.	R-type adjunct		2a	12	19.67%
3.	absorption affix-based classification		7f	6	9.84%
4.	R-type adjunct, directional verb		2a+6-V	4	6.56%
5.	adnominal possessive		5a	3	4.92%
6.	directional verb		6-V	3	4.92%
7.	directional verb, directional adverbial		6-V+6-D	3	4.92%
8.	R-type adjunct, directional verb, directional adverbial		2a+6-V+6-D	2	3.28%
9.	T-type adjunct		2b	2	3.28%
10.	directional associated motion		6-AM	2	3.28%
11.	directional adverbial		6-D	2	3.28%
12.	three-place predicate direct argument		1a	1	1.64%
13.	R-type adjunct, directional associated motion		2a+6-AM	1	1.64%
14.	R-type adjunct, directional verb, directional adverbial	absorption direct lexicalisation	2a+6-V+6-D-more-instr-7a	1	1.64%
15.	T-type adjunct, absorption affix-based classification		2b+7f	1	1.64%
16.	adnominal possessive	absorption direct lexicalisation	5a-more-instr-7a	1	1.64%
17.	absorption direct lexicalisation		7a	1	1.64%
			total	61	100%

Table 8.2 Inventory of 3PE construction types by encoding strategy in text subcorpus (single and combination strategies, and constructions with a fourth participant)

The 3PE constructions can also be looked at in terms of what proportion of the total number of constructions involve a single encoding strategy (e.g. R-type adjunct strategy), compared with those that either combine more than one encoding strategy or add a fourth participant (e.g. combination R-type adjunct-directional verb strategy, or an R-type adjunct strategy with a fourth participant added via the absorption strategy). While the use of combination strategies (and to a lesser extent, constructions with a fourth participant) are relatively widespread in the data, the majority of constructions involve only a single strategy. Single strategy constructions in the combined corpus and elicitation dataset account for just under two-thirds (64.85%) of all constructions, and in the text subcorpus, for just over three-quarters (78.7%) of all constructions.

The frequencies of construction types differ somewhat when looking at which strategies occur the most overall in distinct 3PE constructions. To investigate this, all distinct constructions involving a certain strategy were grouped together. So, combination R-type adjunct-directional verb strategy constructions were added to ‘pure’ R-type adjunct strategy constructions involving only a single encoding strategy in order to assess the overall prevalence of the R-type adjunct strategy. Combination R-type adjunct-directional verb strategy constructions were also added to the counts of the ‘pure’ directional strategy construction.¹⁸⁴ Table 8.3 shows the total frequencies of each encoding strategy, both in the combined dataset (corpus and elicitation) and in the text subcorpus. Note that as combination constructions are counted more than once, the total percentage exceeds 100%. For both datasets, the order of the R-type serial constructions and R-type adjunct constructions reverses when looking at the total number of constructions containing these strategies – which includes combination strategies – compared with the number of ‘pure’ single strategy constructions (listed in Table 8.1 and Table 8.2). Overall, the R-type adjunct strategy is the most common (36.81% in the combined dataset and 32.79% in the text subcorpus), followed by the serial verb strategy (21.43% and 26.23%). Table 8.3 also shows clearly how common overall the directional verb strategy is, with approximately a fifth of all 3PE constructions in both datasets containing this encoding strategy (19.78% and 21.31%).

There is a marked difference in the frequencies of the absorption affix-based classification strategy (18.68% and 11.48%) and the T-type adjunct strategy (11.54 and 4.92%) across the two datasets. The contrast in frequencies for of these two strategies can be attributed to the inclusion of the stimuli subcorpus (which contains a large number of constructions involving these two strategies) in the combined dataset. There is a small difference in the use of the directional adverbial strategy between the data sets: it is more common in the text subcorpus (13.11%) compared with the combined

¹⁸⁴ The frequency percentage for each strategy is the total number of constructions it is attested in, so 67 for the R-type adjunct strategy constructions in the combined dataset, divided by the total number of constructions in the corpus and elicitation combined dataset (182).

dataset (8,79%). This may be due to the inclusion of stimuli data in the latter, as directional strategies are not generally used in combination with the T-type adjunct strategy and the absorption affix-based classification strategy. The remaining strategies account for less than ten percent of all constructions in both datasets.

Code	Strategy	Corpus & elicitation		Text subcorpus only	
		counts	%	counts	%
2a	R-type adjunct	67	36.81%	20	32.79%
3a	R-type serial verb	39	21.43%	16	26.23%
6-V	directional verb	36	19.78%	13	21.31%
7f	absorption affix-based classification	34	18.68%	7	11.48%
2b	T-type adjunct	21	11.54%	3	4.92%
6-D	directional adverbial	16	8.79%	8	13.11%
5a	adnominal possessive	11	6.04%	4	6.56%
7a	absorption direct lexicalisation	5	2.75%	1	1.64%
6-AM	directional associated motion	4	2.20%	3	4.92%
1a	three-place predicate direct argument	1	0.55%	1	1.64%
1b	three place predicate causative	1	0.55%		
3b	T-type serial verb	1	0.55%		
more	4 th participant	21	11.54%	2	3.28%

Table 8.3 Inventory of distinct 3PE construction types by encoding strategy (%=<100)

8.3 Frequencies of three-participant events

Another way to view the Sudest 3PEs is in terms of token frequencies in the corpus. The token frequency is distinct from the inventory of 3PEs discussed in the previous section. Token frequency relates to how many times a particular encoding strategy occurs in the corpus. The 3PE inventory, on the other hand, relates to how many distinct 3PEs are attested. For example, there are eight tokens of the three-place direct argument strategy in the corpus (1a), but they are all the same construction with *vaghare* ‘teach’. Thus, there is only one 3PE construction attested for the three-place direct argument strategy. Only frequencies from the text subcorpus are considered in the discussion of token frequencies. In total, there are 153 3PE tokens in the text corpus. However, token frequencies will not be considered for the combined stimuli and text corpus. This is because the stimuli subcorpus contains data from multiple recordings of the same stimuli tasks (see §1.5.5.2 for discussion of texts in the corpus). Two of the tasks in particular, the PUT task (Bowerman et al. 2004) and the CUT-BREAK task (Bohnenmeyer et al. 2001) nearly exclusively consist of stimuli videos depicting events that correspond to 3PE target events – type A, B, and E events and type G and H events respectively. For example, the absorption affix-based classification strategy occurs 279 times in the stimuli subcorpus - making it the most frequent encoding strategy in the stimuli

subcorpus - but the same strategy occurs just ten times in the text subcorpus and is the sixth most frequent encoding strategy.¹⁸⁵

Table 8.4 presents the token frequencies of each of the encoding strategies (single and combination strategies, and constructions with a fourth participant) in the text subcorpus.

¹⁸⁵ This is not to suggest that the text subcorpus is a truly 'representative' sample of the language. However, it is still more spontaneous and naturalistic in nature than the combined corpus.

Encoding strategy		4 th participant strategy	Code	Number of tokens counts %	
1.	R-type serial verb		3a	54	35.29%
2.	R-type adjunct		2a	30	19.61%
3.	directional associated motion		6-AM	9	5.88%
4.	absorption affix-based classification		7f	9	5.88%
5.	three-place predicate direct argument		1a	8	5.23%
6.	R-type adjunct, directional verb		2a+6-V	7	4.58%
7.	directional verb		6-V	7	4.58%
8.	directional adverbial		6-D	6	3.92%
9	directional verb, directional adverbial		6-V+6-D	6	3.92%
10	absorption direct lexicalisation		7a	5	3.27%
11	directional verb, directional adverbial		2a+6-V+6-D	3	1.96%
12	adnominal possessive		5a	3	1.96%
13	T-type adjunct		2b	2	1.31%
14	R-type adjunct, directional associated motion		2a+6-AM	1	0.65%
15	R-type adjunct, directional verb, directional adverbial	absorption direct lexicalisation	2a+6-V+6-D-more-instr-7a	1	0.65%
16	T-type adjunct, absorption affix-based classification		2b+7f	1	0.65%
17	adnominal possessive	absorption direct lexicalisation	5a-more-instr-7a	1	0.65%
total				153	100%

Table 8.4 Token frequency in text subcorpus (single and combination strategies, and constructions with a fourth participant)

The patterning of token frequencies in the text corpus in many ways mirrors the encoding strategies, with the most-attested to least-attested constructions discussed in the previous section. The majority of tokens in the corpus only involve a single encoding strategy (133 tokens or 86.93%), and just 20 tokens (13.07%) are encoded by multiple strategies or involve a fourth participant. The two most common encoding strategies in terms of token frequencies are the R-type serial verb strategy (54 tokens or 35.29%) and the R-type adjunct strategy (30 tokens or 19.61%), which combined account for just over half of all attested tokens (84 tokens or 54.9%). As discussed above, the pervasiveness of the serial verb strategy is primarily due to the fact that all basic events of ‘putting’ and ‘placement’ - as well as those that specify the manner of the placement - are obligatorily expressed as a multi-verb construction involving one of the four PUT stems (§6.3.3., §7.4.2). Three-participant events with one of the PUT stems account for 38 (70.37%) of the 54 serial verb strategy constructions. A further four tokens are manner-specific complex verbs with a PUT stem (e.g. *linggi-mban* ‘pour-put, put by pouring’, *vanggu-ra* ‘lead-put, put by leading’), meaning that PUT constructions account for over a quarter (42 tokens or 26.14%) of all 3PEs in the corpus and just under three quarters (74.07%) of all serial verb strategy constructions. Besides the R-type serial verb strategy and the R-type adjunct strategy, the only other encoding strategies that make up over five percent of all 3PE tokens in the corpus are the directional associated motion prefix strategy (5.88%), the absorption affix-based classification strategy (5.88%), and the three-place predicate direct argument strategy (5.23%).

Table 8.5 presents the overall frequencies of each of the (sub)strategies in the text subcorpus. Again, the total percentage exceeds 100 per cent due to combination strategy tokens being counted twice.

	Encoding strategy	Code	Number of tokens	
			counts	%
1.	R-type serial verb	3a	54	35.53%
2.	R-type adjunct	2a	42	27.63%
3.	directional verb	6-V	24	15.79%
4.	directional adverbial	6-D	16	10.53%
5.	directional associated motion	6-AM	10	6.58%
6.	absorption affix-based classification	7f	10	6.58%
7.	three-place predicate direct argument	1a	8	5.26%
8.	absorption direct lexicalisation	7a	5	3.29%
9	adnominal possessive	5a	4	2.63%
10	T-type adjunct	2b	3	1.97%
	absorption direct lexicalisation	more	2	1.31%

Table 8.5 Strategy frequency in tokens in text subcorpus (%=<100)

The R-type serial verb strategy (54 tokens or 35.53%) and R-type adjunct strategy (42 tokens or 27.63%) remain the most common encoding strategies, even though the serial verb strategy does not occur in any combination strategies in the text subcorpus. The importance of the directional

strategies for encoding 3PEs in Sudest also becomes clear when looking at the overall token frequencies – both in single encoding strategy constructions and combination encoding strategy constructions. The three directional substrategies (directional verb, adverbial directional, and associated motion prefix strategies), are cumulatively the next most frequent strategies overall, and are present in a third of all 3PEs in the corpus (50 tokens or 32.9%). The remaining five strategies (affix-based classification, direct argument, direct lexicalisation, possessive, and T-type adjunct) together occur 30 times (19.73%) in the subcorpus.

8.4 Correlations between event type and encoding strategy

Overall, the majority of target events are expressed by a variety of encoding strategies. This means that patterning between event type and target strategy is limited. The strongest correlations between event types and encoding strategies are found for events of impact in which an instrument is used on a patient (type G and H target events), the absorption strategies, and, to a lesser extent, the T-type adjunct strategy. There are also some correlations between the directional strategies and events of caused motion (type A, B, and E events). Finally, while there is a limited number of attested events in which A intends to cause R to receive T (type F target events), the data suggest that the adnominal possessive strategy may be a preferred strategy to encode such events. The remainder of this section explores each of these correlations in turn.

Events of impact involving an instrument (type G and H events) are almost exclusively encoded by absorption strategy constructions, T-type adjunct strategy constructions, or a combination of both in the combined corpus. Furthermore, these encoding strategies encode non-impact 3PEs in only a handful of attested constructions. The encoding strategies used to encode type G and H events and their frequencies in the combined corpus are given in Table 8.6.

Strategy	Code	Number of tokens	
		counts	%
1. absorption affix-based classification	7f	191	63.46%
2. T-type adjunct and absorption affix-based classification	2b+7f	92	30.56%
3. T-type adjunct	2b	12	3.99%
4. absorption direct lexicalisation	7a	5	1.66%
5. T-type serial verb	3b	1	0.33%
total		301	100%

Table 8.6 Events of impact and their encoding strategies (combined corpus)

The affix-based classification substrategy involving a manner-of-causation prefix and the T-type adjunct strategy can be used either interchangeably or in combination when expressing a wide variety of type G and H target events. The majority of these 3PEs are encoded by the affix-based classification strategy (191 tokens or 63.46%), followed by a combination of this strategy with the

T-type adjunct strategy (92 tokens or 30.56%). The remaining 5.98% of tokens are encoded by the T-type strategy alone (12 tokens or 3.99%), the absorption direct lexicalisation strategy (5 tokens or 1.66%), or the T-type serial verb strategy (1 token or 0.33%). As discussed in chapter 2, the events involving an instrument impacting on a patient do not fit into the macro semantic roles with a T- and R-type participant. Instead, they have participants with the semantic roles of instrument and patient. It is, therefore, not necessarily surprising that type G and H events are encoded differently from other events, and that the encoding strategies used are more or less restricted to encoding these event types.

It can also be noted that while there are a variety of encoding strategies used to express A, B and E events, the directional strategy is only attested encoding these three event types. Whether the directional strategy is restricted to these three target event types or this is just a tendency and they may also occur with other event types is unclear. In any event, it is clear that the directional strategy plays an important role in the expression of the three event types that involve caused motion to or from a location. A more detailed study of these event types of events and their encoding in Sudest can be found in Sheppard (forthcoming).

Some correlations can also be observed between events in which an agent intends to cause the recipient to receive the theme (type F events) and the adnominal possessive strategy. This observation comes however with the caveat that there are only a few events of this type attested in the data. There are eight attested constructions expressing type F events, only three of which occur in the corpus (and only once each). The remaining five constructions are only attested in elicitation data. The three type F events attested in the corpus - as well as two of those attested in elicitation - are encoded by the possessive strategy. The remaining three constructions from the elicitation data are encoded by the R-type adjunct and serial verb strategies. While the possessive strategy is also used to encode other event types, the limited data suggest that it could be a preferred strategy for expressing events involving the creation, preparation, and obtaining of T for R.

Before concluding the discussion on correlations between event types and encoding strategies, it should also be noted that some target event types are underrepresented in the current data: specifically, events of types I, J, K, and L. In type I events, conditions of satisfaction imply that A causes R to receive T (e.g. *promise, lend* (s.o. s.th.)). In type J events, A acts to cause R to receive T at a future point (e.g. *leave, allocate* (s.o. s.th.)). In type K events, A allows R to receive T (e.g. *permit, allow* (s.o. s.th.)). And in type L and events, A causes R not to receive or access T (e.g. *refuse, hide* (s.o./s.th. from s.o)). There are no attested tokens of these 3PEs in the corpus data, and only one or two attested constructions of each of these event types in elicitation data.

The only attested type I event involves the two-place complex verb *dage-ra* ‘speak-put’ meaning ‘promise (s.th. to s.o.)’ (see §7.4.2). The single type L 3PE is expressed by GET-*thuwole* ‘get-hide’ meaning ‘hide’, which is likewise a two-place complex verb (see §7.4.3). The type J events identified in elicitation involve predicates that also encode different three-participant event types. For example, *vatomwe* ‘show’ (1) can have the implication that what is being shown is on offer. Similarly the ‘give’ verb constructions in (2) and (3) can be interpreted as an offer to give rather than an outright giving event.

- (1) *i=vatomwe=ya mbombo we=nggo*
 3SG=show=YA pig PREP=1SG
 ‘he offered (lit. showed) a pig to me’ (e_211116_01)
- (2) *mbugha=ma i=ri-wo-ve=nggo teo=ma*
 dog=DET 3SG=w.teeth-GET.SG.RIGD-give=1SG rat=DET
 ‘the dog offered me the rat in its mouth’ (e_141116_02)
- (3) *rama-nggu i=vangu-giya=nggo we=ya le boda-boda*
 father-1SG.PSS 3SG=lead-give=1SG PREP=YA POSS.CLF2 RED-relative
 ‘my father offered me to his relatives (to adopt)’ (e_041116)

The verb *vatomwe* ‘show’ can also be used to imply a type K event (the only one attested in the data). In (4), *vatomwe* ‘show’ implies that R is allowed to take (temporary) possession of R:

- (4) *Lydia i=vatomwe=ya le koukou we=ya Michael*
 pers.name 3SG=show=YA POSS.CLF2 canoe PREP=YA pers.name
 ‘Lydia allows (lit. shows) her canoe to (be used) by Michael’ (e_041215_01)

Finally, responses in elicitation for type L target events typically consist of negated clauses, like in (5) with *ande ivaghevaghere* ‘not give (as gift)’.

- (5) *ande i=vaghevaghe=re mbombo=ma we=nggi=ya bwabwari=ma*
 NEG1 3SG=give(gift)=NEG2 pig=DET PREP=3PL=YA visitor=DET
 ‘they refused (to give) the pig to the visitors’ (e_261116_02)

Given the minimal data on type I, J, K, and L events, it not possible to draw any type of conclusions relating to event types and potential links to particular encoding strategies.

8.5 Comparison with previous 3PE research

When comparing the encoding strategies used to express 3PEs in Sudest with those attested in other Oceanic languages, Sudest generally conforms to the patterning identified for Oceanic languages by Margetts (2007). All encoding strategies – although not all substrategies – identified by Margetts (2007) in her survey of 28 Oceanic languages are found in Sudest, excluding the incorporation strategy. There is no attested noun incorporation in Sudest, and therefore no use of this strategy.

Within the directional strategy, Sudest also makes use of an additional substrategy not identified in previous literature: the directional associated motion strategy. Margetts' (2007) survey is based on data from grammatical descriptions rather than corpus data. It is therefore not possible to compare the relative frequencies of encoding strategies and tokens of 3PEs in the Sudest data with other languages in this study.

Like the majority of Oceanic languages with three-place predicates identified by Margetts (2007), Sudest only has a small number of predicates that take three core arguments. These predicates are the R-type serial verb strategy constructions with *ve* 'give' (§7.4.1); the three-place predicate direct argument strategy verb *vaghare* 'teach'; and the three-place predicate causative strategy verb *va-ravu* 'teach' (§7.2). It is not surprising that the two event types that can be encoded by three-place predicates are 'give' and 'teach'. Semantically, 'give' verbs are often considered to be *the* prototypical three-participant event (Haspelmath 2005b); if a language only has one three-place predicate it is nearly always 'give' (Kittilä 2006). However, 'give' has long been identified as atypical cross-linguistically (e.g. Borg & Comrie 1984; Newman 1996; 1997). Kittilä (2006a) argues that 'give's exceptional status relates to its high level of formal and semantic transitivity (in line with Hopper and Thompson (1980)), and goes so far as to propose a universal that if a language has only a single three-place predicate, that predicate will be 'give'. The fact that the only other event type that takes three core arguments is 'teach' is also typical of languages with a small number of three-place predicates. In these languages, the most frequent event types encoded by ditransitive verbs also include 'teach' and 'show' (see e.g. Kittilä 2006a; Malchukov et al. 2010a: 50). A further '(near-)universal' Kittilä (2006a: 606) proposes is that, if there are derived and underived three-place predicates, it will be 'give' that is underived. This is also borne out in the Sudest data. The verb stem *ve* 'give' obligatorily occurs in complex verbs, but does not take any derivational morphology.¹⁸⁶ It is the 'teach' verbs *va-ravu* and *vaghare* that are derived (or show evidence of historically being derived) (§7.2).

As discussed, the directional associated motion strategy used in Sudest is not identified as a 3PE encoding strategy in either Margetts (2007) or M&A. Associated motion morphemes also appear to be undocumented in any other Oceanic language. However, multi-verb constructions with sequential semantics involving a motion verb in V_1 are relatively widespread among Oceanic languages (Lynch et al. 2002: 47). Cleary-Kemp (2015: 134) even proposes that they should be labelled 'associated motion' serial verb constructions, based on their similarity to associated motion prefixes identified in other language families. In a number of North New Caledonia languages,

¹⁸⁶ The valence of complex verbs is determined by the verb stem with the highest valence in the construction. The stem *ve* 'give' is analysed as ditransitive because it only ever occurs with monotransitive V_1 stems, and because the complex verbs it occurs in take three core arguments (§6.3.2, §6.3.7).

comparable constructions to the Sudest ones express simultaneous events with a posture or motion V_1 and a fixed V_2 stem meaning ‘put’ (Ozanne-Rivierre 2004). These constructions often have the formula ‘X is moving taking (or carrying) Y’ (Ozanne-Rivierre: 345). In these languages, however, it is the V_2 verb ‘take’ that tends to grammaticalise into an associative morpheme meaning ‘with’. Example (6) shows a serial verb construction with sequential semantics in Nemi (North New Caledonian), with a V_1 motion verb *ta* ‘go up’ and *fe* ‘take’ in V_2 .

- (6) NEMI (NORTH NEW CALEDONIA)
wo-n ta-nga-me fe Kaavo
 1SG-PERF go.up-REV-towards take pers.name
 ‘I have come to fetch Kaavo’ (Ozanne-Rivierre 2004:
 336)

Nêlêmwa, another North New Caledonia languages, has an associative morpheme *ve* (probably historically derived from *fe* ‘take’) in serial constructions that indicates that the horse is running with the theme participant (Ozanne-Rivierre 2004: 339).

- (7) NÊLÊMWA (NORTH NEW CALEDONIA)
I thege-ve ye ru hooc
 3SG run-ASSOC him ERG horse
 ‘the horse dragged him’ (Ozanne-Rivierre 2004:
 339)

While none of the examples listed in Ozanne-Rivierre (2004) appear to imply a third participant, it is possible that other Oceanic languages also have ‘associated motion’ 3PEs, whether they involve a grammaticalised morpheme or a multi-verb construction.

8.6 Issues with the current framework

The 3PE framework set out by M&A assumes that the 3PE is encoded by a transitive predicate with either two or three core arguments. The encoding strategies are generally categorised by how the ‘third’ participant is expressed. This means that a 3PE expressed, for example, by an intransitive verb with two adjuncts does not neatly fit into the categories of the framework. The fact that the encoding strategies are identified and categorised by how they encode the ‘third’ participant also means that aspects of the constructions may be ignored by the categorisation of the encoding strategies, even though they are relevant. As shown in §5.2, the CLFVs in Sudest classify the referent of the object (the T-type participant). However, because the T-type participant is encoded as one of two syntactic arguments, these classificatory morphemes are not taken into account in the description of the encoding strategies; also, the CLFVs are not distinguished in the coding. This means that the 3PE in (28) with *giya* ‘give’ (which includes no information about the nature of the

object) is treated identically as the constructions with a CLFV in (29) and (30) (which entail information about the object).

- (8) *thi=giya we=nggi ghaningga dayagha*
 3PL=give PREP=3PL food be.hot
 ‘they give them hot food’ (hunting_261214 017-8, 37.440 40.430)
- (9) *amba methi=li-giya nambo we=Ø*
 then 3PL.IMM.PST=GET.SG.FLEX-give basket PREP=3SG
 ‘then they give a (empty) basket to him’ (dating_081015 074, 201.500 204.860)
- (10) *...na thi=thin-giya=Ø we=ya wevo=ko*
 and 3PL=GET.SG.CNTR-give=3SG PREP=YA young.woman=DIST
tina-e na rama-a
 mother-3SG.POSS and father-3SG.POSS
 ‘...and they give it (a full basket) to the girl’s mother and father’
 (first_time_251214 021-23, 58.230 64.780)

Margetts and Austin (2007) do in fact identify a strategy related to ‘classifiers or object markers’ (p. 434): specifically, the absorbed classifier/object marker strategy, a substrategy of the absorption strategy. In this strategy, the verb takes two arguments and ‘the verb stem has absorbed what used to be a classifier or object marker which conveys information about a further participant’ (Margetts et al. 2019: 2). Margetts and Austin (2007: 434) give a number of North American languages (including Tsalagi (Cherokee)) as an example of this strategy. Cherokee has around 40 sets of classificatory verbs that express handling and caused motion events (Montgomery-Anderson 2008: 278). The diachronic source of the classificatory verbs is noun incorporation, but the incorporated element is no longer separable or necessarily identifiable in the synchronic verb sets (Mithun 1999: 111; Montgomery-Anderson 2008: 277). The Cherokee classificatory verbs therefore fit the criteria of having an ‘absorbed’ element that conveys information about a participant. However, as discussed in §5.3.1, verbal classifiers cross-linguistically function on an ‘absolutive’ basis (Keenan 1984). This means that like the CLFV in Sudest, a verbal classifier in a monotransitive predicate will always specify properties of the object referent, rather than a third participant that is not a core argument.

Cross-linguistically, verbal classifiers in transitive predicates overwhelmingly occur in predicates expressing events of handling and caused motion, and are usually monotransitive (Aikhenvald 2000: 154; Kilarski 2013: 42). This means that for any language with verbal classifiers in transitive predicates, there will likely be a relatively high number of 3PEs that include a verbal classifier, as is the case for Sudest (and likely Cherokee). In fact, classificatory verbs occur in over one third (35%) of all 3PE constructions in the Sudest data (64 distinct constructions). Additionally, they occur in 57% (87 tokens) of all 3PE tokens in the text subcorpus. However, there is no place in the

framework to holistically account for this important feature, which plays such a prominent role in the expression of 3PEs in the language. This means that for languages like Sudest with verbal classifiers, a cross-linguistic comparison of 3PEs based on encoding strategies alone can ignore key features of 3PEs – and thus similarities and differences – between, for example, languages with verbal classifiers.

8.7 Conclusions and future research

This thesis has presented an analysis of Sudest verbal morphosyntax and the expression of three-participant events. The thesis is based on primary fieldwork. Like any such project, the most valuable output of the project is arguably the language data itself (Morey 2005: 78). The data collected for the thesis includes 73 transcribed, interlinearised, text-audio aligned texts (approx. 9.5 hours) and some 20 hours of elicitation recordings. These texts are currently in the process of being archived in in The Language Archive of the Max Planck Institute so that they are available for transparency and reusability.¹⁸⁷

The first three chapters presented introductory matter. Chapter 1 introduced the language, its speakers and the aims of the thesis. Chapter 2 reviewed the literature related to the study of three-participant events. It also introduced Margetts and Austin's (2007) list of three-participant events and morphosyntactic encoding strategies, which form the starting point for the investigation of three-participant events in Sudest. Chapter 3 provided a grammar sketch of the language.

Chapters 4 to 6 focussed on the verb complex in Sudest. Chapter 4 presented an analysis of the slots in the verb complex. The Sudest verb complex shows many features that are widespread in Oceanic languages - such as valence changing and rearranging morphology and posture-based prefixes - but the data also showed that Sudest has a group of three prefixes with associated motion semantics that have grammaticalised from motion verbs with manner semantics. While multi-verb constructions with a motion verb slot and sequential semantics are common in Oceanic languages, grammaticalised associated motion morphemes appear to be unattested. Chapter 5 described two 'classificatory' verbal elements in the language. The manner-of-causation prefixes, traditionally called 'classificatory prefixes' in the literature, are common in the Papuan Tip languages. They indicate the manner in which the event encoded by the verb comes about (e.g. 'by hands', 'by cutting'). The second group of morphemes discussed in chapter 5 were the classificatory verbs. The group of classificatory verbs mean 'get' and are selected based on properties of the object referent (e.g. consistency, composition, and number). The presence of classificatory verbs in Sudest is of particular note, as they are otherwise unattested in the Oceanic (and Austronesian) languages.

¹⁸⁷ The corpus will soon be available at <https://hdl.handle.net/1839/a67b355f-a22d-4e86-a95d-e41a2674e196>.

Chapter 6 provided an analysis of the approximately 250 multi-verb constructions attested in the Sudest dataset, many of which could be analysed as nuclear-layer serialisation.

Chapter 7 and chapter 8 presented an overview of the encoding of 3PEs in Sudest. Chapter 7 provided an analysis of all 3PEs attested in the Sudest data, grouped by the encoding strategies identified by M&A. The current chapter has presented a discussion of the 3PE encoding strategy combinations, looking at the inventory of encoding strategies and which are used most frequently to express 3PEs (§8.2); the token frequency of the encoding strategies in the text subcorpus (§8.3); and potential correlations between encoding strategies and target events (§8.4). For both the inventory of 3PE constructions and token frequencies in the corpus, the serial verb strategy and R-type adjunct strategy were found to be the most common encoding strategies. The directional strategy also plays a prominent role in 3PE encoding, with the third-highest number of tokens in the corpus. The only strong link between event types and encoding strategies involves the use of the absorption strategy - particularly the affix-based classification strategy - and the T-type adjunct strategy to express events involving impact by an instrument (type G and H target events). There also appears to be a restriction on directional strategy constructions only encoding caused-motion events (type A, B, and E target events). Also, there is potentially a link between the adnominal possessive strategy and events in which A intends to cause R to receive T (type F target events), although the encoding strategy is not restricted to type F events. As was shown in §8.5, the 3PE encoding strategies that occur in Sudest conform overall to previous research on Oceanic languages (cf. Margetts 2007), with the exception of the directional substrategy involving associated motion prefixes. The associated motion strategy is not attested in previous 3PE literature (neither Oceanic nor non-Oceanic); through its identification in the Sudest data, it can now be added to the list of identified 3PE encoding strategies.

The Sudest case study of 3PEs also highlights a limitation of the 3PE framework by M&A, namely its inability to capture salient features of 3PEs that relate to the expression of participants which are already encoded as arguments. As mentioned, the current framework primarily classifies strategies in terms of how a third participant is added to a transitive construction. As discussed, verbal classifiers cross-linguistically convey information about a core argument. Furthermore, because cross-linguistically verbal classifiers tend to occur in the same types of semantic domains, (specifically, handling and caused-motion events), they are likely to play a prominent role in the expression of 3PE in languages with verbal classifiers. However, due to the reasons outlined above, they are effectively ‘ignored’ by the 3PE coding. This could, in turn, leads to commonalities and potential correlations being missed when comparing 3PE findings across languages.

While taking the above limitations into account, the Sudest findings contribute to our knowledge of 3PEs. The Sudest study provides not just qualitative but also quantitative data about 3PEs, in a

language that could be used in the area of linguistic typology to investigate questions about 3PEs as well as related topics from semantic typology.

Finally, the investigation in chapter 7 showed that the range of encoding strategies used to express 3PEs is large and relatively heterogeneous. At least for the Sudest case, the notion of 3PE is possibly too broad to find meaningful patterns in the syntax-semantic interface. Future avenues of research could involve the investigation of more specific semantic domains within the 3PE target events using the Sudest corpus. Two such semantic domains that show promise for future investigation are CUT-BREAK and PUT-TAKE events. These two areas have received attention in the form of individual language studies and investigations into the semantic variability and constraints across languages; see Majid and Bowerman (eds. 2007) and Majid et al. (2008) for CUT-BREAK events and Kopecka and Narasimhan (eds. 2012) for PUT-TAKE events. The Sudest data lend themselves particularly well to a comparative study of these two semantic domains, because the same stimuli tasks used for investigations in Majid and Bowerman (eds. 2007) and Kopecka and Narasimhan (eds. 2012) were also carried out during Sudest data collection. This means that my findings would be directly comparable to this body of literature. One such study that focusses on a specific semantic domain has already been undertaken, looking at directed caused accompanied motion events (Sheppard, forthcoming) and Margetts et al. (forthcoming), which compares the Sudest findings with parallel investigations from other languages from the 3PE project.

Appendix A: Table of texts

The following table contains a list of all texts in the corpus divided into the text and stimuli subcorpora. For each text, the text title, speaker(s), type of text are listed as well as the number of intonation units (IUs) it has and its length in minutes and seconds. The text types are divided into anecdotes (A), conversations (C), narratives (N), personal narratives (PN), traditional narratives (TD), stimuli (ST), and stimuli narratives (SN).

Text title	Consultant	Type	IU	Mins	Secs
Text subcorpus					
cooking_111015	Jaclyn Sam & Joyce Mao	A	37	1	47
last_night_181214	Josephine Banian	A	27	1	6
short_story_111015	Pauline Donny	A	15	0	38
stone_cooking_251015	Miriam	A	122	5	29
sweeping_011115	Jaclyn Sam	A	36	1	24
working_011115	Monica Michael	A	44	2	11
c_061116	Colette Stevens, Livina Luke, Meira Kebari, Noelyne Livina	C	352	10	43
lizard_and_possum_121015	Michael Karuwo	N	51	2	13
marriage_111015	Lydia Sale	N	91	4	35
bwaindiya_151115	Norbert Simeon	N	127	5	27
chicken_story_181015	Simon Thomas	N	73	2	40
child_and_giant_201015	Livina Luke	N	145	6	30
couples_story_101214	Lydia Saulo	N	55	2	35
pig_and_dugong_101214	Denise Mary	N	52	2	41
skeleton_181015	Simon Thomas	N	58	2	19
education_241214	Colette Steven	PN	87	5	4
family_251015	Anne Edwards	PN	23	1	27
family_ties_081115	Lydia Noel & Jaclyn Sam	PN	69	2	39
moving_291214	Meira Kebari	PN	98	3	32
vuwo_111015	Miriam	PN	20	0	53
widow_251015	Anne Edwards	PN	53	2	31
bush_betelnut_011115	Noelyne Livina	TN	147	5	49
snake_passage_061215	Lydia Noel	TN	214	8	38
crab_girl_081115	Joyce Mao	TN	123	5	54
eagle_story_081115	Joyce Mao	TN	72	3	24
engginas_story_231116	Alexander Gitali	TN	47	1	36

Text title	Consultant	Type	IU	Mins	Secs
feast_of_the_fish_271015	Michael Kebasi & Noelyne Kadewe	TN	167	7	14
mandumbunga_02_181916	Tajin Roberts	TN	547	22	57
Mandumbunga_061215	Lydia Sale	TN	175	8	11
snake_story_101214	Meira Kebari	TN	31	1	19
bagi_181215	Sylvester Kieran	P	37	1	55
body_parts_251015	Josephine Banian	P	56	3	53
canoe_021015	Abel Sam	P	30	1	10
dating_081015	Josephine Banian	P	83	4	50
divorce_111015	Noelyne Kandewe	P	31	1	17
first_time_251214	Joyce Mao	P	28	1	0
fishing_071015	Patrick Kieran	P	18	0	47
funeral_feasting_081015_01	Josephine Banian, Trudo Camillus	P	165	7	45
funeral_feasting_081015_02	Abel Sam	P	121	5	2
garden_planning_021015	Meira	P	23	1	3
hunting_261214	Sylvester Kieran	P	46	1	40
kinship_071015	Abel Sam and Jaclyn Sam	P	106	5	0
kula_exchange_081215	Noelyne Livina	P	112	5	20
kula_exchange_101214	Josephine Banian	P	80	3	46
mangroves_261214	Colette Steven	P	21	1	3
menstruation_081015	Josephine Banian	P	65	3	16
new_mother_251214	Joyce Mao	P	123	5	6
organising_021015	Abel Sam	P	19	0	49
pigs_251214	Noelyne Livina	P	44	1	52
sago_101214	Abel Sam	P	69	3	2
small_child_051214	Josephine Banian	P	53	2	9
traditional_dress_051214	Josephine Banian	P	115	5	2
womens_work_221214	Colette Steven	P	45	2	54
Stimuli subcorpus					
cb_stimuli_051016_01	Jaclyn Sam	S	246	43	50
cb_stimuli_051016_02_01	Meira Kebari	S	183	17	11
cb_stimuli_051016_02_02	Meira Kebari	S	138	16	58
cb_stimuli_051016_03	Noelyne Livina	S	560	40	14
cb_stimuli_071116	Colette Stevens	S	125	19	53
cb_stimuli_101116	Abel Sam	S	91	19	22
fp_stimuli_191015_01	Meira Kebari, Noelyne Livina	S	146	9	20
fp_stimuli_191015_02	Meira Kebari, Noelyne Livina	S	202	9	36
fp_stimuli_191015_03	Meira Kebari, Noelyne Livina	S	418	17	12
fp_stimuli_191015_05	Meira Kebari, Noelyne Livina	S	475	17	13
fp_stimuli_191015_07	Meira Kebari, Noelyne Livina	S	165	6	35
fp_stimuli_201015_01	Jaclyn Sam, Sylvester Kebari	S	254	15	52

Text title	Consultant	Type	IU	Mins	Secs
fp_S_201015_02	Jaclyn Sam, Sylvester Kebari	S	239	13	34
fp_S_201015_04	Jaclyn Sam, Sylvester Kebari	S	107	5	8
put_S_191015_01_01	Noelyne Livina	S	241	17	2
put_S_191015_01_02	Noelyne Livina	S	249	17	9
put_S_191015_02_01	Meira Kebari	S	37	3	56
put_S_191015_02_02	Meira Kebari	S	129	14	43
put_S_201015_01	Jaclyn Sam	S	175	16	26
put_S_201015_02	Sylvester Kieran	S	168	16	50
put_S_231015	Abel Sam	S	123	17	13
frogstory_161214	Lydia Saulo	SN	127	5	35

Appendix B: Sample Sudest texts

Skeleton's Story (by Simon Thomas)

skeleton utuutuniye va mbwa tanuwaga va gha ndighe imare
 skeleton utu-utu niye va mbwa tanuwaga va gha ndighe i=mare
 skeleton RED-word-SP REM.PST water owner REM.PST POSS.CLF1 fire 3SG=die
 skeleton's story, before, the water spirit's fire went out

gha ndighe va imare iwa vevoro Vanambithimbithi ghemba
 gha ndighe va i=mare i=wa ve=voro Vanambithimbithi ghemba
 POSS.CLF1 fire REM.PST 3SG=die 3SG=go 3SG.INT=go.up place.name village

regha idae Vanambithimbithi
 regha ida-ye Vanambithimbithi
 one name-3SG.POSS place.name

his fire went out (and) he went to go up to Vanambithimbithi, a village called Vanambithimbithi

ina e luwako tine va thiyaku we
 ina e luwa=ko tine va thi=yaku we
 location PREP middle=DIST inside REM.PST 3PL=stay goal/source/rec
 it was inland they lived there (inland at Vanambithimbithi)

orumburumbumeko va thiyaku we
 o-rumbu-rumbu-me=ko va thi=yaku we
 PL-grandparent/child-1EXCL.POSS=DIST REM.PST 3PL=stay goal/source/rec
 our ancestors lived there

ngginangginau iyako wakiwakiniyeko va thidagedageko
 nggina-ngginau iya=ko waki-wakini-ye=ko va thi=dage-dage=ko
 RED-building.materials DEM=DIST RED-bone-3SG.POSS=DIST REM.PST 3PL=RED-speak=DIST
 that skeleton (lit. building materials), his bones were creaking (lit. speaking)

thinga "amala regha iya ivuthako"
 thi=nga amala regha iya i=vutha
 3PL=say man one DEM 3SG=arrive=DIST

They (the people) said "somebody is coming" the elders didn't recognise him, they said

giyagiyako thimbumbunya thinga "nggorongga amalako maa e mbunmbunmaniye?"
 giya-giya=ko thi=mbumbunya thi=nga nggorongga amalako maa e mbunmbunmani-ye
 RED-big.person=DIST 3PL=not.recognise 3PL=say how man=DIST NEG PREP flesh-3SG.POSS
 the elders didn't recognise him, they said "why doesn't that man have any flesh?"

thinga “*wakiwakiniyeengge rara e angganiyeko?*”
 thi=nga wakiwakini-ye=engge rara e angga-niye=ko
 3PL=say bones-3SG.POSS=just be.from(masc) PREP where-SP=DIST
 they say “he is just bones! Where is he from?”

thivevaivaitonggi
 thi=ve-vaito=nggi
 3PL=RECP-ask=3PL
 they asked each other

giyagiyako thinga mbe bigi regha tanuwaga iyana!”
 giya-giya=ko thi=nga mbe bigi regha tanuwaga iya =na
 RED-big.man=DIST 3PL=say still/yet thing one owner DEM=ADDR.PROX
 the elders said “there's something about that person!”

ivutha e nggolo ghadidiye inga “wo ndighe
 i=vutha e nggolo ghadidi-ye i=nga wo ndighe
 3SG=arrive PREP house beside/close-3SG.POSS 3SG=say POSS.CLF1.1SG fire

me=mare? thare bosowa huyenggegiya ghami ndighe
 me=mare thare bosowa hu=yengge-giya gha-mi ndighe
 3SG.IMM.PST=die REQ possibility 2PL=GET.SG.FIRE-give POSS.CLF1-2PL.POSS fire

na we=nggo
 na we=nggo
 and goal/source/rec=1SG
 A(give-giya)2a-CLFV-yengge

he came close to the house and he said “my fire died. Is it possible for you to give your fire to me?”

giyagiyako thi=nga “uyenggegiya ndighena”
 giya-giya=ko thi=nga u=yengge-giya ndighe=na
 RED-big.person=DIST 3PL=say 2SG=GET.SG.FIRE-give fire =ADDR.PROX
 those elders said (to a younger person) “you give the fire (near addressee)”

thiyengge ndighema thiyenggegiya we
 thi=yengge ndighe=ma thi=yengge-giya we
 3PL=GET.SG.FIRE fire=DET 3PL=GET.SG.FIRE-give goal/source/rec
 A(give-giya)2a-CLFV-yengge
 they got fire and they gave it to him

ma i=wareriva iwa venja
 ma i=wareri=va i=wa ve=nja
 already 3SG=leave=REP 3SG=go 3SG.INT=go.down
 he left again he went down

iwa venja
i=wa ve=nja
 3SG=go 3SG.INT=go.down
 he went down

ma thivariyenggiya thegha thenjighewo thinga “*wo=hu=variye=nggi*
ma thi=variye=nggiya thegha thejighe-wo thi=nga wo=hu=variye=nggi
 already 3PL=send=3PL=YA male.youth COUNT.CLF-two 3PL=say IMP=2PL=send=3PL

ghe-wo=na theghanggina wothiwa buda kai
ghe-wo=na theghe-nggi=na wo=thi=wa buda kai
 COUNT.CLF-two=ADDR.PROX COUNT.CLF-PL=ADDR.PROX IMP=3PL=go what thing

tanuwaga iya”
tanuwaga iya
 owner DEM
 then they (the elders) sent two young boys, they said “you send those two, those youths, they (should) go (to see) what that person is”

imena inanggo ndigheke wenggi thighewona
i=mena i=nanggo ndighe=ke we=nggi thi=ghewo=na
 3SG=come 3SG=ask fire=SPKR.PROX goal/source/rec=3PL 3PL=go.away=ADDR.PRO
 he came and asked for fire from them, (the youths) went away

thikubaro reghamba amalaghiniye ivuvuva
thi=kubaro reghamba amala-ghi-niye i=vu-vuva
 3PL=hide behind man-HON-SP 3SG=RED-go.first
 they hide behind (while) the old man (the skeleton) was going first

i=vuvuva i=vuvuva iranggiwona e mbwana
i=vu-vuva i=vu-vuva i=ranggi-wo=na e mbwa=na
 3SG=RED-go.first 3SG=RED-go.first 3SG=go.out-thither=ADDR.PROX PREP water=ADDR.PROX

tine
tine
 inside
 he was going first, he was going first, he was going away down along the water

iranggi-wo=na iranggi-wo=na
i=ranggi-wo=na i=ranggi-wo=na
 3SG=come.out-thither=ADDR.PROX 3SG=come.out-thither=ADDR.PROX
 he went away down there, he went away down there

iwa ma iwa vemunnja Thuwarighena
i=wa ma i=wa ve=mun-nja Thuwarighena
 3SG=go already 3SG=go 3SG.INT=dive-go.down place.name
 he went, he went and dived down (into the water) at Thuwarighena

iya ranggiwona
iya ranggi=wo=na
 DEM come.out thither=ADDR.PROX
 that's the place out there!

iwa ve=munnja we
i=wa ve=mun-nja we
 3SG=go 3SG.INT=dive-go.down goal/source/rec
 he went and dived down there

ghewoma thinjogha
ghe-wo=ma thi=njogha
 COUNT.CLF-two=DET 3PL=go.back
 the two (boys) went back

thinjogha thinga “ghama une mbwako e ranggiwoko
thi=njogha thi=nga gha-ma une mbwa=ko e ranggi=wo=ko
 3PL=return 3PL=say POSS.CLF1-1EXCL.POSS friends water=DIST PREP go.out=thither=DIST

iyako tanuwaga memena
iya =ko tanuwaga me=mena
 DEM =DIST owner 3SG.IMM.PST=come
 they went back and they said “our friends, that water out there, the person comes (from there)”

utu ghaghadi
utu ghaghadi
 story/word end/until
 the end

Bagi (by Sylvester Kieran)

autunga bagi utuniye
a=utunga bagi utuniye
 1SG=speak= TR k.o.shell.necklace story/word=SP
 I (will) tell a bagi story

iviva
i=viva
 3SG=go.first
 first

amunja
a=mun-nja
 1SG=dive-go.down
 I dive (to collect shells)

awa vamban bagi
a=wa va=mban bagi
 1SG=go 1SG.INT=GET.RIGD.PL k.o.shell.necklace
 I go to get bagi (shells)

thinga sapsap

thi=nga sapsap

3PL=say k.o.shell

They are called sapsap (lit. they say sapsap)

avoro abebe

a=voro a=bebe

1SG=go.up 1SG=break

I go up (from the sea and) I break it into pieces (them/sapsap)

Amba yabebe munumunuwo

amba a=bebe munumunuwo

then 1SG=break many.parts

then I break (the sapsap) into small/many pieces

amba awi

amba a=wi

then 1SG=grind(bagi.on.stone)

then I grind/smooth it (the bagi shells on a grinding stone)

awivao iko

a=wivao i=ko

1SG - grind(bagi.on.stone)-COMPL 3SG=finish

I finish grinding it (the bagi on the stone and) it is finished

amba aten

amba a=ten

still/then 1SG=break

and then I cut it (the bagi shells with cutters/pliers)

va ivivako va ivuyowo moli

va i=vivako va i=vuyowo moli

REM.PST 3SG= go.first-DIST REM.PST 3SG=be.heavy INTS

in the past it was very difficult (making bagi)

noroke kaero ithovuye kaiwae lumo kaero thivakatha kata

noroke kaero i=thovuye kaiwae lumo kaero thi=vakatha kata

day already 3SG=be.good reason -3SG.POSS white.person already 3PL=make/do cutter/pliers

today it is easier because white people (have) made pliers

na aten weya sapsapke

na a=ten weya sapsap

and 1SG=break PREP=YA k.o.shell-SPKR.PROX

and I cut with it (the pliers) sapsap shells

atenvao iko

a=tenvao i=ko

1SG=break-COMPL 3SG=finish

I finish cutting it (and) it is finished

amba abus

amba a=bus

then 1SG=bore

then I bore it (holes in the shells)

ambama abulale

ambama a=bulale

then=DEM 1SG=roll/smooth

then I smooth it (the sapsap beads)

na avakatha ivuyowo moli

na gha vakatha i=vuyowo moli

and POSS.CLF1 action 3SG=be.heavy INTS

and its production (bagi making) is very hard

iya kaiwa

iya kaiwa

DEM reason

because of this

mbangake noroke

mbanga=ke today

time/when=SPKR.PROX

now, today

baginiye

bagi=niye

k.o.shell.necklace=SP

bagi's

mwada ilaghiye

mwada i=laghiye

payment 3SG=be.big

payment is big

kaiwae awo bagi avamodo weya thelau

kaiwae a=wo bagi a=vamodo weya thelau

reason-3SG.POSS 1SG=GET.RIGD.SG k.o.shell.necklace 1SG=pay PREP=YA ground

becuase I get bagi, I pay for land

awo bagi avamodo weya mbombo

a=wo bagi a=vamodo we=ya mbombo

1SG - GET.RIGD.SG k.o.shell.necklace 1SG=pay PREP=YA pig

I get bagi (and) I pay for pigs

awo bagi avamodo weya wevo

a=wo bagi a=vamodo we=ya wevo

1SG - GET.RIGD.SG k.o.shell.necklace 1SG – pay PREP=YA young.woman

I get bagi (and) I pay for women with it (i.e can pay brideprice)

bigi thangarike
 bigi thangari=ke
 thing every/all=SPKR.PROX
 anything/everything

avamodo weya e bagi
 a=vamodo we e bagi
 1SG - pay PREP PREP k.o.shell.necklace\$
 I pay for with bagi

iya kaiwa
 ya kaiwa
 DEM reason
 for this reason

mwadae ilaghiye
 mwadae i=laghiye
 payment -3SG.POSS 3SG=be.big
 the payment is big

na bagi
 na bagi
 and k.o.shell.necklace
 and bagi

ghemba thangarike kaero thimban
 ghemba thangari=ke kaero thi=mban
 villge every/all=SPKR.PROX already 3PL=GET.RIGD.PL
 every villlage uses (lit. gets) them (bagi)

na thighavatha we
 na thi=ghavatha we
 and 3PL=dress PREP
 and they dress with it

na thivakaiwonga
 na thi=va-kaiwo=nga
 and 3PL=CAUS-work=TR
 and they work for it

ago
 ago
 thanks
 thanks

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