

**A PSYCHOANALYTICAL STUDY OF SELF-LEARNING
IN MUSIC COMPOSITION**

Daniel Lavan

Bachelor of Science, University of New South Wales

Graduate Diploma, University of Sydney

Master of Science, University of Technology Sydney

Submitted in fulfilment of the requirements for the degree:

Doctor of Philosophy

Faculty of Education

Monash University

September 2014

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Preface

Daniel Lavan was a remarkable man. He was a physicist but had an abiding passion for music. Daniel became a good pianist and he was also a composer of electro acoustic music. As a composer, Daniel was an autodidact. He used natural sounds, such as astronomical recordings of radio signals from space as his raw material. He fashioned these into intricate and engaging electronic compositions. It was the processes of his own composition that he subjected to rigorous psychoanalytical analysis that became the research for his doctoral thesis. The research context, data and analysis chapters of his thesis were complete at the time he became too ill to continue. I had on file his raw sound materials and his compositions. As he had become increasingly ill all that remained to be written was the introduction and a brief conclusion. Our last conversation was about how he would frame his study for this final section. The quality and rigour of his work was always worthy of a doctoral award. Personally, I very much admired Daniel's dogged determination to complete his work in the face of increasing illness. I enjoyed our conversations that when they not about his research were far ranging and enjoyable. He had a thirst for knowledge and for life and his passing leaves us with his remarkable work to remember him by.

Associate Professor Jane Southcott

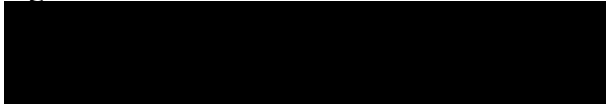
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Statement

This thesis contains no material that has been accepted for the award of any other degree or diploma in any educational institution and, to the best of the candidate's knowledge and belief, it contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

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No Ethics approval was required for this research

ABSTRACT

A PSYCHOANALYTICAL STUDY OF SELF-LEARNING

IN MUSIC COMPOSITION

This thesis approaches self-learning in music composition from a psychoanalytic (PA) perspective, specifically with reference to the work of the French theorists Julia Kristeva and Jacques Lacan. These theorists focus upon the examination of the subjective experience of self-learning. This theoretical underpinning was found to be best suited to revealing hidden aspects of subjectivity. Since the experience of self-learning addressed by the thesis is the candidate's, the methodology autoethnographical, and within this context there is an adaptation of PA theory to describe and analyze an electroacoustic composition written several years ago. The compositional aspects were self-learned. This piece has received recognition from listeners and professionals at universities, at an exhibition and on websites. In adapting French psychoanalytic theory to approaching the question of how an autodidact could have generated this piece without formal instruction, the theoretical approach selected was difficult but promised to approach the notion of subjectivity in self-learning from an original perspective. Thus, due to the unusual nature of this approach, it became necessary to progressively outline and explain the relevant aspects of the theory, having in mind an intelligent reader who is not necessarily familiar with PA theory. Throughout there is a careful balance at key points in the exposition: between PA theory and self-learning; between PA theory and music perception and practice; and between the theory and the autoethnographic context of the thesis. These linkages are original, i.e. proposed and developed by the candidate.

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A PSYCHOANALYTICAL STUDY OF SELF-LEARNING IN MUSIC

COMPOSITION

CHAPTER 1

INTRODUCTION BY DANIEL LAVAN WRITTEN 29 AUGUST 2012

This thesis approaches self-learning in music composition from a psychoanalytic (PA) perspective, specifically with reference to the work of the French theorists Julia Kristeva and Jacques Lacan. I chose these theorists because the focus of this thesis is upon examining the subjective experience of self-learning, and I have found PA theory best suited to revealing hidden aspects of subjectivity. Since the experience of self-learning addressed by the thesis is my own, the methodology used is autoethnographic, and within this context I attempt to adapt PA theory to describe and analyze an electroacoustic composition which I wrote several years ago. Although I was taught how to use the music editing software, the compositional aspects were self-learned. This piece has received recognition from listeners and professionals at universities, at an exhibition and on websites. In adapting French psychoanalytic theory to approaching the question of how I could have generated this piece without formal instruction, I have chosen a difficult theoretical approach, but one which promises to approach the notion of subjectivity in self-learning from an original perspective. Thus, due to the unusual nature of this approach, I feel it necessary to progressively outline and explain the relevant aspects of the theory, having in mind an intelligent reader (or examiner) who is not necessarily familiar with PA theory. At the same time, I am always careful to introduce linkages at key points in the exposition: between PA theory and self-learning; between PA theory

and music perception and practice; and between the theory and the autoethnographic context of the thesis. These linkages are original, i.e. proposed and developed by me.

In the Methodology Chapter, I attempt to address and resolve another challenge facing my approach, namely the use of visual imagery and symbolic representations as autoethnographic data suitable for analysis with PA theory. My previous supervisor and I agreed that multiple audio samples would be too impractical, as they could not be readily accessed without constant reference to a CD or to online links (which could change or expire). Also, I do not have a written journal of my compositional processes at the time. My data consists of a selection of computer "screen-shots" providing visual representations of the audio editing process. Initially, I justify this by reference to the autoethnographic literature, which provides precedents for visual data. In a deeper sense however, I treat the problem by discussing the significance of visualization for PA theory, and then adapting this discussion to my own thesis question. That is a delicate task which I introduce and explain at several key points within the Theory chapter, and then treat more extensively within the Methodology chapter. The conclusions at the end of the Methodology chapter then lead directly into the Data Presentation and Analysis chapter that follows the discussion of Methodology. Hence, the thesis needs to be read as an evolving argument, with extensive discussion of music and self-learning brought in at key points. The preparatory discussion is designed to be complete and comprehensive at the point at which the reader arrives at the Data Presentation and Analysis chapter. Thus, I did not feel it necessary to introduce notions of music and learning at every other page in the Theory chapter, as the flow of exposition would then be interrupted and destroyed.

Instead, I decided that so long as music and learning are thoroughly treated during the course of the exposition, this would provide sufficient and comprehensive linkages between PA theory and the specific focus of the thesis. In this decision, I was guided by the examples of other PhD theses studying music or learning from a psychoanalytic perspective. Furthermore, I will also write an extensive introduction that will set the scene for the reader and explain how the thesis will evolve in subsequent chapters, and why. Finally, a note on the scientific examples elaborated in the Methodology section. There are two reasons for their inclusion. The first is that they serve as examples and explanations of symbolic visual representations in general, treated from a psychoanalytic perspective. Their specific scientific aspect is meant as a precursor to the (later) use of acoustic waveforms as autoethnographic data. In explaining how scientific representations are perceived and understood from the viewpoint of PA Theory, my intention is to set the scene for the subsequent use of acoustic waveforms – i.e. scientific symbolic representations – from the same theoretical perspective. The second reason for the extended treatment of scientific imagery in Methodology chapter is that a central autoethnographic theme to my thesis is my transition from scientific practice (I have an MSc in Physics) into art and music. There is a constant tension and interaction between science and art which has characterized my life, and which will be addressed extensively in this thesis, particularly in the Introduction and then later, in the Discussion and Conclusions chapter. Hence, although the scientific imagery in Methodology could perhaps be treated more briefly, I felt the need to elaborate upon its usage and meaning for the intelligent non-scientific reader/examiner, in particular with regard to the learning of visual symbolic perception and performing functional symbolic operations; and then

how and why these differ so radically from artistic and musical practice. The later Discussion and Conclusions chapter will then draw upon this exposition of scientific imagery, and compare its normative social and cultural usage with the psychoanalytic approach used to analyze the visual data in the previous Analysis chapter. This will then refer to, and tie in, with an autoethnographic discussion of my double experience as both a scientific and a musical practitioner.

INTRODUCTION BY ASSOCIATE PROFESSOR JANE SOUTHCOTT 29
AUGUST 2014

In the two years since Daniel wrote this, he has continued to work assiduously as his health has permitted. Daniel is now terminally ill and I have constructed his thesis for examination. Daniel is a remarkable man. He is a physicist but has an abiding passion for music. He has become a good pianist and he is also a composer of electro acoustic music. As a composer, Daniel is an autodidact. He uses natural sounds, such as astronomical recordings of radio signals from space as his raw material. He fashions these into intricate and engaging electronic compositions. It is the processes of his own composition that he subjects to rigorous psychoanalytical analysis and that is the research for his thesis. All the chapters of his thesis included here were complete at the time Daniel had to cease writing. I have prepared a CD of his raw sound materials and his compositions to accompany his dissertation. Any errors in the reference list are mine as I did not have Daniel's list. I am also responsible for the compilation of the accompanying CD. As he has become increasingly ill all that remained was the introduction and a brief conclusion.

Our last conversation was about how he would frame his study for this final section. The quality and rigour of his work is (I believe) worthy of a doctoral award. Personally, I admire Daniel's dogged determination to complete his work in the face of increasing illness. I would add that as we have worked together, Daniel and I have become friends and I would very much like his doctoral journey to be successful, both for him and for his family. I wish to thank Dr Christiane Weller in the Faculty of Arts for reading Daniel's work two years ago. I would also like to thank Monash Institute of Graduate Research and the Faculty of Education for supporting the submission of Daniel's thesis.

CHAPTER 2

REVIEW OF LITERATURE

This section introduces literature used for this thesis, relating to various aspects of autoethnography, self-study in music, and adult learning. The psychoanalytic work of Jacques Lacan and Julia Kristeva will be introduced and discussed later, in the theory chapter, together with that of selected musical and electroacoustic theorists.

Autoethnography is a methodology in which an observer, conducting an ethnographic study of a culture or society, is revealed as a participant within the milieu being examined. Within traditional scientific or analytic writing, the observer is invisible and absent, as he is not considered relevant to the object or phenomenon being examined. Hence, scientific writing focuses only upon the object or phenomenon being examined, and excludes mention of the author; ethnographic writing is an example of this. By contrast, autoethnography explicitly embeds the author within an ethnographic narrative and analysis. The author may appear either as the main protagonist, or as one of many participants, or simply as an onlooker; however he will never be disinterested, invisible or irrelevant to the narrative.

The character and validity of autoethnographic methodology is discussed by Ellis (2004), Ellis and Bochner (2006, 2000, 1996), Denzin (2006) and Richardson (2000). These authors advocate a narrative and poetic approach, which is then challenged by Anderson (2006, 2006b), Atkinson (2006) and Vryan (2006), who instead argue for an empirical analysis of autoethnographic data. As this debate is critical to my own choice of

autoethnographic style, it is dealt with more extensively below. Issues of validity in qualitative and self-study research are addressed by Freeman, M., deMarrais, Preissle, Roulston and St. Pierre (2007), Lincoln (2002), Bullough and Pinnegar (2001), and Feldman (2003); these are likewise elaborated below. Validity criteria for qualitative research are again discussed later in this thesis, as I develop a case for my particular choice of visual autoethnographic methodology.

Narrative and Performative Autoethnography

Various powerful examples of *personal narrative* in autoethnography are given by Jegatheesan (2005), Skinner (2003), Ketelle (2004), Davis (2005), Sawrey (2005), and Ellis (1997). Each of these presents the rich lived experience of an individual embedded and acting within a particular social or cultural context. Jegatheesan's personal, heartfelt and detailed narrative of her experience as a doctor in India leaves a stronger and clearer impression of the poverty and caste system there than could be provided by plain qualitative research or by prosaic third-person accounts. Skinner's narrative clearly conveys the cultural distinctions and disjunctions which he experiences as a white European observer on an impoverished post-Colonial Caribbean island. For Ketelle, using fiction for autoethnography can serve two functions: firstly, "distancing the practitioner from her work in an effort to better understand it ... (allowing) freedom to explore experience and ideas", and then also presenting an evocative narrative which is "expressive rather than representational ... allowing readers to experience these worlds in emotional, even bodily ways". Davis connects his background as a Marriage and Family Therapist to his growth as a mature, feeling human being, while Sawrey describes her

intuitive and emotional associations between a pop song and her lived experiences. Ellis constructs a series of episodes about disabilities; these episodes are then embedded within a narrative of herself as a harried academic autoethnographer about to face a skeptical and hostile audience.

Conle (2000, pp. 52, 57) echoes Buchner and Ellis (2002) in explaining the importance in narrative inquiry, of the desires, intentions and actions of the protagonist. She explains that “this emphasis is in stark contrast to researchers approaching 'subjects' with instruments” and warns against “‘hardened stories', that is, narratives that become context-free, portable, and ready to be used anywhere and anytime (purely) for illustrative purposes”. Hence, this approach suggests some criteria for good autoethnography, namely that the author’s motivations and actions should be conveyed in a transparent and honest manner.

Pelias (2005, pp. 416-417) argues for the *performative* presentation of autoethnography, which can provide for an audience “the raw data of life ... (welcoming) ... the body into the mind's dwellings”. This integration of mental awareness with bodily expression is seen as more useful than formal academic work in isolation, since “building structures with the mind only is flawed architecture”, whereas “performative writing ... may help all academic houses settle into greater alignment with human experience”. In this way, performative autoethnography is able to reach beyond the bounds of the written text to incorporate physical and theatrical modes into the expression of the author’s experiences and insights.

Pelias' free and expansive approach to autoethnography is complemented by Duncan (2004), who explains some possible usages of various and disparate documentation as material for autoethnographic data. In her autoethnographic study of hypermedia design, Duncan states that "other evidence that documented the inner experience of design and development of ideas included workplace artifacts such as ... computer screen images ... storyboard sketches and graphic sketches created with pencil and paper ... (and) ... loose notes and diagrams, such as concept maps, that referred to work sequences and problem-solving strategies". Further data included "resource material related to project content such as photographs, government reports, video tapes, audiotapes, reference books ... and software manuals". Such an approach prefigures my own later use of imagery and sound as data, and helps establish my own methodology as existing within the domain of accepted autoethnographic practice and qualitative research.

Analytic Autoethnography

Guidelines for a different kind of autoethnography are offered by Anderson (2006, pp. 378-388), who proposes analytic autoethnography as a practice defined by these features: (1) The researcher is a "complete member of the social world under study ... a legitimate participant in the group's conversations (and activities)"; (2) "Analytic reflexivity", meaning these conversations must be deep and reciprocal; (3) the researcher's presence in the study to be used not to evoke sympathetic response and social action but rather "to develop ... theoretical understandings of social processes"; (4) Significant dialogue with external actors to ensure a dual grounding in subjective experience and social realism;

and (5) “Commitment to an analytic agenda” enabling further theoretical conclusions and even generalizations.

However, these criteria have been criticized by the evocative-narrative school as redundant and unnecessary: Ellis and Bochner (2006) and Denzin (2006) point to the richness of debate among autoethnographers who, within their own practice paradigm, have already grappled with the issues and standards raised by Anderson. Ellis and Bochner also raise concerns with Anderson's approach, regarding its “objective realism” as being at odds with autoethnographic practice. Anderson's response (2006b, p. 456) then clarifies his definition: “there is indeed a wide range of ways in which self-study may yield valuable analytic insights. But I would not consider all of them to be ethnographic ... that is why I do not include such analytic self-studies as ... David Sudnow's (1978) phenomenological description of learning improvisational piano jazz as examples of analytic autoethnography.” It could then appear that the nature of my study is not ethnographic according to Anderson's understanding of the term, inasmuch as the intended focus is on my own learning processes rather than for instance, the interaction between active members of an electronic composition group. However, Vryan (2006, p. 408) proposes a more free and loose definition of analytic autoethnography in which “the key difference between analytical and ... evocative forms of autoethnography ... is the goal of explicit analysis”, while Atkinson (2006, p. 403) argues in favour of Anderson's criteria as a “rescue” from “any implicit assumption that self-transformation is the main outcome of such research processes”. These qualifications and expansions of Anderson's definition help to inform my own choice of methodology, interpretation, and

presentation.

At face value my research is inwardly focussed, i.e. with the intention of understanding of my own learning processes. However, the basis of my research remains analytic, as it attempts to apply psychoanalytic theory to the examination of adult self-learning practices. It is likely that any new knowledge generated by this means will not be empirical, i.e. reproducible under testable conditions, or open to generalization in the sense preferred by Anderson. Nonetheless, as a former participant of the electroacoustic community initiating a theoretical study, I believe that I can use his analytic criteria, providing that his focus on group dynamics is adapted to the reality and methods of self-study research. This adaptation would involve adjusting Anderson's focus on group activity to allow for the lone researcher studying his earlier activities within an online electroacoustic culture. Creating a workable methodology through such an adaptation then necessitates the establishing of standards for quality and validity in self-study research.

Validity Guidelines in Qualitative and Self-Study Research

Issues of validity in general qualitative research are addressed by Freeman, de Marrais, Preissle, Roulston, and St. Pierre (2007, p. 28), who value “thorough description of design and methods ... in ways that audiences find recognizable and comprehensible”. Lincoln (2002, p. 12) proposes five criteria, some of which intersect with Anderson's, such as the immersion of the researcher within the studied environment, the public accessibility of recorded data, and the “consideration of inferences and interpretations, as

well as concrete phenomena” during both data collection and in further analysis.

Lincoln specifically proposes that “(a) “researchers should have been deeply involved and closely connected to the scene”; (b) “researchers should achieve enough distance from the phenomenon to permit recording action and interpretations relatively free of the researcher’s own stake”; (c) “claims should be based on an adequate selection of the total corpus of data”; (d) “data should come, at least partly, from publicly accessible observation records”; and (e) “data and analysis should include consideration of inferences and interpretations, as well as concrete phenomena”.

These criteria help to establish my own research methodology, as I have been “deeply involved and closely connected” to the cultural and compositional scene; and, I now have “enough distance from” that activity to “permit ...interpretations relatively free” of musical self-interest. Furthermore, my visual and audio data samples are many and varied and are “based on an adequate selection of the total ... data”; the data are indeed “publicly accessible” (a CD of the audio samples will accompany this PhD thesis). Furthermore, my “data and analysis (will) include consideration of inferences and interpretations, as well as concrete phenomena”, specifically with regard to the Kristevan analysis which will accompany the presentation of the visual and acoustic data, and which (as was argued above) combines with it to form the autoethnographic study in its totality.

With regard to self-study research, Bullough and Pinnegar (2001) propose guidelines

outlining the requirements for “scholarly integrity” in narrative autoethnographic practice. Some of these requirements were previously discussed and adopted by narrative autoethnography: for instance the emphasis on verisimilitude, drama and character development, context and setting, fresh and heterogeneous perspectives, and readability. The specific contribution of Bullough and Pinnegar is to situate narrative autoethnography in the domain of the self-educator: “autobiographical self-studies in teacher education are about the problems and issues that make someone an educator” (2001, p. 17). Echoing Anderson's criteria for analytic autoethnography, they advocate “an ineluctable obligation to seek to improve the learning situation not only for the self but for the other” and warn against “egoistic” exercises in “self-discovery or self-orientation”. Their fifth guideline, namely that “authentic voice is a necessary but not sufficient condition for the scholarly standing of a biographical self-study”, is congruent with Anderson's own critique of the evocative-narrative tradition. Thus, although Bullough and Pinnegar appear to practice within the personal narrative genre, their guidelines nonetheless anticipate similar ones in Anderson (2006) and as such add to a useful methodological framework for my research.

The latter part of the self-study guidelines address the use of correspondence and edited conversation as data, and are therefore particularly relevant to the practice of complete member research and analytic autoethnography. Correspondence should always be performed naturally, avoiding a reflexive self-consciousness which would mitigate against honesty and openness. The gathered data must be edited in a way that “(does) not present an interpretation that contradicts or would be contradicted by a complete reading

of the data” (Bullough & Pinnegar, 2001, p. 19). Reflexive and introspective self-consciousness should be reserved for later interpretation, which “should not only reveal but also interrogate the relationships, contradictions and limits of the views presented” (Bullough & Pinnegar, p. 20). These ideas are then developed by Feldman (2003, p. 27) who advocates triangulation, or the correlation and integration of differing perspectives, as a benchmark for validity and quality in self-study research: “when we engage in reflective processes that focus on ourselves ... we cannot be sure of the accuracy of what we see”. A “clear and detailed description” of data collection and representation is advocated, along with explicit and warranted definitions of acceptable data.

The various similarities and differences between self-study research and autoethnography, are analyzed by Hamilton, Smith and Worthington (2008) who explain that “...the commitment to self as an element of the work exists in ...(both) ... approaches ... in auto-ethnography, it is the cultural I shaped by cultural contexts and complexities that takes the foreground ... (whereas) ... self-study researchers focus on practice and improvement of practice, closely attending to self and others in and through their practice ... When a self-study involves social or cultural issues, it could fit the definition of auto-ethnography”. Hence, the two genres have much in common and can be seen to converge within an explanation and elaboration of the social context in which they occur.

Learning: Identity and Motivation

MacKeracher (2004) provides a detailed categorization of different learning processes

relevant to autoethnographic analysis, commencing with the *Natural*, in which raw sensory data and life experience is given order, structure, definition and meaning. This process requires “sufficient time and freedom from threat” for order and meaning to emerge naturally. She then describes the *Dialectical*, in which received meaning and personal experiential interpretation are integrated into a constructive whole. The social and cultural dimensions interact with the individual, private dimension through a psychological dynamic which then produces new learning. She also presents the *Cyclical* process, during which previous results and meaning-constructs may be modified by later learning and experiences; the *Preferential*, in terms of planning, perceiving, acting and reflecting; the *Non-normative*, where the individual learns in her own way; the *Biological*, where the human mind and body is assumed to be sufficiently plastic as to allow for the long-term modifying of learning strategies and outcomes according to life experience; the *Contextual* or *Situated*, relying upon interactions with people and groups to facilitate and encourage learning activities; and the *Emotional*, in which emotional arousal motivates behaviour to generate patterns of organization with the intention of accomplishing goals. The proviso given with this last category is that “if arousal continues beyond the individual's maximum ability to respond, motivation decreases rapidly” with possible consequences to physical well-being. MacKeracher describes the *Self-Reflective* as involving critical thought, self-reflection and interaction with peers, with the aim of becoming aware of hidden assumptions and beliefs impeding learning processes, and the *Philosophical*, where critical thought is broadened to encompass reflection upon “the principles, values, and attitudes that structure our philosophy and guide our behaviours”. This process scrutinizes personal experience; the instructor as

authority figure; and the ultimate purpose of the specific learning project.

By contrast, Burns (2002) takes a psychological approach that links the ability of the individual to achieve self-actualization to *self-concept*, which has three aspects: current or contemporary self-image, ideal self-image, and the self as seen through others. These are reinforced through personal expectations – Burns believes learners with low self-esteem tend to “validate” their negative self-concept through failure and abandonment of the learning project. He argues for “critical education” as a preferred mode of learning, where “learners ... participate through their work in the transformation of society into a more fair and humane social arrangement” by rejecting traditional “widespread acceptance and perpetuation of the prevailing traditional behaviours and attitudes”. He further identifies Self-directed Learning (SDL) as a significant focus of contemporary education (Burns, 2002, p. 252), and quotes research which “reveals that most learners do prefer this mode”. SDL is seen as a vehicle for humanist ideas of self-actualization and control over personal destiny: “Learner autonomy appeals to fundamental rights - a person should be able to study what and how they please if they wish to advance themselves.” This in turn assists motivation and the development of a sense of identity.

Smith (2005, p. 37) distinguishes “two types of student goals: those based on personal improvement (variously called task, process, learning, or mastery goals), and those based on social comparisons with others (ego, ability, outcome, or performance goals)”. The first category is linked to intrinsic motivation and self-satisfaction, whereas the latter, ego-related goals are associated with extrinsic motivators such as reward, recognition and

professional reimbursement. Smith views intrinsic motivators as more beneficial to music students: “task goals have been associated with positive affect, intrinsic motivation, use of deep processing strategies, and challenge seeking. Ego goals tend to be associated with negative affect (especially after failure), anxiety, and use of surface learning strategies”. The psychology of “task orientation, with its emphasis on high interest, challenge seeking, and the desire to learn”, is crucial here in overcoming any self-defeating “fixed entity belief” in an innate lack of musical ability and can provide sufficient internal or intrinsic motivation even in the face of negative external demotivating factors (Smith, 2005, p. 48).

Atlas, Taggart and Goodell (2004, p. 81) discuss extrinsic factors affecting motivation, noting that “musicians may be a particularly sensitive group ... as (they) become more proficient ... they appear to develop more introverted tendencies, exposing them to ... stress-related stimulation, which may compromise their capacity to perform”. High levels of anxiety and low self-esteem are not only demotivating, but can actually be debilitating to musical ability: “one study found that students' levels of social anxiety influenced how they perceived the quality of their own singing voice” (Atlas, Taggart & Goodell, 2004, p. 82). Woody (2004, p. 18) claims the importance of extrinsic factors in the development of musical ability: “Psychologists ... cast doubts as to whether an innate talent for music performance truly exists, but most agree that merely the *perception of talent* (author's emphasis) contributes to motivation”, especially from parents and teachers who “may feel a sense of obligation to nurture that gift”.

Adult Music Education

Cooper (2001, p. 166) presents the results of a study of “sample (adult) members of an alumni association of a midsize university of the Southwest (United States)” and concludes that, “the love of music itself, a sense of self-efficacy and a supportive environment are factors that lead to a lifelong involvement with music in general and piano playing in particular”. From a study of the musical background of adult music learners (in Austin, Texas), Bowles (1991, pp. 196, 202) concludes the majority of survey respondents chose a parent or guardian as “the most positive influence in developing their interest in music”, with the remainder choosing a private or institutional music teacher. Most prospective adult music students are university graduates, though not necessarily music graduates, have had at least two years of music lessons some time previously, and “are musically self-motivated in that they may have pursued music skills and knowledge without the direction of a music professional” resulting in “some degree of confidence in their own knowledge and abilities”.

Orlofsky and Smith (1997) regard adults as learners particularly suited to task-oriented and various cognitive approaches. Their “several distinctive, positive characteristics” of the adult learner are self-motivation, good concentration with long attention spans, developed physical coordination, ability to analyse instructional material, capacity for mature self-reflection, and goal-setting in the context of developing a desired identity.

Ernst (2001, p. 49) argues for the importance of personal experience in adult music education: “Adults have many years of music in their memories. That becomes a point of

reference for how music should sound. When music that they already know is included in their classes, they move ahead in leaps”. That individuality and curiosity as prerequisites for musical creativity, is emphasized by the composer R. Murray Schafer in an interview with Achilles (1992, p. 37). Schafer argues that contemporary society militates against creativity, as it “has tended to obliterate individuality” and advocates “educating ... people who make higher demands of themselves than being merely consumers of art”.

Self-Directed Learning

Gibbons and Phillips (1982) distinguish between formal schooling, which controls the educational agenda, and self-education which occurs outside educational institutions. They argue that this gives power and responsibility to the individual learner as he must learn to motivate and discipline himself by establishing content, goals, resources and performance evaluation. Whereas formal schooling is seen as content-oriented and focussed upon texts and structured programmes, the self-directed learner needs to rely upon his own activities and experience. Robotham (1995, p. 3) claims the self-learner must be able to recognize and select the learning style most suited to their situation and capacities from a range of styles: “this ability of an individual to select actively from a personal style or skills portfolio is part of what can be termed self-directed learning”. He characterizes self-directed learners as being able to identify learning needs and setting suitable goals, having the confidence, motivation and discipline to execute these, and having self-awareness of one's own learning strengths and weaknesses.

Kenny (1998, pp. 21, 23, 30) locates music practice within the domain of self-directed

learning, as external guidance is generally not available during music practice. Hence, “students must ... behave as teachers by providing their own goals, planning and evaluation ... they must think critically before, during and after each practice session to optimize their learning”. Kenny concludes that, “advanced musicians merely have more experience (practice) in using such critical-thinking strategies as selecting goals and planning and evaluating their practicing”. Pearce emphasizes motivation and accomplishment in terms of solo music practice: “For practice to be rewarding and productive, it must be effectively self-directed, and to the degree this occurs, the outcome for the student usually is both success and motivation”.

Links between self-efficacy and efficient practice are also found by Nielsen (2004, p. 419) who defines *strategy* as a “deliberate or purposeful process, originally consciously applied, but normally undergoing automation as a result of development and practice”. Nielsen notes the central importance of *effective* strategies in practice: “sustained effort may be necessary but not sufficient to make practice work”: extended practice, if not correctly designed and implemented, is in itself insufficient to achieve musical proficiency. Furthermore, awareness and reflection alone are insufficient benchmarks for objective assessment according to Daniel (2001, p. 216), who advocates “the maintenance of a self-reflective diary on aspects of teaching and learning and the option of presenting a self-assessment folio” of audio or video recordings. These facilitate learning processes through self-reflection combined with external assessment and feedback.

Zimmerman (2002, p. 65) defines self-regulation by referring to “self-generated thoughts, feelings, and behaviours that are oriented to attaining goals ... learners monitor their behaviour in terms of their goals and self-reflect on their increasing effectiveness.” In achieving these goals, it is important to choose the appropriate learning strategies, effective time management, and self-monitoring with mature self-reflection. This last phase requires self-evaluation by comparison either with previous performance, with other people's performances, or against an external, ‘absolute’ standard.

Cranton (1994, pp. 730, 740) regards self-directed learning as a process in which self-management and critical self-reflection combine to generate “transformative learning”, or “the reformulation of a meaning perspective (resulting in) a more inclusive, discriminating, and integrative understanding of one's experience”. “Critical self-reflection” is required to come to an understanding of long-term assumptions about life, society and individual capacities. This is essential to ongoing learning processes: “If the original assumption is left unchanged, learning does not take place, although critical self-reflection has taken place”. It is also essential to implement the new mental awareness: “Transformative learning is not complete without the individual acting on the revised assumptions”.

Jones (1993, pp. 159, 162) regards age as a positive factor in self-directed learning, attributing this to “the amount of personal responsibility students have exercised over their lives in general ... as worker, spouse, or parent”. Her markers for success are love of learning, initiative and responsibility, self-awareness as an effective, independent learner,

tolerance of risk and ambiguity, and a view of learning as a lifelong, beneficial process.

CHAPTER 3

PSYCHOANALYSIS, LEARNING, AND MUSIC

Introduction

In choosing a theoretical framework appropriate for an autoethnographic study of self-learning, I did not initially consider using psychoanalysis, as I had no previous background in this field. However, since a careful analysis of subjective experiences requires established and powerful analytical tools, I chose psychoanalytic theory for its potential in treating subjectivity. It is not sufficient to write about my experiences and musings; I also need tools for looking clearly at myself as a subject, from the point of view of a theory of subjectivity. Psychoanalysis, being such a theory, has an analytical and disciplined approach suitable for rigorous academic inquiry. In particular, French psychoanalytic theory appeared to be the body of work most suitable for examining subjectivity using rigorous and comprehensive literary methodologies. Jacques Lacan's linguistic interpretation and extension of Freud's work sheds light on the genesis of self-identity and the acquisition of language (Lemaire, 1970). Julia Kristeva's later adaptation of Lacanian psychoanalysis to linguistics and semiotics has produced a methodology for revealing and analyzing the buried, or hidden features of a written or inscribed composition, namely text, diagrams and images, painting, and even music (Lechte, 1991). The results of this methodology are then presented to the reader as detailed experiences, observations and final analysis. Undertaking a type of autoethnographic practice, the analyst embeds himself in the world of the composition while at the same time remaining sufficiently separate from it to allow for additional, detached analysis. Having both a

scientific and an artistic background, I believe this interaction between analytical and personal responses to the text to be adaptable to an autoethnographic examination of subjective self-study processes.

Freud and the Unconscious

Psychoanalytic theory approaches the notion of subjectivity with a view of the human being, or speaking subject, that is radically different from that presumed by the scientific perspective. Both the principles and practice of science require, and hence presume, the prior existence of an observer (for data collection) and then of a conscious thinker (for developing concepts and theories). This *a priori* presence of the conscious observer is critical to the scientific project, whose ambition is to know, describe and even manipulate external reality, i.e. a domain defined and constituted as external to, and separated from, the observer. Since the very capacity to know and describe an object must logically precede the existence of that object, the presence of the subject who is able to know and describe things – the conscious speaking subject – must be thus assumed to pre-exist the acquisition and description of knowledge about the world. The inner life of this speaking subject – its feelings, drives and lived experience – is generally not important to the scientific project, whose essential requirement for the *a priori* observer (besides the ability to observe and think) is its separateness from an postulated external reality. The subjective experience of this observer is irrelevant to the requirement; indeed, the very notion of the observer (as a data collector and processor) could in principle be reduced from a human subject to a single point, providing that point is situated separately from the outside world.

Hence, the inner lived experience of a scientific observer is not transparent to insight or understanding. For scientific purposes, only the pre-existing possibility of an external observer is significant; there is no intrinsic need to even consider subjective experience. From this perspective then, subjective experience is unnecessary, and the *a priori* observer could therefore be in principle reduced to a single dot removed from and external to a phenomenon being examined. Such absence of transparency, in which the external scientific observer seems opaque to and unaffected by self-reflection, presents the observer as a unified, unchanging (and always truthful) character. Nonetheless, this image is utterly at odds with the actual human experience of the self as constituted of (and by) fragmented and ever-changing multiplicities, which are elusive and duplicitous towards attempts to define and describe them. Modern psychology does attempt to approach and analyze aspects of subjectivity, but it does so by using scientific methodology. However, subjective aspects of lived experience cannot be discussed from the scientific perspective without first defining them as external objects or phenomena. The actual genesis and nature of subjective life – how it actually feels to be human – cannot be analyzed and discussed using the scientific method without recourse to this logical paradox. Before Freud, the only paths of approach were through literature, drama, poetry, art and music.

With psychoanalysis, Freud radically adjusts the Cartesian concept of the speaking subject. Above, I explained the scientific observer as (in principle) reducible to a point, which must be postulated as being external to the world, and having existed before it;

indeed, transcending reality even prior to the notion of time itself. This transcendent perspective can also be framed and discussed in terms of the *centrality* of the speaking subject, i.e. referring to its critical importance within scientific ontology. This does not at all imply that the observer is central to the world, or centered within the world, which would contradict the notion of the speaking subject observing a gigantic external universe. The term *centrality* is here used instead to designate the position of the scientific observer as the most important *a priori* factor for generating knowledge and scientific understanding. It is this centrality – along with its opaque and unified point of reference, disallowing insight into subjective experience – which psychoanalysis tries to attack, destabilize and unravel. It does this by postulating the *unconscious* within human psychology.

As Grosz (1990) explains, Freud postulates the unconscious not as a counterpart to consciousness, but instead as being radically different:

the unconscious is not a submerged, second order consciousness ... (rather) there is a rift, an un-mastered gap or discontinuity between consciousness and the unconscious ... the unconscious is not a submerged consciousness, a rational system which is somehow invisible; it is an entirely *other* form of reason, logic and pleasure ... (undermining) the subject's conscious aspirations by its symptomatic intrusions in behaviour which ... may be even unknown to consciousness. (Grosz, p.10, her italics)

This implies that the conscious subject has no access to its own unconscious: “unconscious motives (are) not accessible to the subject's waking consciousness and

moral sensibility” (Grosz, p.11) and this inherent barrier (which Lacan later designates as a *bar*) thus “challenges (the) conflation of consciousness with subjectivity” (Grosz, p. 2) that is intrinsic to the notion of the scientific observer. In contradiction to the Cartesian notion of *cogito ergo sum* (I think therefore I am), “Freud posits a subject that is radically *incapable* of knowing itself. The subject, understood as consciousness, cannot (know) the subject, understood as the creator of symptoms, dreams and distorted messages” (Grosz, p. 13) implying an experience that cannot be known by the conscious subject, and of “forms of representation which are themselves unrepresentable in consciousness” (Grosz, p. 12). It is these ‘unrepresentable representations’ – Grosz’s “symptoms, dreams and distorted messages” – which psychoanalysis attempts to describe and unravel; however, their intrinsic inaccessibility to the conscious mind means that the psychoanalyst cannot approach them directly, but rather can only attempt to develop a conscious interpretation of them. Freudian psychoanalytic therapy uses a technique of (verbal) free association to generate, or invoke, “a tightly structured pattern ... of images, wishes, thoughts, memories, of which the analysand has no conscious awareness” (Grosz, p. 12). Thus, in Freudian psychoanalysis the unconscious does have a structure, whose contents form a pattern which can be discerned by the analyst, albeit with the caveat that the analyst is uncovering a pattern, or an image, and not the actual unconscious itself, which remains inaccessible to conscious knowledge.

In his later work, Freud regards the contents of the unconscious “in terms of a series or chain of ‘ideational representatives’ ... of sexual drives”, i.e. “a succession of inscriptions and signs” (Grosz, 1990, p. 82). These ‘representative inscriptions’ do not directly

represent the drives themselves, but instead enable the drives to be positioned within the unconscious: “the energetic component of the drive (together with) its ideational representative become ‘fixed’ together during the act of primal repression which constitutes the unconscious as a system distinct from consciousness, separated by a barrier of censorship” (Grosz, p. 82). In this exposition, *primal repression* specifically refers to the repression of “the forbidden desire for the mother, which occurs during a very early stage in human development during which sensations and memories are associated with drives and are then “frozen – preserved and fixated – as a memory trace, inscribed in/as the (timeless) unconscious” (Grosz, p. 82). Grosz’s double usage (‘in’ and ‘as’) indicates that the frozen memory inscriptions are ‘inscribed’ upon the unconscious, and in doing so, constitute it. In this ‘primal freezing process’, most of the actual energy of a repressed drive is separated from the memory trace, “leaving a smaller quota associated with an idea ... (that) continues to strive for conscious expression in the form of a *wish*” (Grosz, p. 83), i.e. a striving towards discharge of the residual drive energy, which then appears as a ‘wish’ to the conscious subject. Grosz (p. 83) explains the importance of this process to consciousness: “the drive is thus bound up with representation and signification as soon as it is capable of *psychical* registration. Indeed this is its condition of psychical existence. The drive can be lived or experienced only in so far as it acquires a significance”. Hence, the unconscious, the conscious, and the drives are constituted through the process of primal repression. On the one hand this process of repression inscribes (or ‘freezes’) drive energy into the unconscious (thus constituting it); on the other hand, the remaining drive energy becomes associated with ideas, wishes, representations and meanings which can be understood and expressed by the conscious

subject.

The importance of the visual domain in psychoanalytic theory is apparent from the emphasis upon dream imagery as providing ‘the royal road to the unconscious’. Freud's explanation is that in sleep, consciousness is relaxed, and the ‘wish’ (which is associated with residual drive energy) cannot reach conscious expression or ‘motility’ (movement). As a result, it retreats ‘regressively’ away from conscious perception and instead moves towards sensory and kinesthetic domains, “reactivat(ing) a perceptual image (a memory) in hallucinatory fashion” (Grosz, 1990, p. 86). Thus, that which could not be expressed consciously instead appears as a visual representation in a dream. The dream is therefore a type of disguise, in which the wish is allowed a certain limited (or compromised) access to the conscious. The actual form, or components, of the disguise are given by Freud (1900) as ‘dream-displacement’ and ‘dream-condensation’. *Condensation* refers to “the compression of two or more ideas ... (forming) a composite ... image” (Grosz, p. 87) in which certain features of the combined ideas are highlighted and combined, while others are ignored and excluded. Through this edited combination of ideas, “a single image in a dream is able to represent many different wishes ... through compression of common features and elimination of (relevant) differences” (Grosz, p. 87). By this means, various individual wishes may be represented by, or disguised as, a composite image.

Another form of disguise in dreams is known as *displacement*, in which an unconscious wish (along with its associated residual drive energy) – being unable to reach conscious ‘motility’ and expression – is instead represented by an unrelated image: an “indifferent

term ... act(ing) as its delegate, thus disguising it” (Grosz, 1990, p. 87). The ‘indifferent’ image, having no particular significance or meaning, is then “able to represent the more significant one without the repressed features of the significant idea breaching the barriers of censorship” (Grosz, p. 87). Thus, dream imagery can present “a bland or confusing appearance which protects unconscious wish(es) from detection” (Grosz, p. 89). For Freud, dreams are a disguise, or a distortion of, unconscious wishes: “condensation ensures that dream images are overdetermined” (through a single dream image combining various ideas) whereas “displacement ensures that apparently ... insignificant material can represent highly significant unconscious elements” (Grosz, p. 89).

The psychoanalytic interpretation of dreams then follows, or attempts to unravel, these condensations and displacements, through the process of free verbal association that constitutes a core methodology of Freudian and Lacanian psychoanalysis. Within this doctoral thesis, verbal free association as psychoanalytic methodology is adapted to the analysis of aural and visual impressions of electroacoustic waveforms constituting the data for the thesis. In psychoanalytic terms, these waveforms can be approached as if the elements or aspects of a dream. In this adaptation of dream account to audio-visual experience, the visible waveforms, and the constituent sounds themselves, are taken to signify the condensations and displacements representing and disguising the drive energies of the music and of the original composition process. It is important to realize that the dream itself, like the unconscious, is always (radically) barred from conscious perception. Instead, “the dream report, rather than the dream itself, is the object of ... interpretation” (Grosz, 1990, p. 90). Since conscious interpretation and unconscious wish

are intrinsically disconnected, psychoanalytic interpretation cannot reveal the form, structure or meaning of the wish itself. Rather, analysis highlights “chains of associations ... linkage between elements” (Grosz, p. 91) and attempts to understand and ascribe meaning to these associations and to the context in which they originated.

Lacanian Psychoanalytic Theory

Thus, the Freudian approach towards psychoanalytic therapy is to attempt to develop an interpretation of a dream as verbally recounted by an analysand. These verbal accounts are Freud’s ‘royal road to the unconscious’, showing clues, indications or traces of drives which are otherwise completely hidden from conscious perception. The Lacanian approach is to combine Freud's conceptions of drives and the structured unconscious with semiotics, or the theory of symbols and language. Lacan’s focus is on the connection between language and symbols, and the Freudian topography, or map, of the unconscious. Lacan locates the genesis of both the unconscious and the conscious in the archaic discovery of an external reality during infancy, and then describes the development of the speaking subject through the interplay of the Freudian psyche with society, symbols, signs and linguistics, i.e. with semiotics.

Semiotics within Lacanian theory is based upon the work of Ferdinand Saussure, where a sign is defined as being “composed of two components ... the signifier and the signified. The signifier is the material (phonic, graphic) component and the signified is the conceptual (meaningful) component” (Grosz, 1990, p. 93). However, the ‘meaningful’ aspect attributed here to the *signified* does not exist prior to the constitution of the sign,

i.e. “the sign is not an attachment of a label or a name to a pre-given concept. Rather, the sign is active in constituting its ingredients. Neither the signifier nor the signified pre-exist their relations to the sign” (Grosz, p. 93). In Saussurian semiotics, the sign is not constituted by associating a sound to a concept, but instead is generated by “the coupling of a difference in/as the signifier with a difference in/as the signified ... neither the signifier nor the signified have any positive identity. Each can only be identified in terms of what it is *not*. The signifier is that element of the sign that is not the signified; each sign has meaning and value only in relation to other signs similar to it, which it is *not*” (Grosz, p. 93), for example in that “tree” is not defined pointing to an object of a certain shape and colour, but instead (within language) as a linguistic identity distinct from 'flower', 'bush', or 'shrub': “*Its mode of difference within similar i.e. substitutable terms is what gives it its specific value*” (Grosz, p. 93, her italics).

For Lacan however, the signifier is more than the material sound of a word. Lacan’s conception of the signifier extends Saussure’s beyond that of a phonic or graphic component. In Lacanian theory, the signifier is instead constituted by a 'sound-impression': specifically the sound as it impinges upon the human sensory domain. This alternative, revised view of Saussurian Semiotics, in which the signifier is now discussed in terms of sensory affect rather than external, physical and separate form, then enables Lacan to adapt Semiotics into an understanding of the Freudian unconscious, in which psychic activity logically precedes the conscious perception and description of external reality. In the Freudian interpretation of dreams, the dream material is more significant to the analyst than the actual meaning of the unconscious wish, which is inaccessible to the

analyst and indeed indescribable by means of language. Following the Freudian focus upon the unconscious, Lacan regards the material signifier, i.e. its very materiality as manifested within the human sensory domain, as holding particular importance for understanding the structure of the unconscious. The signified, which for Saussure relates to concepts and meaning that are socially prescribed, is redefined by Lacan as being “simply another signifier occupying a different position ... within signification” (Grosz, 1990, p. 94), i.e. within the process of signification generated by the Freudian unconscious. In Lacanian psychoanalytic theory, both signifier and signified – indeed the sign itself – are internal to the subject. In contrast to Saussurian Semiotics, they do not designate external materiality, in which the signifier would appear as an independent acoustic sound, and the signified as an externally conceivable meaning. The Lacanian subject, as with the Freudian subject, does not pre-exist separately and prior to meaning and to the process of signification; instead, the primal repression of drives generates the unconscious together with the conscious, which then generate conscious meaning (concepts and language) and deception (dreams). Hence, Lacan’s focus on the sign as internal to these psychic processes designates both signifier and signified as components of the unconscious, in which the genesis of subjectivity is located. The signified is now another signifier, inasmuch as it may serve as the signifier for yet other signifiers; it no longer denotes a different or external order of reality, but instead is subsumed within psychoanalysis. Lacan locates both signifiers and signifieds within the unconscious, and distinguishes between them by use of a bar that indicates their radical and intrinsic separation from one another. This bar corresponds to “a barrier, a censorship which cannot be traversed ... the (Lacanian) unconscious consists in signifiers which have fallen

below the barrier, i.e., submitted to a repression, preventing them from traversing the bar and gaining access to consciousness” (Grosz, p. 96). In this model, signifiers can only be understood “by reference to another signification” (Lacan, 2006, p. 415), i.e. only in relation to one another by virtue of difference: “each element assumes its precise function by being different from the others” (Grosz, p. 96). The Lacanian unconscious is therefore comprised of chains of signifiers that are unrelated to one another through conscious or external meaning. A chain of signifiers “incessantly slides over (a) chain of signifieds” in such a way that “there is a continuous evacuation of meaning as soon as the signifier moves out its concrete relations” (Grosz, p. 95), i.e. from a particular point of signification within the signifying chain. There is thus an “absence of a fixed anchoring point ... of a solid core of meaning for any term” (Grosz, p. 95) that “is only momentarily arrested in specific contexts” such as in a dream. Hence, “the subject cannot be considered the agent of speech; it is through the ... unconscious ... that language speaks the subject. The subject is the effect of discourse, no longer its cause” (Grosz, pp. 97-8). Instead of relying upon the correlation of words and sounds to particular fixed, pre-existing and socially prescribed meanings – “a signifier tied firmly to a given signified” – signifiers in the Lacanian approach are “founded on *pure difference* ... thus already requir(ing) another term to be understood ... hence all terms can only be understood to language as a whole” (Grosz, p. 95). Dreams, symptoms and other unconscious manifestations are then “seen as ‘stuck’ or ‘congealed’ signs, where the signifier is not free to form other connections and meanings, but is tied to a particular significance” (Grosz, p. 96). Examples of these ‘congealed signs’ are given throughout this thesis: firstly in the Methodology chapter (as scientific visualizations), and then in the data

analysis chapter (as visual waveforms and electroacoustic sounds).

Following and adapting Freudian dream terminology to his linguistic model of the unconscious, Lacan replaces Freud's notions of displacement and condensation with *metonymy* and *metaphor*. Dream-displacement is now constituted within the Lacanian unconscious as metonym, in that a word (or term) may replace and disguise another, without having any logical relation or connection with this substitute. Likewise, condensation now becomes “the metaphoric process, the submersion of one term beneath another, provid(ing) the general model for the unconscious symptom: the term having 'fallen below the bar' becomes repressed, and the signifier which replaces it becomes its symptom” (Grosz, 1990, p.100). In the case of metonymy, free association is allowed, so that “the repressed term always remains in associative relations to the rest of the subject's language, explaining how the unconscious is able to intervene or speak through consciousness at symptomatic moments” (Grosz, p. 100). It should be emphasized again here, that psychoanalysis cannot directly access the unconscious: to reiterate Grosz, “the dream report, rather than the dream itself, is the object of psychoanalytic interpretation” (Grosz, p. 90). The report, or narrative of the dream thus appears as a linguistic phenomenon distinctly separate from the actual dream, whose materiality and existence remains indescribable and unknowable. Psychoanalysis therefore “has nothing but the analysand's speech as its object, nothing but literary/linguistic procedures of interpretation, and no diagnostic or prognostic tools other than language”. With this in mind, Lacan then rigorously develops Freud's linguistic model of the unconscious, whose topography of the unconscious is then declared by Lacan as being ‘structured like a

language'. Freud's notions of condensation and displacement are now replaced by metaphor and metonymy, and in the Lacanian formulation of psychoanalysis, the unconscious comprises signifiers that occur in "indeterminate, open-ended contexts with several meanings at once". These signifiers are then linked and substituted in such a way as to reach a position in conscious discourse "by means of the chains of association (given by) metaphor and metonymy". From this perspective – by postulating language as directly indicative of the structure of the unconscious – Lacanian theory attempts to explain both the genesis of language for the conscious speaking subject, and its location and function within the contents of the Freudian unconscious.

Lacan and the Visual

Within Lacanian theory, language has a function that is closely related to the genesis of both the unconscious and of the conscious subject. Lacan locates this genesis in an early phase of childhood that he names the *Mirror Stage*. Grosz (1990) explains Lacan's notion of the Mirror Stage as the induction of the infant into the realm of perception and identity, which is known as the *Imaginary Register*. Before experiencing the Mirror Stage, the infant is regarded as not being aware of itself as a separate identity, but rather as bound to, and encompassed by, the mother. It can only experience its body as fragmented and uncoordinated – "a series of parts, zones, organs, sensations, needs, and impulses" (Grosz, p. 33) and as such has no sense of itself as an integrated identity, which would imply a sense of unity, selfhood, i.e. a distinct, individual and totalized identity. As the idea of a unity implies boundaries between the identity and an external world, such notions and experiences are thus unknown to the infant, which "cannot

distinguish between itself and environment” (Grosz, p. 34). The infant begins to understand the environment as separate and external – indeed as existing at all – only when it experiences lack, i.e. lack of the fulfillment of bodily needs, and especially lack in the sense of experiencing the absence of the mother. During such an experience the infant begins to recognize the mother, and by extension the external environment generally, as an entity separate to itself, from which lack can be treated and fulfilled. For Lacan, this is a critical recognition that “marks ... the child’s separation of inside and outside, subject and object, self and other” (Grosz, p. 35). During this process, subjectivity moves from the fragmented feelings and impulses of ‘ubiquitous’ subjective experience towards a new perception “now constituted within ... the order of images, representations, doubles, and others” (Grosz, p. 35).

An individual identity, generated through awareness of separation and lack, then matures into a sense of self as seen by others, named *autoscopy* by Grosz (1990, p. 37). This ‘external perception of the self’ is not a projection of discrete, separated internal experiences and sensations onto an external imago – “(it) is not built up by a point-for-point mapping of felt experiences onto the visual image” but is rather “a wholesale adoption of the image in its totality” (Grosz, p. 37). During the mirror stage, this external visual self-perception, or *extroception*, is identified by the child with its internal experience of self (*introception*) but Grosz describes the connection as being at best provisional: “on the global level, the coincidence of the image with the experience of self ... is not guaranteed ... images (cannot be) directly projected from bodily zones” (Grosz, p. 37) into conscious representation. Instead, the totalized external image is assumed and

adopted as both visual and subjective identity. The child “gradually understands ... (its mirror) reflection is an image of itself” (Grosz, p. 37), and this experience then becomes the basis for the formation of a “body-image or imaginary anatomy, which in turn helps distinguish the subject from its world” (Grosz, p. 37). The body simultaneously “becomes the organizing site of perspective and ... an object available to others from their perspective – in other words, both a subject and an object” (Grosz, p. 38).

However, since introceptive experience cannot be directly and truthfully projected onto external visual perception, there is an intrinsic difference – a mismatch or, to use the visual psychoanalytic terminology of Freud and Lacan, a *dissymmetry* – between the two, that cannot be bridged or rectified by identifying with the external, reflected image. Internal bodily experiences are varied, fragmented, dynamic and invisible; the image, on the other hand, is a gestalt, which visually projects totality and static unity. When the child, still physically uncoordinated and fragmented, identifies with this unified image, it becomes “enmeshed in a system of confused recognition/misrecognition” (Grosz, 1990, p. 39) that excludes the possibility of accurate self-representation, since the visual identification in principle cannot substitute for, or be truthfully mapped onto, the multiplicity of the child’s feelings, thoughts and impulses. Hence, the child has now become “the subject of error and falsehood, unable to produce knowledge, a subject of ideology” and is thus susceptible to “the processes of social inculcation and positioning” (Grosz, p. 40). Visually, the reflected image is an accurate point-to-point external representation of the child's body; however, the intrinsic mismatch between extroception and introception ensures that “the subject's relation to the image is also alienated ... the

child identifies with an image of itself that is always also the image of another” (Grosz, 1990, p. 40), i.e. the image of itself as seen by an external observer, whether this be mirror, parent, or stranger. Thus, the self-image of the child is not merely untruthfully related to its own lived experience; it (the self-image) does even belong to the child, being instead constituted through the gaze of an external individual. The child and his self-image are thus always ‘alienated’ from one another, and this alienation, being based upon the generation of self-image through an external gaze, then allows for the construction of a socially-determined identity functioning within the realm of the Symbolic: identities, unities, boundaries, language, thought, and concepts. The Lacanian subject, generated and identified as such through an initial misrecognition of its totalized, specular reflected image, thus emerges as a constituted void or *lack*, in need of social and interpersonal inscription, and hence open to the inscription of social, cultural and linguistic norms.

Hence, the Imaginary Phase designates the genesis of a coherent, unified (yet deceptive) physical and ego identity that is generated in the mirror stage. (From the perspective of psychoanalytic theory, this ‘false identity’ also relates to Freud’s narcissistic concept of the ego, in which libidinal (or psychic) energy is outwardly projected from the (subjectively) fragmented subject and then *introjected* or returned back into the subject in an idealized, coherent and unified form). Within the Lacanian Imaginary, there is thus a dyadic relationship between an individual and his perceived world; this is based on the primary encounter with the mother, i.e. the mother-child dyad that predates and initially excludes the father, together with all other external impressions. The exclusive, dyadic

relationship with the mother directly follows from the infant's earliest existence within the *Real* – the Lacanian domain indefinable by language, concept, structure, or even perception – in which the infant experiences only its needs and incoherent, disjointed reflexes and impulses. To the infant in its earliest phase, the mother is not yet a separate individual: for it to perceive the mother as separate, and hence enter into a dyadic relationship with her, it must first progress from the Real and become inaugurated into the Imaginary realm. This occurs during the Mirror stage, in which the child perceives a specular and unified image of itself that is then mistaken for a truthful representation of its own being. This unified image is *false* insofar as the child remains disunited and ‘dis-integrated’ within the realm of lived experience; hence the reflected image, though alluring, is deceptive inasmuch as it promises the sensation of unity and cohesion. The child jubilantly discovers a unified image that visually corresponds to its own disunited body; although the bodily impulses and experiences are not integrated or unified into a whole, the image is, and furthermore appears to correspond with (or reflect) the child's appearance and movements. Hence, the image discovered by the child during the mirror stage serves as an ‘ego-ideal’ for the infant. Grosz notes (1990, pp. 44-6) that the *body-ideal* arises from this experience, and it is therefore follows that kinesthetic ability (the intuitive locating and awareness of the body's muscular structure from an ‘inner’ or subjective perspective) is constituted within the Imaginary, or the mirror stage. This ability is particularly important for athletes, gymnasts, dancers and performing musicians, who need to have developed their own awareness of this ‘unified body ego’ in order to master it for the purposes of expressive and articulated physical expression.

Hence, the Imaginary stage is the beginning of the child's realization that he is an individual. Lacanian theory asserts that prior to this, notions of individuality, aloneness, or togetherness simply cannot apply to the infant in its earliest stage, existing as it does within the realm of the Lacanian Real – the non-descriptive and indeed indescribable realm of pure biology and direct physical reality. In this realm, if the mother is absent, the infant cries only because its needs are not met, not because it is lonely. With the advent of the Imaginary, the child, in recognizing and ‘owning’ its totalized specular image, thus also comes to a realization of itself as a separate individual, with the consequent possibilities of identification with other people and objects. During this stage the child begins to enjoy manipulating and playing with external objects that may have meaning and significance to the child’s experiences with the outside world. For instance, he may take delight in reproducing (or simulating) the mother’s absence followed by her return, by playing with a ball-and-reel, throwing the reel and then bringing it back in. With this game the child shows he has learned not only that the mother is a separate individual, who may leave and then return, but also has shown that an object (or person) may be substituted, or replaced, by another object or person – in this case, the reel for the mother. This implies that Lacan’s notions of metaphor and metonymy originate and can be located within the mirror stage: metaphor by the substitution of identities, and metonymy by the succession of actions (the mother's absence followed by her return, or the throwing of the reel followed by its return). Since the Lacanian unconscious functions by way of metaphor and metonymy, this can then be taken to illustrate Lacan’s assertion that ‘the unconscious is structured like a language’, in which signifiers are freely interchangeable or substitutable. In substituting the reel for the mother, the child does not know that this

action is a metaphor for her absence followed by her return, but his unconscious, which is structured according to metaphors and signifiers, has ‘chosen’ this act according to its nature as understood and explained by the Freudian and Lacanian unconscious. Hence, from the psychoanalytic perspective, the language of the unconscious has ‘spoken the subject’, as opposed to the Cartesian sense in which a pre-existing conscious subject would use language to articulate an idea. In psychoanalysis, the unconscious subject does not speak language, but rather is generated and constituted *by* language – specifically, the language of the unconscious structured according to the Freudian and Lacanian schema of metonymy and metaphor.

The Lacanian Symbolic

The *Symbolic* is central to Lacanian theory, referring to the domain of language, symbols, rules and laws, structure, society, tradition and science. For example, the Symbolic dominates scientific methodology, based as it is upon abstract concepts and laws, symbols and operations, and the strategies of experiment and observation. Nonetheless, along with the Symbolic, the Lacanian Imaginary can be also regarded as having significance within scientific practice – specifically with regard to the intuitive and visual imagination that is used by the practitioner prior to the formulation of an idea or hypothesis. For instance, Einstein claimed to think in a visually intuitive sense, without words, before proceeding into actual thought and practice; an example being his famous ‘thought experiment’ in which he imaginatively visualized the results of his travelling upon a beam of light (from which the theory of Relativity was produced). From a Lacanian viewpoint this ‘thought experiment’ could be regarded as Einstein subjectively

acting within the (visual) Imaginary, prior to and then together with, the structured, linguistic Symbolic. Still, in order to extract new physics from these kind of thought experiments, the Symbolic must then clearly dominate: Einstein needed to consciously understand and use the various established and properties and ‘laws’ of light in order to make any sense of his visualization, or ‘thought experiment’. These physical properties and concepts are all formulated, communicated and understood solely within the Symbolic. Nonetheless, an understanding of Lacanian psychoanalysis indicates that the genesis of Einstein's visualization can be located within the Imaginary, as an intuitive projection of an ‘imaginary self’ (or Grosz’s Lacanian ‘body-image’) into a subjective identification with his notion of a beam of light. Later, the result of the visualization is then worked into a conscious and rigorous argument whose language and symbols and logic belong exclusively in the Symbolic. However, the above example suggests that Einstein could intuit a type of non-verbal meaning even in a pre-verbal (or pre-Symbolic) domain, which in Lacanian theory would be situated within the Imaginary.

Lacan and Learning

As mentioned previously, within the Lacanian perspective both language and meaning itself are structured by the dynamic interaction of Freudian psychic processes that constitute subjectivity. Given that both language and art are ways of generating and communicating meaning, it is then reasonable to assume that artistic practice can be understood and examined according to Lacanian processes. For example, Lacan’s ideas can be applied to the study of the act of musical composition that is the focus of this thesis. Specifically, my study aims to unravel and understand the *self-learning* aspects of

musical composition, from a subjective point of view. As I have explained above, this implies two methodological approaches, both of which are used in this thesis. The first method is autoethnography, which was discussed previously (in Literature Review) and which is further elaborated in the next chapter. This approach positions the researcher as the subject of the study, while at the same time clearly situating him within the wider cultural and social context (hence avoiding a degeneration of the study into prosaic autobiography). The second approach is psychoanalytic theory, which (as discussed) I consider best suited to a theoretical discussion of subjectivity. If this approach is to be adapted to studying learning processes within artistic practice, Lacanian ideas of the origins of learning must then be presented in a way that explains both the generation of subjective identity together with the archaic genesis of learning itself. In this section, I now attempt to do this.

As previously explained (Grosz, 1990; Lemaire, 1970), the psychoanalytic perspective does not presume the necessity for a subject to exist *a priori*; indeed, the notion of the ego existing *a priori* is completely undermined by the psychoanalytic perspective. By contrast, the scientific-empirical perspective is based upon observation and experiment, and hence requires the prior assumption of a ‘scientific observer’ situated externally to the object or phenomenon being studied. This ‘outside observer’ corresponds to the *Husserlian transcendental ego* that is postulated to exist outside and prior to the universe (hence ‘transcending’ it); in both conceptions, the subject is (in principle) able to know and apprehend the external world with which Science concerns itself. In its empirical, i.e. observational and experimental, dealings with external reality, science is not concerned

with questions of the inner subjective experience of this ego, or of the logic of its genesis. Within the field of psychology, such an approach prevents it from addressing the genesis of subjectivity in the same manner as psychoanalysis. The latter recognizes no single unified truth, whereas Science intrinsically believes in and aspires to the possibility of a universal knowledge. In studying learning processes, psychology proceeds from the perspective of the (pre-existing) ‘transcendental ego’ and attempts to define and study human learning activities as they occur during the course of interactions with external entities, for instance teaching authorities. From its observations, psychology then attempts to derive and construct objective and universal knowledge regarding aspects of human behaviour. However, from the psychoanalytic perspective, identities such as ‘subject’, ‘observer’ and ‘authority’ are not assumed as pre-existing or given, but are rather constituted through a dynamic interaction between biological drives and social-cultural inscriptions and effects. As was explained previously, this process is both diachronic – situated in evolving time (developing from the infantile, or *pre-Oedipal*, stage through to the Imaginary and then to the *Oedipal* and *Symbolic* stages) – and also synchronic, i.e. simultaneous, in that subjectivity is at all times constituted by this interaction. Within Lacanian psychoanalysis, this dynamic between drives, needs and the external world also sets the stage for the genesis of learning. I now explain how a psychoanalytic model for understanding the origins of learning can be derived from Lacan’s discussion of the Freudian *Fort/Da* game.

The *Fort/Da* game of the infant child, originally recounted by Freud in *Beyond the Pleasure Principle*, was developed by Lacan to illustrate the acquisition (or learning) of

language during the Imaginary stage, in which the child begins to conceive and understand the idea of separation. In the Imaginary stage, the child begins to recognize objects as separate identities, thus logically also allowing the recognition of himself as a separate identity. As Grosz remarks (1990, p. 60): “The Fort! Da! game ... represents the child's first attempt to articulate in verbal or proto-verbal form the needs it feels animating its body”, i.e. those needs corresponding to the departure from the child of its mother. These needs are originally based in the Lacanian Real, and are “more or less universal or constant in human life ... (i.e.) the requirements of brute survival” requiring “real, tangible objects for ... satisfaction” (Grosz, p. 59). *Need* in principle can always be satisfied, if not by the infant himself then through an other. This ‘other’ is usually the mother, who is most often able to immediately satisfy the need of the infant. At this stage, *need* is purely instinctual and short-lived, and language and identity does not yet exist for the infant. However, the instinctual nature of need is soon “rapidly overlaid by a structure of meaning and significance that envelops it in imaginary and symbolic relations, transforming it into demand and desire” (Grosz, p. 60). The advent of the Freudian *Fort/Da* at the point is located at the moment “when the child recognizes the absence of the mother ... (and) instinctual need becomes converted into social, imaginary, and linguistic functions” (Grosz, p. 60), i.e. at a critical stage during which the suffering of the child experiencing the absence of the mother is transformed from the neonatal cry of an infant into a subjective visual phenomenon that may be expressed by use of language and bodily action.

Although Freud's own account of the *Fort/Da* focuses upon its implications for the

pleasure principle, a footnote (Freud, 2009, p. 13) introduces an important learning aspect. Initially, Freud describes the child's game thus (Freud, pp. 12-13): “The child had a wooden reel with a piece of string wound round it ... he kept throwing it with considerable skill, held by the string, over the side of his little draped cot, so that the reel disappeared into it, then said his significant 'o-o-o-oh' and drew the reel by the string out of the cot again, greeting its reappearance with a joyful '*Da*' (there). This was therefore the complete game, disappearance and return, the first act being the only one generally observed by the onlookers, and the one untiringly repeated by the child as a game for its own sake, although the greater pleasure unquestionably attached to the second act”, i.e. the return of the reel to the child. In the main body of his analysis, Freud is concerned to examine why, given that “the departure of the mother cannot possibly have been pleasant”, the child nonetheless “repeats this painful experience as a game ... (in which) ... the departure must be played as the necessary prelude to the joyful return” (Freud, p. 13). The connection of this to the pleasure principle occupies most of Freud's attention. However in the footnote, Freud adds that, “during his long lonely hours he had found a method of bringing about his own disappearance. He had discovered his reflection in a mirror which nearly reached to the ground and had then crouched down in front of it, so that the reflection was '*fort*' “, i.e. gone. The *Fort/Da* game had now expanded to incorporate the disappearance and reappearance of the child's specular image.

The implications for learning in this perspective clearly differ from the traditional perspective of a unified, pre-existing ego absorbing knowledge from an external environment. From the psychoanalytic perspective, learning is part of the dynamic

structuring of subjectivity itself through the interplay of psychic processes. Anika Lemaire explains that the *Fort/Da* game “illustrates the birth of language in its autonomy from reality and allows a better understanding of how language distances us from the lived experience of the Real” (Lemaire, 1970, p. 52). The genesis of language is a process that is “effected in two stages: the child moves from the mother to the reel and finally to language”, this being “the inaugural moment of all future displacement, all metaphors and all language” (Lemaire, p. 52). Hence, in the Lacanian view, the process by which the child learns language is logically connected to and dependent upon the very constitution of separate identity. In *The Four Fundamental Concepts of Psychoanalysis*, Lacan emphasizes that “this reel is not (just) the mother reduced to a little ball ... (rather) ... it is a small part of the subject which detaches itself from him while still remaining his, still retained ... it with this object that the child leaps the frontiers of his domain” (Lacan, 1998, p. 62); the reel has enabled the child, through a process of psychic self-splitting, to make distinctions between himself and external objects located at a distance. The Lacanian perspective thus differs from the traditional consciousness-centered viewpoint in that the genesis of subjective awareness is now radically decentered: “If it is true that the signifier is the first mark of the subject, how can we fail to recognize here – from the very fact that this game is accompanied by one of the first oppositions to appear – *it is in the object to which the opposition is applied in act, the reel, that we must designate the subject*” (Lacan, p. 62; my italics, emphasizing the de-centering of subjectivity from the psychoanalytic perspective).

In further developing this analysis, a closer examination of the advent of the mirror stage

is helpful, as for Lacan this is the domain of the Imaginary, in which the advent of the *Fort/Da* is situated. (The word “stage” can thus refer both to a point within an evolving chronology, as well as to a theatrical set in which the subjectivity ‘appears’ for the child, as discussed later.) In *The Mirror Stage as Formative of the Function of the I as Revealed in Psychoanalytic Experience*, Lacan (1977) emphasises the critical importance of the mirror stage in the generating of subjectivity, explaining that “We have ... to understand the mirror stage *as an identification*” (Lacan's emphasis) that correlates with “the transformation that takes place in the subject when he assumes an image” (Lacan, 1977, p. 2). The infant is “still sunk in his motor incapacity and nursling dependence” which manifests as “a primordial Discord betrayed by the signs of uneasiness and motor un-co-ordination of the neo-natal months” (Lacan, p. 4). Hence there is an “an organic insufficiency in his natural reality” which for Lacan indicates a “*specific pre-maturity of birth* in man” (Lacan, p. 4; his emphasis). This then is the scene within which the mirror stage unfolds: the child *assumes*, or *identifies with*, his specular reflection. In describing this identification, Lacan uses the term ‘jubilantly’, suggesting the child's enthusiasm and a sense of victory. However, this occurs against, and does not alter the organic fragmentation of the child's inner tactile experiences – the ‘primordial discord’. Hence there is a logical contradiction between the inner fragmented experiences of the child, and the unified and singular image with which it identifies. Considered from the perspective of the origins of subjective identity, this contradiction is dialectical in nature, as both these conflicting aspects of the child's experience are essential for the genesis of this identity. Lacan focuses upon the intrinsic contradiction between motor incapacity and fragmentation on the one hand, and the ‘jubilant assumption’ of a unified exterior image

on the other; this contradiction indicating “in an exemplary situation the symbolic matrix in which the *I* is precipitated in a primordial form, before it is objectified in the dialectic of identification with the other, and before language restores to it, in the universal, its function as subject” (Lacan, p. 2). For Lacan then, the mirror stage, based as it is upon an ‘organic insufficiency’ and a ‘specific prematurity of birth’, is a specific example of the primordial scene of subjectivity, i.e. prior to the advent of the *Fort/Da* and of the recognition of other people and objects, and ultimately of the initiation into universal language. These latter stages belong to the symbolic, whereas the primordial identification with the specular *I* occurs however during the *Imaginary*, or *Mirror* stage, which is dialectical in nature, as indicated by the essential contradiction at its heart explained above, and by the dynamic momentum of this contradiction implied by Lacan in the phrases “in which the *I* is precipitated” and “internal thrust ... precipitated from insufficiency to anticipation”.

This dynamic contradiction at the heart of the Mirror stage is explained by the fact that the image (which is so enthusiastically assumed by the child) is in fact illusory, because it cannot reflect the actual divergent and fragmented tactile inner life of the infant. The ‘precipitating’ motivation – the organic insufficiency and premature birth – “situates the agency of the ego, (even) before its social determination, in a fictional direction” (Lacan, 1977, p. 2) as unified visual reflection. The feeling of jubilation is misplaced since this singular reflection is a *mirage*: “the total form of the body by which the subject anticipates ... his own reflection is given to him only as *Gestalt*” (Lacan, p. 2), i.e. instead of an actual reflection of the child's actual organic experience of “the turbulent

movements that the subject feels are animating him” (Lacan, p. 2). The logical momentum of this contradiction is then a process “which will always remain irreducible for the individual alone, or rather, which will only rejoin the coming-into-being of the subject asymptotically, whatever the success of the dialectical syntheses by which he must resolve as *I* his discordance with reality” (Lacan, p. 2). Regardless of the nature or number of attempts by the constituted subject to resolve this essential contradiction, he can never succeed in resolving them and hence synthesizing a unified subjectivity. At best he can approach this synthesis ‘asymptotically’, meaning that with great effort he can at best approach ever closer to success; however he can never completely succeed in synthesizing ‘the mental permanence of the *I*’. Since subjectivity is generated by the child’s identification with an image, any such efforts are “irreducible for the individual alone” (Lacan, p. 2) as they require the exterior unified image for their dynamic.

Therefore, this irreconcilable difference between image and experience dooms these efforts to an “alienating destination” (Lacan, 1977, p. 2) in which the image serves as mediator, trying in vain to establish a relation between inner experience and exterior reality. The genesis of the subject is thus “caught up in the lure of spatial identification” (Lacan, p. 4) and eventually produces “the assumption of the armour of an alienating identity, which will mark with its rigid structure the subject's entire mental development” (Lacan, p. 4). For Lacan, the chinks in this armour are marked by dreams or psychoanalytically observable phenomena such as “the schizoid and spasmodic symptoms of hysteria” (Lacan, p. 5). By contrast, the Kristevan perspective (as discussed later) is that this fragile specular identity is constantly being threatened, destroyed and

then renewed through the interaction between constructed subjectivity and the violent, indescribable forces comprising the Kristevan Semiotic.

As the onset of subjectivity in the mirror stage is critically dependent upon Lacan's 'lure of spatial identification', the very origins of subjective space itself during the Imaginary Stage should now be addressed. From the psychoanalytic perspective, dealing with this question can then in turn address the central and critical metaphysical ideas of *appearance*, *reappearance* and *representation* within the context of the Imaginary and the *Fort/Da*. The genesis of a subjective awareness of space during early childhood, and the significance of its relation to the *Fort/Da* game, is examined by Peers (2012), who notes the Lacanian view that "the child's entry into the Imaginary is largely concerned with organizing the disparate experience of the body within a singular value system conducted via the unitary image of an Other (in the mirror)" (p. 761). Peers emphasises the jubilant visual experience of the child, who is driven by "a relentless urge to the pleasure obtained in relation to the *unity of form and representation*" (p. 762; author's emphasis). With this need to establish for itself a total and singular self-representation, the child's response to Lacan's 'primordial discord' of fragmentation and disorientation is "to imagine a space for which he constitutes the centre. The self is thus initiated as a *presence* (something which does not change, and for which other things 'appear') by way of reflecting on the shape and form ... of his space" (Peers, p. 764). This analysis of how objects, and indeed space itself, may subjectively appear to the infant is effectively a description of the genesis of *appearance* itself in a metaphysical sense. Peers then emphasizes that this initiation of presence and appearance is crucial to understanding the

Fort/Da game as a learning process. As noted by Derrida (1987) in *The Postcard*, “instead of playing on the floor, he (the child Ernst) insisted on putting the bed into the game, into play, on playing with the thing over the bed, and also in the bed. Not in the bed as the place where the child himself would be, for ... he is not in the bed at the moment when he throws the spool, *it appears* (my emphasis). He throws it from outside the bed over its edge, over the veils or curtains that surround its edge ... it is from ‘out of the bed’ that he pulls back the vehicle in order to make it come back” (Derrida, 1987, p. 315). Thus, the spool that *appears* is caused by Ernst to vanish beyond a curtain, and then made to *reappear*. Peers remarks (p. 764) that “the curtain ... gains significance as a signal of the split between visible real and invisible unreal, for a game about the construction of a belief about his own birth”, i.e. how Ernst originated, or appeared, as a presence within an imagined space. These beliefs must logically precede notions of the invisible: “the original unity that Ernst anticipates (his own presence) must supersede the invisible, that which is beyond the curtain, the place to which he casts the reel” (Peers, p. 765). This constructed belief about his birth must then logically also involve a belief about truth, in the generalized metaphysical sense of an Ontological belief about the nature of reality. In this sense the *Fort/Da* can thus be seen as a learning process through which the child displays, or ‘tells’, essential notions of reality. The ‘learning’ in this process relates to the construction of Ernst's identity within the Lacanian Symbolic. In this game the child gives names to primordial notions of disappearance and re-appearance are given names – ‘Fort’ (gone) and ‘Da’ (here). Ernst is now functioning within the Symbolic as a speaking subject. In telling of a belief about truth, the *Fort/Da* functions as a learning process for Ernst since by repeating the game, he learns how to speak the

names of his beliefs, and hence how to “link the I to socially elaborated situations” (Lacan, 1977, p. 5). Thus, learning is logically connected to the genesis of subjectivity: “Ernst effectively invents himself, by casting the 'fort' outward in order to bring the reel back – 'da'; the idealization necessary for this procedure to make sense relates to the shape and form of a circuit – the casting and reeling produce Ernst as a point of orientation” (Peers, p. 765). This point of self-identification, which is always located within the symbolic, is then constantly threatened by, destroyed and then postulated anew by its interaction with the Kristevan Semiotic.

These psychoanalytic concepts of appearance, invisibility and reappearance are further examined by Derrida (1987), who extends and develops this analysis into a discussion of *return*, *recall*, and *representation*. In *The Postcard*, Derrida describes the *Fort/Da* as a game “in its two phases, in the duality, the redoubled duality of its phases; disappearance/re-turn, absence/re-presentation. And what binds the game to itself is the *re-* of the return, the additional turn of repetition and re-appearance ... the greatest quantity of pleasure is in the second phase, in the *re*-turn which orients the whole, and ... which ... orders the entire teleology” (Derrida, 1987, p. 317), i.e. the actual purpose of the game. Derrida regards the *Fort/Da* as the pleasurable scene of mastery, and interprets this from the perspective of the Freudian Pleasure Principle: “Far from being checked by repetition, the (Pleasure Principle) also seeks to recall itself in the act of repetition of appearing, of presence, of representation, and ... via a repetition that is mastered, that verifies and confirms the mastery in which it consists” (Derrida, p. 317). For Derrida, the *Fort/Da* indicates more than a simple, or single, departure and return; indeed, even more

than a series of single departures and returns. Instead, the repetitions of the *Fort/Da* are viewed from a metaphysical perspective, in which the importance of the reel and its motions are superseded by the representation of the very notion of departure and return: “One must make the return the repetition of that which returns, and must do so on the basis of its returning. Which, therefore, is no longer simply ... an object which must depart/return, or which departs-in-order-to-return, but is departure-returning itself, in other words the presentation of itself of representation, the return of itself to the return” (Derrida, p. 318). From this metaphysical vantage point, disappearance and return are now superseded by a metaphysical representation, i.e. by a (repetitive) re-presentation of the departure-returning, which in itself then becomes a representation in the telling: “the re-turning re-turns ... the re-turn is not only of an object but of itself ... it is its own object ... (and thus) ... that what causes to return itself returns to itself” (Derrida, p. 318). Indeed, once Ernst learns to substitute his own specular reflection for the reel (as in Freud's footnote) he is then able to generate his own disappearance, and thus is logically capable of “(making) himself reappear without a mirror, in his disappearance itself, maintaining himself like his (absent) mother at the other end of the line. He speaks *to himself* telephonically, he calls himself, recalls himself, ‘spontaneously’ affects himself with his presence-absence in the presence/absence of his mother. He makes himself *re-*” (Derrida, p. 319), thereby inscribing himself as a temporal as well as a spatial identity into the domain of the Lacanian symbolic.

Kristeva and Subjectivity

In its assumption that a conscious analyst is able to know and describe the impulses and

drives of the (unapproachable) unconscious, psychoanalytic theory presents a contradictory methodology to the reader. On the one hand, the understanding of the psyche is presented as being provisional, firstly, in that the knowledge gained from analysis is dependent upon the discovery and development of future insights that could revise extant theory; but also in that its very basis (as discussed previously) is founded upon the principle that the unconscious can never actually be known – only its biological and linguistic effects as reported through dreams, seen through literature, or observed within the setting of an analyst-patient relationship. As explained above, Freud understood these intrinsic limitations to psychoanalytic knowledge, which are built into the very basis of psychoanalytic theory. However, the desire of practitioners of psychoanalysis to know and understand the phenomena of the unconscious – indeed, its very *name* – must necessarily force the Freudian project into adopting an analytic perspective, which then inevitably constitutes the analyst as another version of the Husserlian transcendental ego. The famous complexity, subtlety and difficulty of Lacanian theory can then be regarded as resulting from his desire to communicate his insights in the face of this intrinsic contradiction: discussing psychoanalytic theory while simultaneously trying to avoid, or even disrupt, the security of the position of a ‘knowing reader’ who would otherwise presume to understand these insights from a singular, distant and unified perspective.

These inherent difficulties – of a conscious, knowing, and pre-existing subject developing a theoretical methodology to describe an otherwise indescribable subjectivity – are comprehensively addressed by Lacan; from a different perspective, they are also inform

the approach of the French/Bulgarian linguist and psychoanalyst Julia Kristeva. Her work attempts to unravel the difficulty of describing the indefinable unconscious within language by using a methodology different to that of Lacan's. Instead of focusing upon the symbolic formulation of complex structures within the psyche, she combines her linguistic and literary expertise with her background in Freudian and Lacanian analysis to study the unconscious as it manifests itself into the domain of literature: specifically, that of poetry.

This is a subtle approach, particularly suited to a study that attempts to approach and unravel the hidden and invisible subjective aspects of artistic and conceptual practice. Kristeva accomplishes this by examining poetic and artistic practice and process from a Freudian and Lacanian viewpoint. Her focus on using literary practice as a methodology within psychoanalysis bypasses the limitations inherent within strictly conceptual descriptions (such as those assumed by psychoanalysis when practiced and presented as a 'science'). These latter are bounded by one-to-one meaning relationships between signifier and referent, in which a word is clearly defined and understood to denote a specific, distinct object or concept. This then enables the construction of interlocking concepts that rely upon a language whose restrictions upon signification enable the development of an elaborate conceptual structure. Poetry, however, uses language more freely, allowing for a multiplicity of meaning within words and phrases. Authentic subjectivity is then visibly expressed not in the words themselves, but instead 'in between the lines': within the rhythms, tonality, and texture of the poetry. For Kristeva, poetic language can thereby become a methodology for a type of *post-structural* psychoanalysis,

in which a *paragrammatic* or meta-level study of the text may be performed by the analyst.

Kristevan Semiotics

As previously explained with regard to Saussure, semiotics, as a theory of the functions of signs and symbols (i.e of signification) has close bearing upon structuralist theories of linguistics and communication. Kristeva however, finds this account lacking inasmuch as it fails to address the actual genesis and origins of signification within inner subjectivity: “semiotics has (thus far) accounted for signification – its knowledge as production, but it has not yet been able to account for the very processes of its (signifying) production” (Holmes, 2003, pp. 27-29). Kristeva’s response has been to reformulate semiotics into a self-study of its own processes of production within a social and cultural context. This approach now takes into account the archaic generation of signification within early subjectivity, and undertakes to analyze the process as a practice rather than as a static, fixed product whose initial genesis remains invisible and irrelevant to the discourse. Such an analysis, which necessarily still remains grounded in analytical language and metaphor, will therefore encounter difficulties “for this is language’s ultimate transparency – the denial of its existence – just as the eye is non-existent in seeing” (Lechte, 1990, p. 67). In other words, language is here put to work in an attempt to describe that which exceeds and precedes itself: apparently, another methodological contradiction. However, Kristeva’s insightful attempts to reveal ‘the other scene’ prior to the production of language and meaning can certainly assist a study of unconscious drives existing prior to the generation of the usual concepts and models as understood

from other theories of learning. Within this thesis, I focus upon motivated self-learning; a Kristevan analysis is particularly useful here, since for the directed but socially isolated self-learner questions of drives and motivations are especially highlighted, i.e. compared to other students subjected to formal curricula and institutional training cultures. In this study of the isolated self-learner, the social and cultural context, while always present, necessarily recedes to the background to allow a stronger focus upon individual psychic processes. Kristeva's work, which challenges Saussurian Semiotics as the analysis of signs and symbols with a new understanding of subjective processes as the basis for the very production of meaning, is then well suited to a study of the inner life of the self-learner. Her methodological innovation – a blend of Semiotics and Psychoanalysis called *Semanalysis* – allows indications as to the character, structure, and procedural aspects of such a study.

As a synthesis of psychoanalysis and linguistics, Kristeva's work aims to reveal drives and dynamics that exist within the psyche even prior to signification, i.e. prior to the act of positing and naming situated by Lacan within the Imaginary and the Symbolic. These earliest drives to signification are normally ignored in other theories of linguistics and semiotics that focus on the product, while ignoring the subject that generated this product and which (for Kristeva) exists prior to signification itself. Kristeva sees this as a critical deficiency, in that, without an understanding of its own origins, the subject (or for Lechte, the 'eye') is unable to see and hence know itself. To rectify this and complete the picture, Kristeva focuses on poetic text, searching for the musical aspects embedded within it, in particular texture, rhythm and repetition, while considering how these may relate to

psychoanalytic categories of anticipation and tension, release and expulsion, and condensation and displacement. The focus of her methodology is to use literary and poetic texts (along with visual and musical artistic practice) to reveal the dynamics of subjective processes as understood within the framework of psychoanalytic theory. Such a methodology is particularly suited to a psychoanalytic study of the genesis of the production of meaning, and its implications for music and the learning process.

The Kristevan Semiotic Chora

Within the Freudian psyche, Kristeva names the location of drives and impulses as the *Chora*, which is a Greek word meaning ‘receptacle’. Here, Kristeva is naming that which is otherwise indefinable, as it is both logically and temporally located prior to the advent of language and description, and hence before the genesis of the Freudian and Lacanian unconscious. Kristeva’s Semiotic Chora is associated with the mother, although not actually located in any part of her anatomy. It is named as the receptacle for the drives and impulses of the Semiotic. Situated outside and prior to the Lacanian Imaginary and Symbolic, the Semiotic Chora and its description – indeed the very act of defining it – is thus best regarded as provisional, i.e. by necessity used within the symbolic realm of name, category and discussion, although actually essentially belonging outside and prior to this domain. The Kristevan Semiotic refers to the drives and impulses of earliest infancy, belonging to the dyadic relationship between the infant and the mother, and located before the advent of the Imaginary and the Symbolic.

In Lacanian theory, drives are correlated with Desire, which is formulated later during the

later Imaginary Stage and crystallized in the Symbolic following *castration*, which occurs during the ‘Oedipal’ process. In this context, the term ‘castration’ refers to the genesis of the conscious subject; this occurs through the recognition that he cannot return as one to the (desired) mother, and is therefore forever separated from her. For Lacan, the term denotes a necessary acceptance of the permanent separation, which is then closely related to the constitution of the conscious subject as a separate individual functioning within the Lacanian social domain of the symbolic. This ‘castration’ is chaperoned, or if necessary even forced, by the father. However, while Lacan situates drives (and their genesis) within the Imaginary and Symbolic stages, Kristeva locates them within her own notion of the Semiotic – a domain preceding and situated outside of the symbolic, which in fact threatens its very unity and coherence. For Kristeva, the *Semiotic* refers to that which cannot be defined by, or incorporated within, the Lacanian Imaginary and the Symbolic: she locates pre-symbolic impulses there. Thus, although she specifies a ‘location’ for these impulses – the *Semiotic Chora* – this cannot be regarded as denoting an actual psychic morphology as such, but serves instead as a type of provisional naming, as explained above.

Kristeva’s notion of the Semiotic corresponds with the Freudian notion of the unconscious in that the Semiotic always eludes conscious attempts to know and represent it directly. However, though barred from the Symbolic, Kristeva’s Semiotic is always present as a threat to the structured rules, coherence, and unicity – indeed, threatening to dissolve structure and unity itself. This is the basis of Kristeva’s ‘revolution in poetic language’, in which her analysis of the Semiotic focuses upon poetic elements of rhythm,

repetition, texture, metonymy and metaphor that are otherwise ignored in prosaic or purely communicative speech and text. From the perspective of symbolic, communicative language, these poetic elements are redundant (for instance, repetition) or unnecessary (rhythm and texture). Kristeva regards them instead as essential markers of indicators of subjective experience. These nonetheless need to be circumscribed by the structure of the symbolic; were they to be too heavily weighted, symbolic coherence could be destroyed and subjectivity would degenerate into psychosis. Their presence is recognizable and able to be apprehended because (for Kristeva) we are subjected to both Semiotic and the Symbolic influences from society, culture, and family. In this respect, although the Semiotic threatens the Symbolic, it also works together with it to give a more complete and comprehensively honest, experience of speech and text: poetry exceeds speech and text by incorporating the Semiotic in the form of unwritten traces and stylistic elements.

Desire, Negativity and the Thetic

I now describe Kristeva's views of *Negativity* and the *Thetic*, which will figure prominently in the later analysis of my electroacoustic music. As her methodology is derived from Lacan's, it is important to first present Lacan's perspective, and then explain how her conclusions diverge from and challenge his own. In this exposition, I focus firstly upon Lacan's theory of *desire*, and then explain where Kristeva differs from Lacan regarding his description of the genesis of desire. Discussing both the Lacanian and Kristevan perspectives requires in the first instance, the outlining of two important aspects of psychoanalytic theory which cannot be ignored in any presentation of this field. Furthermore, in presenting this exposition, I am providing significant and relevant

background to my autoethnographic study of my musical journey – that of the role of desire, negativity, and the thetic as they are manifested within the context of the electroacoustic composition studied within this thesis.

The contrast between Lacanian and Kristevan views of the genesis of identity is summarized by Oliver (1993) who explains that, from Kristeva's perspective, "Lacan discounts the semiotic drive force operating prior to the mirror stage ... (whereas for Kristeva) the logic of signification, the logic that organizes the mirror stage ... is already operating within the material bodies of children prior to what Lacan identifies as the onset of the subject" (Oliver, 1993, p. 18). For Kristeva, "(s)ubjectivity is a process that neither begins nor ends with the mirror stage; it is operative in the material body prior to the mirror stage. There are social relations prior to the mirror stage and language acquisition" (Oliver, p. 19). As opposed to Lacanian theory which states that the drives and impulses of early childhood are repressed by entry into the symbolic order, Kristeva claims that the "unnameable drives are part of childhood ... they are 'real' in a way that ruptures the Symbolic" (Oliver, p.19). The reason for this is that drives exist and thrive prior to the advent of Lacan's mirror stage; in fact for Kristeva, they originate from earliest infancy, being integral to the body itself and to the physical bond between mother and child, that originates and expresses itself from birth – indeed, even before birth, i.e. in the womb. Kristeva emphasizes the significance of this fact, drawing attention to its significance for the archaic genesis of identity: "Semiotic activity is the mark of drives that stem from the body. These drives are prior to Lacan's mirror stage in which the infant first recognizes itself as a body proper. It is this realm of bodily drives that Kristeva

wants to bring back into Lacanian theory” (Oliver, p. 32). Kristeva’s criticism of Lacan stems from her interpretation of his notion of the mirror stage, in which:

the onset of the Lacanian subject is completed at the cost of repressing drives ... for Lacan, we have no access to drives in themselves; drives are always and only representations of drives ... they are always already symbolic ... (whereas for Kristeva) ... drives operate on a material level that is both logically and chronologically prior to the onset of the Symbolic. (Oliver, p. 32)

Contradicting the Lacanian view, in which socialization only occurs following the advent of the mirror stage and the induction of the subject into the Symbolic, Kristeva argues that these drives have an existing social aspect to them “not because they are already symbolic, but because within the semiotic body there is already an experience of otherness that prefigures the other in the mirror even as it sets it up” (Oliver, p. 32) – i.e. the subjective bodily experience of the child-mother dyad that originates before the mirror stage. In a subtle criticism of the Lacanian theories of drives and desire, Kristeva claims that while Lacan draws attention to the notion of desire itself, his perspective “covers over its relationship to the semiotic body, out of which it comes” (Oliver, p. 32) and hence ignores and forgets the physical basis of the origins of drives. Since this critical analysis of desire has later implications for Kristeva’s ideas of Negativity and the Thetic, and as Lacan’s theory of desire is intrinsic to psychoanalysis, it is worth spending time examining Lacan before then explaining Kristeva’s differences with him.

As Grosz (1990) explains “(f)or Lacan, the drive cannot be regarded as *Real*, biologically determined, or natural, but is a function and effect of the field of the Other ... in short, of

the order of language and the symbolic” (Grosz, 1990, p. 59). For Lacan, the Fort/Da game signifies the conversion of biological and instinctual needs (intrinsic to the Real) into an Imaginary domain (native to the Mirror stage) and then finally into the symbolic world of language, concepts and structures. – With this process, natural instinct has been transformed into *demand* and *desire*. ‘Demand’ is the linguistic replacement for raw need, which was originally “represented by its 'natural sign', the indeterminate cry” (Grosz, p. 61). In the primal experience of the mother-child dyad, Need can be fulfilled through the presence and function of the mother's breast, but demand is intrinsically incapable of being satiated as it is itself a linguistically structured substitute for the original primary need for the mother's presence. Such language structures, being removed from primary and direct subjective experience, are thus alienated from the essence of the subject: “they function as excuses for access to the second object, the (m)other ... the thing demanded – food, attention ... the undying love of another ... (as) a rationalization for maintaining a certain relationship to another” (Grosz, 1990, p. 61). Demand can never be satisfied as, even if a specific demand is met, the original source in primary identification and need is never fulfilled, because language is intrinsically alienated from direct self-expression, and hence the expressed demand, even if met by the other, can not address the essential primary need which is now hidden, or repressed. The cycle of demand – its expression and gratification (or non-gratification) – is then renewed and perpetuated, as the subject continues to strive for satisfaction through the alienated means of language. This is an essentially futile exercise, as “demand requires the affirmation of an ego by the other to such a degree that only an imaginary union or identification with them, an identity they share, could bring satisfaction – and only then with the annihilation

of the self, for it is now invaded by and exists as the other” (Grosz, p. 61). Naturally, this applies *in extremis* since many partnerships or marriages are regarded as fulfilling by the participants. However even in these cases, *demand* indicates that the mutual expressions of identification be constantly renewed and be felt as authentic by each participant.

Within the Lacanian notion of *Demand*, that which was originally required in *Need* now becomes a “battery of signifiers ... messages directed to or received by the other” (Grosz, 1990, p. 62). As one demand is met, the next one is then posited: “the child ... demands a fullness of the other to stop up the lack that conditions its existence as a subject” – a lack “which is evoked by any demand beyond the need that is articulated in it” (Grosz, p. 62). Since Demand is linguistically based, and since for Lacan, ‘the unconscious is structured like a language’ (as metonyms and metaphors) then “a (metonymic) chain of objects, substitutable for each other, stand as signifiers of the other's desire” (Grosz, p. 62). This implies firstly, that one *need* is able to replace another without loss of either satisfaction or for that matter dissatisfaction, as the essential alienation from the primary identification always remains regardless. Secondly, “the object of demand is always an *imaginary object*” (Grosz, p. 62, her italics), and so the subject must first postulate the existence of the other before demand becomes possible. Demand is hence ‘structured, alienated need’ which bears a close and significant analogy to the mirror-identity as a structured, alienated version of the subjective self. Therefore, in the same way that identity is structured according to an ideal mirror image, *demand* is likewise structured according to an imagined and expected response; in other words from the desire of the other: “it is from the locus of the Other that its message is emitted ... Demand constitutes

the Other as already possessing the 'privilege' of satisfying needs" (Grosz, p. 63). *Desire* is then "the *difference* or gap separating need from demand ... (drawing from) ... elements of both ... re-establish(ing) the specificity and concreteness of the satisfaction of *need*; while ... participat(ing) in demand's orientation to the other" (Grosz, p. 63). *Demand*, throughout its multiplicity of forms, is essentially a demand for love – a multi-structured, constantly renewed insistence for constant and renewed proof of unconditional love replacing the primal pre-linguistic infant cry for *need*). The objects demanded are substitutes and signifiers for the now-repressed original need for primordial identification and complete, unconditional love. Hence, demand and desire are always oriented to another identity, based as they are upon an absence, a privation or a lack that is "is intrinsically inter-subjective ... Desire desires the desire of an other" (Grosz, p. 65). For instance, I may desire the desire of my music teacher, or of my audience, my thesis examiner, or my relatives and friends.

Whereas Demand is situated within the Imaginary, Desire belongs to the symbolic domain. Demand is intense and never-ending, and can never be fulfilled, as the primary need is already repressed and the linguistic structures of Demand hence can at best only signify primary need. The child keeps demanding, and whether the object of the demand is met or not will not halt the ever-renewing metonymic chain of demands: if a specific demand is met, then a new one is raised. Desire however, "threatens to subvert the unity and certainty of conscious demand ... (as it is based upon) ... "expelled, socially inappropriate (and) repressed wishes" (Grosz, 1990, p. 65). There is a 'remainder or residue' of need left over after it is articulated as a demand, that is then "subjected to a

primal repression ... that constitutes the unconscious as such” (Grosz, p. 66). Consequently, a drive is attached or 'assigned' to a signifier (or representation) “which then acts as its delegate in the ... expression of the unconscious”, specifically as expressions of unconscious desire resulting from primal repression.

Hence, the difference between demand and desire is that while demand is the articulation of need within the Imaginary domain in which the Other is initially recognized, desire “opens the subject to a broader world of signification ... a world in which it has access to systems of meaning unregulated by any individual or group, and unrestricted in the range of its possible messages” (Grosz, 1990, p. 66). This goes far beyond the proto-social context of demand, which was restricted to the interaction between child and mother (or family): “desire marks the child's entry into the domain of the Other ... the symbolic (which) is the domain ... of the signifier's primacy over the subject” (Grosz, p. 66). On the other hand, demand corresponds to the articulation of the child's identity; of his initial identification with his Mirror-image, his recognition of the Other, and his awareness of absence and lack. Desire is associated with the articulation of the subject-as-social-signifier situated within the symbolic (for instance, in my case as music composer), but as Grosz emphasizes, its range can encompass anything encompassed by “the domain of law and language, law-as-language” (Grosz, p. 66). The subject must locate himself within this domain to become a speaking being, finding his niche. Whatever the final choice, primal repression remains; the real primal need remains out-of-bounds, and hence like demand, desire is intrinsically insatiable: “It is always an effect of the Other, an 'other' with whom it cannot engage, in so far as the Other is not a person but a place, the locus of

law, language and the Symbolic” (Grosz, p. 67). The subject is therefore seen in psychoanalytic theory as being ‘divided’ or ‘split’, and as explained previously, this ‘splitting’ between inexpressible experience and articulation-towards-another is required by Lacan to form the very notion of identity during the Mirror Stage. In Desire, *lack*, which originated in *Need*, finds an expression only through the functions and structure of the unconscious. However, the unconscious (along with conscious subjectivity) is the product of primal repression, and so Desire must intrinsically express the *split* or *division* of the subject between articulation and the (inaccessible) unconscious. For Lacan, “(d)esire is the *reality* of the unconscious” (Grosz, p. 67), where the signifier acts upon the subject to produce socialized urges always directed towards an external Other.

For Lacan and Freud, the *drive* is not identical to the *instinct*, which is biologically based and hence more related to Need, and based in the domain of the Real. Instead, the drive is related to an impulse towards satisfaction through the attainment of an object in order to fill a lack. Since this implies a *drive* rather than to a rational strategy for achievement, this urge to satisfaction remains constant and ever-present, whether or not the object is attained. Indeed, even if a new object or goal is substituted for the original desired object, the urge to satisfaction remains unfulfilled, as “the ‘object’ providing satisfaction is not the object *of* the drive. It is always a divergence, a metonym, a lack of the real, displaced onto a substitute” (Grosz, 1990, p. 75); in other words (as explained above) desire is always located in the ‘field of the Other’. The desired object of satisfaction is always a metonym, or substitute, for the original (now primally-repressed) need that can never be satisfied; it is insatiable. Hence the ‘drive to desire’ is similarly insatiable, as it is the

socially-trained displacement of repressed need into the functional symbolic domain. As with Demand, Drive is insatiable because in the domain of the Real, it was originally related to the child's constant need for reassurance of omnipresent love, which is now repressed. However paradoxically, being thus insatiable Drive is in fact essentially satisfied by the very fact of its expression, even if the object of desire is not actually attained: “(t)he drive is motivated by but always falls short of satisfaction ... the aim of the drive is always both the attainment of its object, *and* ultimately, a gain in satisfaction” (Grosz, 1990, p 75). Thus, even if the object of desire is renounced or sublimated, a degree of satisfaction is still attained. The object of desire (designated by Lacan as the *objet a*) correlates to the awareness of an *other*; for Demand, this *other* is situated within the familial Imaginary, whereas with Desire, it is located within the socially prescribed Symbolic where its function as symbol and meaning (substituting for primally repressed Need) means that it (the *objet a*) “is not the drive's (object), but the *cause of desire*” (Grosz, p. 75). This then structures the Lacanian unconscious (that is 'structured like a language'), as Desire and Drive, being situated in the Symbolic, work to affect and structure it in a manner analogous to language itself. Consequently, the unconscious is the product of social affects – language and Desire – rather than the other way round. In this way, drives, while dependent upon and even mimicking earlier primal biological instincts, are culturally specific and inscribed upon the unconscious via the Symbolic.

In its striving to fill a lack through an impulse to attain an object or goal, a Drive can thus be characterized as “an endogenous pressure seeking external satisfaction” (Grosz, 1990, p 77), that (as previously explained) can be satisfied regardless of whether the object

itself is actually attained. In the first case this is because the object of desire is inscribed upon the unconscious as a metaphor for a primally repressed Need, and so is interchangeable with other metaphors, or other objects. Hence, a specific object in itself cannot be the real goal of Desire, and indeed (as previously mentioned) Desire-as-Drive also aims for a sense of satisfaction regardless of whether its nominal goal was attained. Grosz explains (p. 77) that for Lacan, this is possible by means of a type of 'psychic circuit' in which the pressure of Desire-as-Drive towards satisfaction pushes the boundaries of the subject outwards towards its (Imaginary) Aim. Upon experiencing however, the intrinsic impossibility of stable and constant satisfaction from an external *objet a* that is, after all, an imaginary substitute for primally repressed need, the Drive impulse then turns back inward towards the erogenous rim marking the standard boundaries of the subject-at-rest: "(t)he aim, then, is always a return, a reintegration into the circuit of perfectly self-enclosed auto-eroticism which has succeeded in replacing the lost object with its own processes and parts ... (and hence) ... the drive involves the process in which the subject detaches part of itself from itself, and in attempting a reincorporation, returns this movement back to the subject's body. This movement outside and back again is only ... (possible) ... if the *objet a* ... is not a Real object, but the 'presence of a hollow, a void, which can be occupied ... by any object'" (Grosz, p. 77).

Relating this to the practice of music composition, a Lacanian perspective would assert that my drive to compose stems from a *desire* that is situated within the Symbolic. This desire is in fact the Desire of the Other, i.e. the desire of an appreciative audience. My Desire-as-Drive breaches the erogenous rim marking my standard static boundaries, and

strives to reach outwards towards the attainment of a suitable object, such as a collection of raw sound samples along with the goal of their subsequent processing and organization. These objects and goals are always interchangeable and substitutable with any other: different sound samples could be chosen, or alternatively the same ones could be recast into different contexts and presented in different ways. I am able to achieve a sense of satisfaction even if my ultimate goal – the desire, or approval, of the (imagined and Imaginary) audience – is not attained, because Desire-as-Drive is satisfied through the very effort of breaching my boundaries, reaching towards satisfaction, and then returning to within my boundaries. A circuit of autoerotic self-satisfaction is thus completed through the very act of composition itself, over and above any approval provided by an external listener or audience. It should also be noted here that Lacanian theory requires that the drive to compose is inscribed into me by the Symbolic, i.e. by the forms, rules, customs and language of the music social scene. This drive, with its accompanying desire, is the inscription of the musical Symbolic into my unconscious. My discovery and response to the Desire of the (musical) Other can then be regarded as a form of *learning*, specifically in relation to the unconscious adaptation to the presence and social-musical structure of this Other.

However, Lacanian theory guarantees that even if approval *is* granted, my desire would nonetheless remain unsatisfied, as the external *objet a* of desire is intrinsically imaginary and therefore unattainable. Although applause and approval is clearly appreciated by any performer or composer, it cannot complete the *lack* or void marking the split of the Lacanian subject, which in principle requires constant and ever-renewed approval. Hence

the applause must be sustained; and yet, as even this approval is but one form (the musical-social type) of the Imaginary *objet a* or goal, it is ultimately empty and ephemeral. Hence, as Kristeva points out (1984, pp. 131), “Desire will always be seen as an already accomplished subjugation of the subject to lack: it will serve to demonstrate only the development of the signifier” rather than the physical processes producing it prior to the Mirror Stage. The Lacanian subject is then “the subject, precisely, of desire who lives at the expense of his drives, ever in search of a lacking object” (Kristeva, p. 132). Kristeva’s criticism of Lacanian theory is that “lack alone cannot motivate a move away from the maternal body and into language ... the logic of separation that is taken over in language is founded on pleasure as well as lack, or lack experienced as pleasure” (Oliver, 1993, p. 33). For Kristeva, the ‘logic of separation’ producing subjectivity is inherent in the body from birth, and “is experienced as pleasurable” (Oliver, p. 33), for instance in the bodily excretory processes experienced during infancy. The semiotic drives that later are evidenced in language as rhythm and intonation originate within the “primal mother-child symbiosis ... (marked by) ... the rhythms and sounds of their bodies together fused into one ... their bodies physically ‘signal’ to each other before the onset of language proper, before the mirror stage. Their semiotic relation sets up the onset of language proper” (Oliver, p. 34).

On the other hand, “(f)or Lacan, the subject can see itself only as the image reflected in the mirror ... the self is reflected in the Other ... which results in a primary frustration that becomes the ultimate driving force behind human life ... when the child realizes that the ... (mirror image) is alien and beyond its control and yet constitutive of its own

identity, a struggle begins” (Oliver, p. 37) – a struggle in which subjectivity is recognized only through a visual intermediary, be that of his own image or that of another individual. Desire is ‘assimilated’ to the subject’s own image, or to that of the body of another separate being. Oliver explains that “(t)his specular relation, where the subject can see itself only through the other, leads to an absolute rivalry with the other. The subject wants to annihilate the other so that it might exist”. (Oliver, p. 37). The other is now permanently separated from the subject; however, this ‘other’ is usually the mother, with whom the child has previously enjoyed an intimate dyadic relationship. The ‘other’ “shows how the subject is alienated from the world” (Oliver, p. 38) and (as explained above) can never successfully connect desire (which is inscribed onto him by external forces) with subjective identity. Hence,

the tension between the subject and object is unresolvable. If the object is unified and autonomous, it cannot be had by the subject ... (and so) the subject’s desires remain unsatisfied. The subject remains fragmented. As long as the object is whole the subject cannot be. On the other side, if the subject is whole, the object cannot be ... (and thus) the mirror stage is a fight to the death where desire cannot be satisfied except by moving on to another way of conceiving the relationship. (Oliver, p. 38)

Kristeva however, criticizes Lacan’s emphasis on the visual or scopic drive that is immanent in his account of the mirror stage. For her, semiotic aspects exist within the Symbolic together with symbolic elements. Lacan’s idea of the Imaginary is defined purely within the boundaries of the Symbolic, whereas for Kristeva the process of signification, constituting the subject’s entrance into the Symbolic, contains elements of

her understanding of the Semiotic, that have been present since the earliest times of the mother-child dyad. Oliver points out that Kristeva

has a more sophisticated definition of the Symbolic than Lacan's. For her the symbolic function – the ability to take a position or make a judgment – is just one aspect of signification ... (whereas) for Lacan signification is synonymous with the symbolic function. (Oliver, 1993, p. 39)

Taking a position or an identity is part of the signifying process that Kristeva names as the *thetic phase*. This involves a 'breaking into' the Symbolic of semiotic drives and articulations, prior to and leading up to the mirror stage. For Kristeva, there is already present in the infant body a type of *rejection* or *negativity* that eventually gives rise to a 'thetic break' in which the child is finally positioned to acquire an identity – namely, the reflected mirror image and the speaking subject. In this process, "the semiotic functions as the negative or surplus of the signifying system. It functions as the precondition to any signification. Although the instinctual semiotic, prior to meaning, is 'mobile' and 'amorphous', it is also 'already regulated' by material laws" (Oliver, p. 41), i.e. those regulated by the mother within the mother-child dyad, and by the oral and excretory processes of the infant itself. However, "after the thetic phase the 'logic' of the semiotic is taken over by the symbolic" (Oliver, p. 41).

In the conscious speaking subject, the thetic therefore marks the point at which the Husserlian 'transcendental ego' (the analytical observer of this study's discussion) is established. The term 'thetic' is related to the word 'thesis', a concept or notion requiring the presence of an external consciousness already constituted within the Imaginary and

Symbolic. As discussed, such presence is not automatically assumed for Lacanian psychoanalysis, and instead is generated through a subjective identification with a totalized image located within a constituted, or imagined, space. The thetic marks the moment at which personal identity may be conceived, and is positioned at the point at which the individual is first able to posit ideas, identities, and concepts. This notion of the thetic can thus be used to develop a Kristevan approach to understanding and analyzing the process of early childhood learning. In Kristeva's theory, a dialectical dynamic between Semiotic drives and the cultural influences of the Symbolic constitute subjectivity, and since this may apply to all subjective processes, learning is also included. 'Learning' in the Kristevan perspective is therefore not viewed in terms of a separate, unified consciousness receiving information from external authoritative sources, but instead as a manifestation of a process during which subjectivity is posited through the thetic, challenged and destroyed by Kristevan Semiotic drives, and then re-posited as a new thetic, thus constituting an ever-changing, ever-evolving cyclic process.

The thetic phase is therefore a critical point in postulating the speaking, conscious subject, as "there is no symbolic function without the subject situated through the thetic phase" (Oliver, 1993, p. 41), which for Kristeva, is the result of contradictory and heterogeneous processes. Although the semiotic disrupts and breaks the thetic, it does so

only insofar as it *enters* it (her emphasis) ... in order to then break it. The semiotic in signifying practice needs laws, boundaries, and stases, in order to go beyond and transform them. The semiotic uses the law against itself. Although the dialectic between them frustrates both and maintains a constant tension, the semiotic needs

the symbolic as much as the symbolic needs the semiotic. Together, in constant dialectical alternation, they make up signifying practice. (Oliver, p. 41)

This tension and mobility between the symbolic and the semiotic domains is guaranteed by Kristeva's account of *negativity* or *rejection* "which is the movement of heterogeneous matter, drives ... (that) eventually produce symbolic unification" (Oliver, p. 42). The term is not used in the usual sense (as the 'negative' to a stated or imagined 'positive'), i.e. not as argument as constituted by words, concepts and structured speech. That could only exist within the Thetic – within the symbolic realm of language, idea, concept, and identity. In the Thetic, the 'negative' functions as a linguistic, conceptual opposite to a given postulate or idea. As an idea and a thesis in itself, this 'negative' is thus more correctly named an 'antithesis' by virtue of its oppositional or dialectical relation to the original thesis. Its visual metaphor is the photographic negative, in which the image, while clearly defined and visible, is inverted. Due to the possibility of confusion with her use of *negativity*, Kristeva also uses the word *rejection* to denote "a specific kind of negativity that functions as the logical and material operator of signification. Rejection is the separation of matter, one of the preconditions for symbolization ... the material element that is heterogeneous to the Symbolic ... (and) not unique to the symbolic function or the Symbolic order. Rather, it first operates in the semiotic body ... as maternal regulation ... (and) the patterns and structures of signification operat(ing) on a material bodily level before they operate on a Symbolic level" (Oliver, p. 43). For Kristeva, rejection is the added dimension to psychoanalysis that most fully explains the development of identity during the Mirror Stage: "Kristeva maintains that without material rejection we cannot explain the transition from the presymbolic to the Symbolic.

We cannot explain what motivates the move through the mirror stage to the Symbolic. Lacan, of course, gives the castration threat as the motive. But in order to experience this threat in the first place, the child must take a position as a subject in the mirror stage. It must recognize that it *is* its image but that it is *not* its image. It must ‘see’ the gap between its body and its image, the other ... (and for Kristeva) this move is already *thetic* and *symbolic* ... (as it indicates that) the mirror stage already requires a negation of the other in order for the child to identify as a subject/self ... (and) since negation is already a judgment ... (that) can only be made from a position ... (then) it is already *thetic*. In other words, in Lacan’s account, we seem to be moving in circles: the child takes a position as subject so that he can negate his image in order to take a position as subject ... (and so) ... rather than prefiguring either the symbolic function or the Symbolic Order, the mirror stage is already symbolic” (Oliver, p. 43; her italics). For Kristeva, the bodily and material logic of negativity (specifically, rejection) explains the inconsistency in the Lacanian account by introducing a “material rejection set(ting) up a logic of excess that eventually gives rise to speech” (Oliver, p. 43). In Kristeva’s interpretation of the *Fort-Da* game, the bodily and gestural act of throwing and retrieving the reel is more significant than Lacan’s symbolic and metaphoric interpretation, because “the negativity necessary for the onset of subjectivity is already operating in the body” (Oliver, p. 44) and hence precedes the symbolism of Lacan’s and Derrida’s accounts.

Thus, it is at this point that Kristeva’s account of desire in psychoanalytic theory can be differentiated from Lacan’s. For Kristeva, negativity, or rejection, acts as an excess that must be separated and expelled. Since this separation and expulsion begins from the

orality and anality of earliest infancy, it precedes the Symbolic, and (as Kristeva points out) corresponds to an “acute pleasure ... coincid(ing) with a loss, a separation from the body, and the isolating of objects outside it ... a separation which is not a lack, but a discharge, and which, although private, arouses pleasure” (Kristeva, 1984, p. 151). This differs markedly from Lacan’s view of separation resulting from the mirror stage and constituting the subject with its identity, together with an essential ‘lack’ that can never be fulfilled. Kristeva’s view outline above is that “material negativity is founded on excess” (Oliver, p. 44), i.e. the pleasurable separation and rejection of excess matter “which coincides with a loss, a separation from the body, and the isolating of objects outside it” (Kristeva, 1984, p. 151). The pleasure associated with expulsion and separation must however, be repressed as it threatens the unity of the Symbolic, for “(t)he unity of reason or consciousness cannot admit that it is part of a process that alternates between unity and the fragmentation and repetition of drives. To admit this, of course, is to admit that it is not unified” (Oliver, p. 45).

In a remark that anticipates the analysis of the various repetitions, entries and fading moments of the electroacoustic piece studied for this thesis, Oliver notes that this ‘repetition of drives’ does not simply imply an unchanging cycle of starts and stops within the drive economy of the subject. Instead, “rather than merely repeat the same identity, it creates something new. As such it is not only the demise of the symbolic function but also its renewal ... rejection is not only discharge but also build up ... (resulting in) stases, plateaus where excitation is posited and only then discharged. Eventually, this oscillation between rejection and stasis jolts ... (the) body into thethetic,

and into the Symbolic, where the body is represented by a sign” (Oliver, 1993, p. 45). The renewed cycles of rejection and stases eventually lead to a *thesis*, in which a position is taken or an identity postulated. This is then followed by further cycles of rejection and stases, resulting in a multiplicity, or heterogeneity, of theses or positions. In contrast to the Lacanian view of desire as founded upon an intrinsic lack, Kristeva connects this multiplicity of positions to the origins of desire *within* drive, “for identification with the other or the suppression of the other are locked within family structure; it is in the family that relations of rejection become intersubjective: they become relations of desire” (Kristeva, 1984, p. 174). In the Kristevan perspective, rejection and stasis act both with and against each other in a dialectical semiotic process that renews thethetic, ultimately enabling “the would-be speaking being to metonymically replace its privation and excess with a signifier” (Oliver, p. 46). Kristeva’s speaking subject thus locates its earliest origins in the physical rejection inherent in the body of the infant combined with the maternal regulation, or maternal law, defined and described by the archaic Semiotic Chora. Oliver then explains, “it is this pattern of maternal regulation that sets up the infant’s recognition of the paternal ‘no’ or the Name of the Father as it operates in the Oedipal situation. The maternal function ... *prefigures* the paternal function” (Oliver, p. 47, her italics) and hence the pre-Oedipal, pre-Symbolic drives of negativity and rejection precede – both chronologically and logically – the genesis of desire as understood from within the Lacanian Symbolic. This idea has musical implications, and within this thesis, rejection, negativity and their early functioning within the Semiotic Chora will be understood and explained more fully in later chapters, within the context of the unconscious or ‘automatic’ aspects of music composition.

Kristeva, the Artist, and the True-Real

The 'True-Real' is a category named and developed by Kristeva and is based on the Lacanian notion of the 'Name of the Father'. Lacan's concept is tied to the origins of the Symbolic – the Name of the Father is the social, or Symbolic representation of the 'Big Other' which the subject, having been castrated and socialized during the Oedipal process, comes to recognize, accept and introject. Preceding this 'Big Other' was the 'small other', referring to the dyadic relationship between an infant and its mother. This relationship belongs to the earliest stages of infancy, and continues to the Mirror Stage and the advent of the Lacanian Imaginary, during which the child first recognizes its fabulous though deceptively unified specular reflection, thus inaugurating the existence of the conscious, the unconscious, and the recognition of an 'other'. Subsequent to this stage is the Symbolic, during which the child learns language and social rules that critically include circumscribing his desire for the mother – hence Freud's and Lacan's use of the term *castration*. The benefits of castration are the genesis of a defined human sexuality functioning within the Symbolic, as well as the provision of 'rules of engagement' for interactions as encountered and expressed through Lacanian Desire. This Desire forever reaches outward and in principle cannot be satisfied, as it originated in the initial experience of a lack or emptiness. As soon as the infant has recognized the presence of an 'other' – initially, the 'small other' as the mother – the experience of lack is created, as this must logically be accompanied by a recognition of the absence of the mother, and hence with the realization that the child is not complete; nor can he or she ever have total or guaranteed completion, as he is no longer in the ubiquitous world of the

Real.

In taking on the Name of the Father and accepting the constraints of the Symbolic, subjectivity is born and the individual then takes on the intrinsically social identities of language and rules of engagement. On the one hand, this implies an eternal alienation from the Real, and a permanent sense of 'lack' for the subject; however, Lacanian castration (on the other hand) provides the benefits of a constructed identity along with its integration into the world of relationships and society. Kristeva posits the *True-Real* as a way for the subject to entirely circumvent or avoid this process, by never entering into it in the first place. This is a situation that should be clearly distinguished from a simple rebellion against the Symbolic. For Kristeva, conscious rebellion is still clearly expressed within the Symbolic – for instance political rebellion in the form of highly structured philosophies and rules of engagement such as those found in Marxism. Another kind of rebellion against the Symbolic could be the subject arguing against definitions and names for objects. However the subject of the True-Real has 'foreclosed the Name of the Father' by not even accepting even the possibility of names or rules at all. Such an instance shows that rejecting the power and presence of the Symbolic even before the Symbolic can also constitute subjectivity. However, the danger of psychosis arises, in which objects (that are still recognized as such from the Imaginary) no longer have any names for the individual – or even any possibility of being named – but are instead experienced as a particular kind of truth or reality in themselves. This mitigates against a normative experience of the Symbolic in which objects are named, described and clearly alienated from the individual subject. However, critically, Kristeva points out that while the True-

Real can constitute a type of psychosis, it can also provide an important experience for an artist or a poet. The direct and affective nature of musical sound would for example, provide an example of the ‘poetic True-Real’, in so far as the actual sound itself cannot be directly ‘seen’ or ‘named’ as such, but is instead directly experienced by the brain via a particular kind of ‘tactility’ (that will be later elaborated upon). In contrast to visual art, musical sound is not experienced quite as evidently separated from our identities, and presents itself as ‘true’ and ‘real’ in that it does not require the intervention and mediation of visualization, or of symbolic naming and interpretation.

The Musical Text: a Kristevan Approach

Within music practice, the Lacanian Symbolic is presented in the form and traditional representations of music notation, unwritten performance traditions that must be learned, and formal aesthetics and artistic values. The notion of *text* adapted to music can then be understood as musical notes, their groupings and arrangements, and a variety of written performance instructions (*allegro*, *crescendo*, *ritardando*, etc.). Following Kristeva (1974), I consider these instructions and ideas to constitute a *musical Phenotext*, corresponding to the Kristevan phenotext within in poetic language that denotes the literal written text as a mundane communication situated strictly within the Lacanian Symbolic. On the other hand, the associated musical *Genotext* – that for Kristeva defining the underlying subliminal rhythms and textures of a poem – would, in a musical printed score, be revealed by the visual arrangement of note groupings and sectional divisions. Kristeva pays particular attention to the gestures and rhythms of the literary genotext; within twentieth century music notation, these may be indicated (for instance) by the

particular visual presentation of a Stockhausen score.

Within poetic language, another example of the visual presentation of genotext is given by Mallarmé (Lechte, 1990), who deliberately arranges the printed words towards to a chosen position on the page, i.e. into the particular line or area of the page they are intended to occupy. The visual impression then constitutes an aspect of the genotext, as it is not meant to be described by language, but rather is directed towards and assimilated into the Semiotic drives of the individual encountering the poetry. In the case of an unusual visual arrangement of a musical score however, the visual groupings indicate lesser poetic intent than with Mallarme, as the particular arrangement of the musical groupings is usually more mundane: to facilitate a certain understanding for the purposes of musical performance. Hence, while such musical scores convey a sense of visual genotext, their function is ultimately oriented towards instruction rather than conveying the broader poetic intent of literary genotext. Thus, as an arrangement of rules and instructions, even a visual arrangement of the musical score would seem to be situated entirely within the realm of the Symbolic. However, I also suggest that a musical score carries a ‘psychic energy value’ from the Kristevan Semiotic, meaning that there is some overdetermination or excess within the visual presentation. For example, in publishing a performance score in which the parts are visually arranged according to a unique pattern of colours, shapes and printing styles, Stockhausen’s immediate and practical intent was to facilitate clear performance instructions, but together with this there is also the conveying of enjoyment and play in the manner Stockhausen has actually ‘performed’ his visual arrangement. His own handwriting is printed on the score, together with cartoons,

wavy bar lines, and other visually poetic devices. Hence a Stockhausen score may serve as an example of where the Genotext can appear even within the printed musical phenotext:

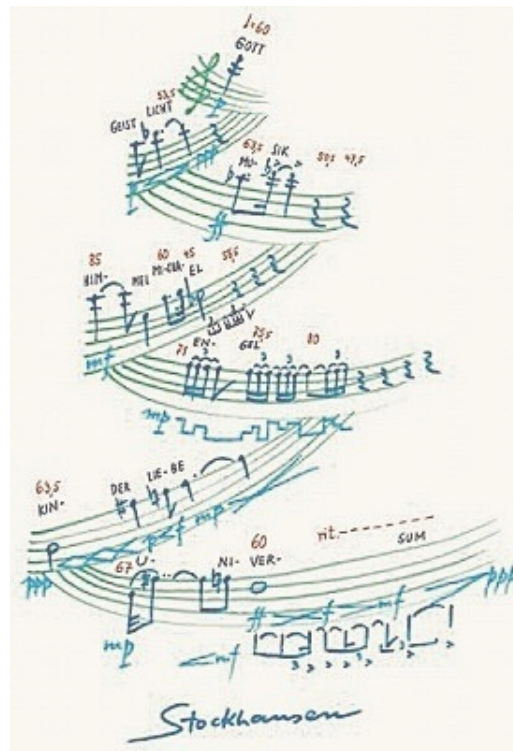


Fig. 1. Stockhausen score with both Phenotext (instructions) and Genotext (from <http://www.pinterest.com/ethawilliams/augenmusik-seeing-musical-notation/>)

Furthermore, with regard to the handwritten musical score – the first drafts or manuscripts of a composition – many examples can indicate the presence of a musical Genotext. Beethoven, with his evidently strong physical and psychic drives, can serve as a good example: for instance, the manuscript of the ‘Moonlight Sonata’, showing evidence of tremendous rush and fury – the note lines are bent forward like poles in a hurricane; the note values at the top of the note lines are barely marked in, as if in a

hurry; the graphical outline of the sheet paper shows little regard for conventional structure (the clef lines are barely visible). There is also evidence of intense reworking, giving the impression of the activity of a battlefield:

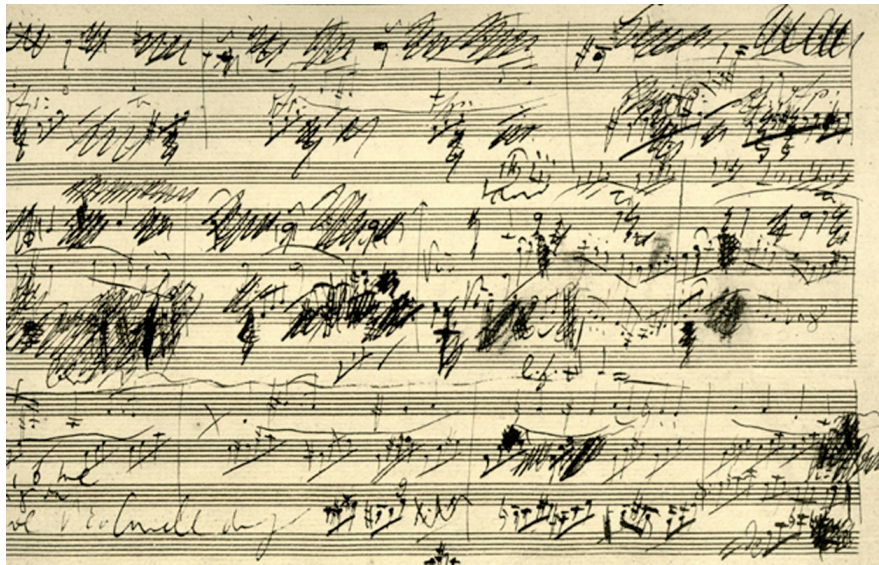


Fig. 2. Beethoven: Cello Sonata – manuscript (from http://lvbandmore.blogspot.com.au/2010_08_01_archive.html)

Composing Music: a Lacanian Approach

During piano music practice, kinesthetic abilities (the spatial awareness of the arms and hands, and the feeling of muscle tensions in the wrists, upper arms and shoulders) combine with tactile sensory experience of the hands and fingers. Together, these interact with the visual domain that in piano practice is constituted by the keyboard layout and the sheet music. Prior to this, the origins of the subjective ‘body-image’ were located within the Mirror Stage, during which the intuitive sensing and locating of the body's muscular structure (as subjectively felt from the ‘inside’) is visually mapped onto a totalized

external image. Piano practice is a complex example of the body-image being linked to the *musical* Symbolic, i.e. the keyboard, the sheet music, and musical and performance culture in general. For example, the standard piano keyboard, as a repeating distinct pattern of black and white keys, is visually anchored within the Symbolic and so is encountered by the student as such:

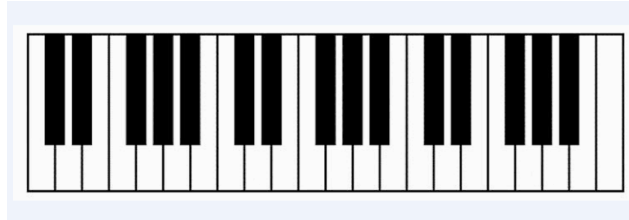


Fig. 3. Piano Keyboard Layout

In fact, the aural experience of music can itself be regarded as comprising another aspect of this ‘Imaginary body-image’, as every piano student needs to learn to listen to the sound of his or her own playing within a variety of different acoustic environments. The immediacy of such ‘aural feedback’ can therefore be regarded as constituting another type of specular, or reflected, image for the piano student. Once he has learned to carefully listen to the sound of his own playing, this ‘reflected aural image’ then becomes the means by which he is able to directly and immediately listen to the totality of his own musical and physical actions ‘reflected’ back to him – in this instance as an aural rather than a visual reflection.

With the composition of electroacoustic music using a computer, the ‘aural reflection’ is not immediate, but is instead displaced in time to the moment of playback. During the composition process, individual sound samples can be heard and examined quickly, as

they are shorter and hence almost immediately available for preview. However, as the composition evolves and matures, the textures and sounds become more complex, and the direct contact between fingers, keyboard and aural image becomes less apparent: the composer must first craft the piece, and only then hear the result. During the process of composition, the composer's drives achieve expression and representation within the Symbolic as an aural reflection, or an acoustic image of these drives. Within the Freudian perspective, visual images, though deceptive, can be regarded as corresponding to the condensations and displacements characteristic of dream interpretation, thus providing a disguising function for the drives. In Lacanian theory these images are analyzed and described using the literary functions of metaphor and metonymy. In my own adaptation of the Lacanian approach to the process of musical composition, the ideas of the 'reflected aural image' and the 'ideal body image' are then introduced to analyze and describe the composing process, that however is not immediately 'aurally reflected' back to the composer as is the case within the visual domain, but is instead processed, transformed and displaced in time to a future moment of listening. However, as my ideas are based in the traditional linguistic methodology of Freudian and Lacanian psychoanalysis, they are more readily applicable to literature, drama and poetry, and their usage within a musical context needs to be more fully explained and justified.

In attempting to apply Lacanian theory to the process of musical composition, I begin by describing music as a closed signifying system, generated by a subject who experiences a lack (or void), which then becomes the basis for desire. Lemaire (1970) explains that this lack is generated during the Mirror Stage, when the child first (mis)apprehends his

totalized image in a mirror. He identifies with this image, mistaking it for a true and complete representation of himself: he is logically incapable of experiencing a kinesthetic wholeness within his own body that could correlate to the immediate unity of the reflected image. A conflict is generated between this reflection and the kinesthetic sense, in which the only available “anatomical complement” (Lemaire, p. 162) to the feeling of an uncoordinated physical self is given by the reflected and totalized image. This schism between the image and its subjective physical self is experienced by the child as an “irreversible incompleteness” (Lemaire, p. 162) that for Lacan constitutes the basis of desire, demand and language. From this perspective, language is then a function of the subject who desires, identifies with, and yet is alienated from his reflected image. Lemaire explains that (consequently) the subject is intrinsically unable to consciously express innate physical and psychic needs: “the subject is divided into two parts: *his unconscious truth and the conscious language which (only) partially reflects this truth*”; this division of the subject “is the reason for man's radical inability to find anything to satisfy him” (Lemaire, p. 163). Thus, the divided subject is produced in the mirror stage, which for Lacan generates both the unconscious and the conscious subject. Both consciousness and the unconscious are therefore products of misrecognition, lack, and false identification, which then generate desire and language. Thus, language is situated within the unconscious as well as within the conscious mind. Within the unconscious, language takes the form of ‘elementary signifiers’ that Lemaire describes as disconnected “pointillist impressions” (Lemaire, p. 163). These signifiers exist in the unconscious not as referents or meanings for an external world, but rather as the possibility of metonyms and metaphors for one another – correlating to Lacan’s famous maxim that ‘the

unconscious is structured like a language'. As metaphors for each other, these elementary signifiers can be metonymically strung together into chains of words, which however cannot in themselves convey meaning or desire, as "no logical connexion holds them together ... (hence) ... it is impossible for the subject to formulate the desire they enclose, except in a more elaborate linguistic form, such as the phantasy" (Lemaire, p. 163).

By analogy, music can then be understood as an expression of elementary signifiers: sounds and pitches, chords and textures, durations and rhythms, and melodies and themes – all without referent or meaning, but instead comprising a diachronic chain of acoustic events, or 'musical signifiers'. Music is thus able to convey a direct aural experience that consists of a chain of aural metonymy (in its dynamic flow) and as a series of acoustic metaphors (in its recapitulations and substitutions for previous themes remembered in the immediate past, or as tones heard in different ways due to their presence in different chords and contexts). In this way, listening to and composing music is similar to speaking and listening to language, except that it does not pretend to refer to a unified external reality; instead, it simply aspires to a subjective sense of cohesion through the use of aural chains of metonymy and metaphor. Regarding 'phantasies' (or fictional linguistic forms of story-telling and poetry), Lemaire states that they "are one of the modes of the hallucinatory satisfaction of desire" (Lemaire, p. 165), and music – both for the composer and the listener – also belongs to this category, as it constitutes a type of 'acoustic poetry' (or as Beethoven termed it, 'tone poetry'). In developing this line of reasoning, I can then state that if musical composition is comprised of chains of aural metonymy and

metaphor, *learning* to compose music can then be associated with the formation of the unconscious, just as with the learning of speech, of objectification and of conceptualization within the Lacanian mirror stage.

Additional to this are the introceptive elements of sensuous aural texture and rhythm that are also present in poetry (Kristeva, 1974) – that which is felt by the listener, rather than explicitly recognized. Unlike poetry however, music radicalizes the Semiotic aspects of linguistic sound to the point where words and syllables are dissolved directly into pitches, chords, themes and textures. Previously, I discussed the Kristevan notion of the *True-Real*, describing the subject who ‘forecloses’ the very possibility of language, instead directly experiencing objects and phenomena as a kind of ‘truth’, or ‘reality’, in themselves. Kristeva explains that although an experience of the True-Real can lead to psychosis, it can also yield an important experience for the artist or poet. The direct affective nature of musical sound, in which the music cannot be directly ‘named’ as such, then presents itself more as ‘true’ and ‘real’ (in the Kristevan context), and without any need for mediation by symbolic naming and interpretation. Denying from the outset the possibility of defining identities and conveying their meaning, music ‘forecloses’ on signification and instead aspires only to convey the chains of signifiers of the unconscious. From the Lacanian viewpoint, the student composer must therefore learn to ‘speak’ directly through affective sound, reaching into the unconscious to discover, separate and formulate those elementary signifiers that “pin down the moment of separation of ... lived experience and the hallucinatory reliving of it” (Lemaire, p. 165). At these moments, artistic practice can occur, and a subjective musical identity may be

generated.

Music and the Kristevan Semiotic

The significance of the ‘foreclosure’ upon signification within the True-Real is discussed by Välimäki (2003), who explains that “in music the (Kristevan) semiotic is not submitted to any primal symbolic semantics ... meanings are experienced essentially as semiotic ... in the words of Roland Barthes: ‘In relation to the writer, the composer is always mad (and the writer can never be so, for he is condemned to meaning)’” (Välimäki, 2003, p. 253). This however does not necessarily imply psychosis as “there are exceptional kinds of signifying practices, such as music, in which semiotic processes dominate” (Välimäki, p. 253) but which do not entirely overwhelm the structures of the Symbolic. Hence, music remains a signifying practice, but one in which the Kristevan Semiotic prevails, in the form of rhythms, textures, and musical time. Välimäki again refers to Barthes, who regards music as based on dynamic “bodily expressions of emotions ... bodily-based metaphors” (Välimäki, p. 256) that are ‘archaic’ in the sense that they predate the Symbolic, and so instead are located within the Imaginary, i.e. at the stage in which early subjectivity and bodily awareness are constituted. In music performance, gestural and motive aspects such as scales, cadences, leaps and other examples of musical motion could then be regarded as “relics of archaic meaning schemata” (Välimäki, p.256), or ‘somathemes’. For Kristeva, the physical basis of these ‘somathemes’ – the primitive origins of these gestures and utterances – are located even prior to the Mirror Stage and the construction of Lacanian subjectivity; for her, the rhythms, ebbs, flows and ruptures of the Semiotic Chora originate within the earliest

phases of the dyadic relationship between mother and infant. She claims that the rhythms of the Semiotic Chora also constitute subjectivity for the infant. Therefore, as the mother-infant dyad precedes the Lacanian Imaginary both logically and chronologically, Kristeva's intervention is seen as adding to traditional Lacanian psychoanalytic theory, by addressing the formation of infantile subjectivity prior to the Mirror Stage.

Along with these 'somathemes', Välimäki also addresses notions of *heterogeneity* and *intertextuality* that are intrinsic to the Kristevan Semiotic: "In Kristeva's view, when we are dealing with the semiotic modality of signification, we are dealing with a truly diverse, rich and excessive modality of meaning" that Kristeva "describes 'as something musical', by which she refers to heterogeneous, bodily-based meanings, where possibilities and mobility are open" (Välimäki, p. 257). Barthes' musical 'somathemes' attract and accumulate "multiple and varied meanings ... which are transparent in themselves, yet ... enable all the meanings which share the same vitality effect" (Välimäki, p. 256) of rhythm, textures, pitches and other categories generating musical expression. Consequently, "in music we are dealing with open, un-closed, un-fixed mobile meanings" whose multiplicity makes it "difficult to distinguish between ... form and content" (Välimäki, p. 257). Hence, the heterogeneity intrinsic to music tends to attack, dissolve and 'pulverize' the Thetic, specifically at the very point at which signification is postulated and formulated. In her introduction to Kristeva's essay on the *True-Real*, Toril Moi states that "the speaking subject in search of the 'true-real' no longer distinguishes between the sign and the referent ... but takes the signifier for the real (treats the signifier as the real) in a move which leaves no space for the signified. This

'concretization' of the signifier is not only typical of modernist art, but is also a striking feature of the discourse of psychotic patients" (Moi, 1986, p. 214) in whom, "according to Lacan, psychosis is characterized by the foreclosure of the Name of the Father" (Moi, p. 215) – the very possibility of entering the language and the Symbolic register is foreclosed. According to Kristeva, artistic practice is located within the domain of the True-Real, as art is able to present expressive material while at the same time 'foreclosing' on the possibility of communicating literal or prosaic meaning. This is particularly so with 'pure' music, abstract painting and sculpture, and other art-forms that avoid the direct expression of a specific meaning or program. The abstract artist or musician then has this much in common with the psychotic: that language and the expression of prosaic meaning do not occur within their signifying practices. However, the artist is able to avoid a descent into psychosis by introducing and maintaining some facets of the Symbolic within artistic practice – for instance, form, shape, contour, and overall structure. In balancing the True-Real with the Symbolic, artistic practice is then able to combine 'the best of both worlds' into an integrated expression of emotion, drive and intellect.

As the True-Real implies a foreclosure upon the very possibility of signification within the Symbolic, it would seem that such a foreclosure implies the absence of any type of psychic repression, as the notion of repression itself indicates the pre-existing presence of something to be repressed. However, Blake Leland (1992) does regard the Lacanian foreclosure as a type of repression: "a repression of the thesis of castration (which founds the process of signification)" (Leland, 1992, p. 184). This repression is "so intense as to

produce a psychotic moment in which the desired Truth of 'the one sign' appears as an objective reality hallucinated as arising from outside the subject" (Leland, p. 184). This notion may be applicable to the experience of the music performer, or of the deep listener, or indeed to that of the composer himself. As Kristeva writes in *The True-Real*, "Psychosis proceeds by the disavowal of reality (i.e. the truth of the signifier – separability, otherness, death) and demands that the signifier be real in order to be true" (Moi, 1986, p. 226), thereby creating an impression or 'hallucination' of the Real that in fact consists of a foreclosed signifier.

Thus, the Real – that which (for Lacan) lies outside all of human apprehension and knowledge – irrupts into experience within music, even if as hallucination alone. This can now also be applied to my previous discussion of the 'meaning' of scales, cadences and small-to-large scale musical structure in general. As explained, the accomplished performer needs to 'feel' or conceive this meaning in advance, and then let it emerge on the keyboard as physical practice accompanied by auditory experience. There are no immediate referents or 'signifieds' with which to structure the ensuing music (although the influence of culturally-learned performance practice and tradition cannot be ignored within a wider context). Hence, this approach to music-making may be regarded as a form of hallucination, albeit one with deep roots in Kristeva's bodily drives and Barthes' gestural expressions.

Because music (in particular abstract or 'pure' music) is characterized by signifiers without referents, musicians (and dancers) may then find the True-Real more and more

natural mode of expression than the poet, who (as Leland explains) “must negotiate an Imaginary tightrope without falling either into a Symbolic domain which threatens to dissolve the unity of signifier and signified, or into a psychotic condition which, although it would affirm the reality of the truth he seeks, would irrevocably bar him from communicating that truth” (Leland, p. 185). This may be more difficult for the writer than the musician, because the writer, using language as a basis for the production of meaning, would have to find a way to disconnect a signifier from any referent, which amounts to having to constantly pulverize the Thetic within a medium that is nonetheless encountered, and read within, the Symbolic. The difficulties in accomplishing this are mitigated by a variety of Semiotic aspects that are allowed to appear within poetry (Kristeva, 1974; Lechte, 1990), i.e. rhythm, repetition, nonsense, and so forth. However, the musician has the advantage over the poet insofar as musical performance is essentially immediate and physical, and (if sufficiently abstract) devoid of signification, thus anchoring the performer and listener closer to within the Imaginary (and to the Real), where meaning may be intuitively generated – or ‘foreclosed’ – by means of the archaic body metaphors, gestures and rhythms discussed above.

Significance: Generating Meaning in Science and Music

Thus, musical practice can be psychoanalytically understood as being an instance of the ‘True-Real’, as even the possibility of perceiving or communicating a defined message is prevented, and a fine balance is maintained between a sense of structure and form, and the wilder, untamed impulses of the Kristevan Semiotic. An abstract musical composition (such as that presented for study in this thesis), although clearly and definitely structured,

has no referent with respect to a specific meaning, and as such is not properly situated within the symbolic domain of prosaic language and symbol, but (as explained above) is instead a function of the True-Real.

At the same time, music may nonetheless be regarded and examined as a type of signifying practice, as it is produced by human activity with the intent to conveying meaningful expression to an alert and receptive audience. Lacanian and Kristevan theory both suggest that musical signification radically differs from scientific procedure, and a comparison and assessment of the two signifying practices is essential to an autoethnographic study in which both science and music appear so prominently. As I am attempting to reach an understanding of how I discovered and learnt musical composition from within the constraints of a previous scientific background, it is reasonable to examine and contrast both these areas of activity in the context of the generation of meaning within social and cultural life.

From the Kristevan perspective, both Science and Music can be regarded as signifying practices generating meaning. However, their respective relationships to the Semiotic and the Symbolic are very different. In *Desire and Language*, Kristeva explains (1980, p.134) that “scientific discourse, aspiring to the status of a metalanguage, tends to reduce as much as possible the semiotic component”. This implies a severe suppression of drive motility and expression: “Language as symbolic function constitutes itself at the cost of repressing instinctual drive and continuous relation to the mother. On the contrary, the unsettled and questionable subject of poetic language (for whom the word is never

uniquely sign) maintains itself at the cost of reactivating this repressed, instinctual maternal element”. Although the subjective cost of functioning almost exclusively in the Symbolic (for instance, scientific practice) is indicated here, some benefits also exist that relate to preventing the reactivation of the repressed drives of the Semiotic Chora.

The avoidance of this reactivation is beneficial insofar as it keeps the Kristevan Abject at a safe distance from subjectivity. The Abject denotes that which remains hidden but which nonetheless traces the edges and outlines of the Symbolic: disgust, ‘powers of horror’, defilement, revulsion, the smiling assassin, and the physical corpse clearly showing and displaying (not merely signifying) death. For Kristeva, the Abject is that which constantly threatens to destroy boundaries of structured identity, and as such is related to both Negativity and to the Semiotic Chora. In threatening the borders of identity, the Abject denies and attempts to dissolve those boundaries that are needed to understand and separate the ‘inside’ from the ‘outside’ of the identity. This then relates not only to boundaries between ‘internal’ and ‘external’, but also to the very notion or basis of separation itself, which (as discussed previously) originates in the Mirror stage. With its constant proximity to subjectivity combined with its strange and intrinsic lack of object-ness (it cannot be defined as it always skirts just beyond the boundaries of the subject-object definition), the abject “draws me to the place where meaning collapses” (Kristeva, 1982, p. 2).

Engaging in Science and the Symbolic prevents the reactivation of the repressed drives of the Semiotic by denying the Abject, by ignoring it and consigning it to irrelevance. In this

sense, an alternate version of the 'True-Real' can be said to come into play, in which, foreclosing on the very possibility of the drive-to-nullification of the Abject, the scientist 'hallucinates' a reality with clearly defined boundaries that do not recognize the existence of internal subjective forces. The benefit to the conscious subject then lies in the suppression of the 'un-nameable drives' that threaten his unity, and he is then able instead to enjoy the secure hallucination of himself as a 'transcendental ego'. The cost however, is that the repression of these drives ultimately tend to catatonic disconnection from the body's physicality.

Language itself is described by Kristeva (1984, p. 49) as a 'defensive function': "If language, constituted as symbolic ... protects the body from the attack of drives by making it a place – the place of the signifier – in which the body can signify itself through positions ... (then) ... fantasies remind us, if we had ever forgotten, of the insistent presence of drive heterogeneity". This notion of language as a defensive structure has bearing upon, and thus can be adapted to, the signifying practices of both science (as 'language') and poetry or music (as 'fantasies'). The 'defensive function' of language assists the illusion of subjective unity by designating the body as a signifier. However, Kristeva's 'insistent drive heterogeneity' incessantly attacks this structuring defence, encouraging and aggravating a desire to allow, or release, drive heterogeneity and artistic fantasy. This notion can be applied specifically to musical practice, in which "the semiotic processes, far from being set adrift (as they would be in insane discourse), set up a new formal construct ... Husserl's 'thetic function' of the signifying act is thus re-assumed, but in different form ... not of a particular being or meaning, but of a signifying

apparatus” (Kristeva, 1980, p. 135).

The signifying apparatus is the musician and music combined, comprising the musician’s physical and mental faculties, the musical instrument, the musical score, and the resultant musical phenomenon. Hence, with music the notion of a ‘signifying apparatus’ can be said to exist only for the duration of a musical performance. For subsequent performances, the ‘thetic function’ is then ‘re-assumed ... in a different form’, i.e. as different music; or by using different instruments and performers; or even (if nothing else has changed) simply by virtue of the fact that it is posited and presented as a new, and hence different (or unique) performance. Furthermore, the constant interruption, dissolution and repositing of Kristeva’s Thetic occurs moment-by-moment during the performance, dissolving the previous moment while ‘positing’ the next one. In this manner, music is an example of Kristeva’s idea that signifying practice, or *signifiance*, is the incessant ‘pulverizing’ of the thetic by the drives of the semiotic chora; these drives then act in order to “make it a new device” (Kristeva, 1984, p. 51). The effect of the semiotic drives is then not simply to drift into neurotic discourse, but rather to generate a new position: “the subject, for whom the thetic is not a repression of the semiotic chora but instead a position either taken on or undergone, can call into question the thetic so that a new disposition may be articulated” (Kristeva, p. 51).

With art as a signifying practice, the ‘transgression’ of the Semiotic into the Symbolic “breaks up the thetic, splits it, fills it with empty spaces, and uses its device only to remove the ‘residues of first symbolizations’ and make them ‘reason’ within the symbolic

chain” (Kristeva, 1984, p. 69). Attacking and transgressing the thetic can extract archaic and original symbolizations that had been covered over by learned signifiers, and can then transform them into a new ‘logical’ chain of symbolic reasoning. Thus, art “does not relinquish the thetic” but instead, by constantly renewing it, exposes itself to the “risk that textual practice represents for the subject” due to “the difficulty of maintaining the symbolic function under the assault” of the transgressive negativity of the semiotic drives (Kristeva, 1984, p. 69). The artist must engage with the Semiotic without destroying the symbolic function (which would cause a psychotic break from meaning and signification). He must also engage with the Symbolic without being overwhelmed by its signifying power and subdued into enforced catatonic repression. Maintaining this balance requires the interaction between semiotic drives and transgression on the one hand, and rules, symbols and structures on the other. The unity of the subject is always ‘on trial’: on the one hand always capable of being dissolved, but also bolstered and solidified by an artificial or hallucinated signifier.

By contrast, the Semiotic is suppressed during the practice of science: “metalanguage may be said to suture the signifying process by eliminating the negative charge, by subordinating negativity to affirmation and by reducing instinctual dyads to positivity. Once it has helped constitute the real object as such ... the negative charge seems to withdraw into this symbolism and become subsumed by the *Bejahung* which Freud speaks of” (Kristeva, 1984, p. 93). For science, Kristevan Negativity and the Abject do not exist; having been exiled to a non-recognition that precedes even a negation, metalanguage is instead constituted by the primordial archaic act of symbolization itself.

As Stijn Vanheule explains, “the concept ‘*Bejahung*’ expresses the transcription of a drive-related component into a representation or signifier, and thus its recognition by the subject as an element in mental life” (Vanheule, 2011, p. 95). Within the signifying practice of metalanguage (as opposed to that of artistic practice) the subject is “not included, dissolved or implicated in the system; instead he hovers above it, subdues it and is absent from it” (Kristeva, 1984, p. 94), thus isolating the subject and turning him into the Husserlian ‘transcendental ego’ necessary for positing separate external objects. As previously mentioned, Kristeva notes that repression of the semiotic enables metalanguage and replaces the body and its drives with a ‘pure signifier’. The subjective difficulties of engaging with metalanguage and the Symbolic can then be understood as entailing the severe suppression of drive motility and expression, and the deliberate ignorance or denial of the ever-disappearing moment and ultimately of death itself. Such denial, amounting to a ‘foreclosure’ upon the recognition of disappearance of identity, is challenged by artistic practice that “considers death the inner boundary of the signifying process. Crossing that boundary is precisely what constitutes ‘art’ ... death becomes interiorized” (Kristeva, 1984, p. 70). The Freudian death drive is not ignored or ‘foreclosed upon’ during artistic practice, but is instead reincarnated as ‘semiotic motility’ which is “export(ed) across the border on which the symbolic is established” (Kristeva, p. 70). This ‘second birth’, however, then “becomes harnessed, immobilized, represented, and idealized by religious systems” (Kristeva, p. 70), which, transposed to the case of abstract art and music may be constituted by form, structure, beginning, and end.

Regarding scientific practice, the Symbolic does allow for the generation of a (manufactured) sense of subjective security – the posited unity of a (hallucinated) transcendental ego fed by the illusion of knowledge; and the visceral and subjective enjoyment of *Bejahung*, constituting the basic act of signification. However, for the artist these benefits compare poorly to those derived from engaging directly with the Semiotic in socially acceptable contexts, during which ‘permission is granted’ for bodily drives to transgress the Symbolic while a new Thetic is constantly re-posited, permitting a more complete and integrated lived experience. Mind, emotions and body are now combined with an immediate sense of the presence of time, destruction, death and renewal. Kristeva’s challenge for the artistic signifying practice is then to maintain a balance between the Semiotic and the Symbolic without collapsing on the one hand into the psychotic nonsensical discourse of the purely Semiotic, or on the other into empty symbolic mimesis (merely ‘going through the motions’ as if reading and applying gestures from a diagram).

A Kristevan Theory of *Timbre* in Electroacoustic Composition

Having examined the Lacanian Symbolic, the Kristevan Semiotic, Negativity and the thetic, and their importance for *signifiante* (the genesis of meaning) within the realm of music practice, it now remains to develop a psychoanalytic understanding of the basis of musical perception itself, with particular reference to musical texture, or timbre. The critical relevance to this study is that electroacoustic composition is itself primarily timbral in character. As a type of ‘soundscape’ evolving over time, electroacoustic music emphasizes the manipulation and presentation of aural textures over and above melody,

rhythm, phrasing and narrative, or any of the other components of traditional music composition. In an earlier discussion of Freudian theory, I explained how bodily drives, though subject to primal repression, are nonetheless able to find a (displaced and condensed) means of expression within dreams, art and even conscious narrative. In this section, I show how Kristeva applies and adapts Freud's views in order to explain the capacity of colour perception to reach conscious awareness, instead of remaining permanently bound to the inexpressible sensations and impulses belonging to the inaccessible unconscious. Having established a logical connection between drives and conscious perception, I then extend Kristeva's analysis to the aural domain – specifically to the conscious perception of musical texture. This analysis is important for an autoethnographic study of timbral composition, in which composer, performer and listener are understood and defined as aware, conscious and feeling subjects.

Kristeva's theory of colour perception (from her essay *Giotto's Joy*, from *Desire in Language*, 1980) is based upon Freud's notion of word-presentations as higher-order psychic processes allowing conscious subjective awareness of somatic (or bodily) sensations. This approach enables her to develop substantial insights into the connections between conscious perception and sensuous experience. She explains and elaborates Freud's position, constantly invoking the somatic connection, and completes her analysis with speculation on the influence of instinctual drive pressures upon the sensation of colour. Her particular focus and reference is its appearance in a painting by Giotto, i.e. from the psychoanalytic perspective a work of art situated within the visual symbolic register.

Colour is considered by Kristeva not as a structural element similar to form, line and shape (which are characteristic of the Symbolic) but instead as an economic element native to the unconscious. Consequently, colour cannot be considered as functioning purely within the Symbolic, but instead is here understood as originating within the interplay of unconscious psychic energies and drive pressures. In explaining her position, Kristeva begins by using Freud's own concepts and terminology, namely that an external object appears (or is presented) to the conscious mind both as a *thing* and as a *word*. Initially, the individual subjectively perceives the object as a *thing* (i.e. as an entity) through the investing of mental (or psychic) energy into it, thereby forming a *thing-cathexis*, or a subjective psychic investment with the object.

These 'thing-cathexes' are situated in the repressed unconscious, and are regarded by Freud (1915, p. 201) as "the first and true object-cathexes", in other words the primal, or most primitive psychic connections between subject and object. Freud then defines *thing-presentations* as "the cathexis, if not of the memory-images of the thing, at least of remoter memory-traces derived from these" (Freud, p. 201); hence, thing-presentations are related to memory instead of to direct perception, and thus constitute more remote links between subject and object than 'thing-cathexes'. As they are related to unconscious memory, 'thing-presentations' alone cannot consciously signify or represent objects: Freud emphasizes that any "conscious presentation comprises the presentation of the thing plus the presentation of the word belonging to it, while the unconscious presentation is the presentation of the thing alone" (Freud, p. 201); hence, 'thing-

presentations' occur solely within the unconscious.

The French psychoanalytic theorist Alain Gibeault explains (2005) that, "Freud defined the link between a thing-presentation and a word-presentation as the result of an association ... between a sound image specifically representing the word and the visual image that of all possible mnemonic images is especially representative of the thing representative of the thing". The 'mnemonic image' refers to Freud's notions of "memory traces derived from" the perception of objects, so that "rather than being a direct duplication of an object, a thing-presentation is an inscription in the systems of the mind of certain aspects of the object relative to an instinctual cathexis" (Gibeault, 2005) with the object. A thing-presentation thus remains within the unconscious unless it is associated with a word-presentation, and Kristeva notes that this occurs in "a higher psychological organization" where a thing-presentation is "linked with the word-presentations corresponding to it" (Freud, 1915, pp. 201-2). In this latter process, thing-presentations are now reinforced, or *hypercathected*, by word-presentations. As Richard Uhl explains (2005): "Freud employed the term 'hypercathexis' to designate an additional charge of instinctual energy cathecting any already cathected psychological element". Thus in the Freudian perspective, when thing-presentations are hypercathected by word-presentations, additional psychic energy is brought to bear upon thing-cathexes, enabling this combination to attain conscious awareness.

Kristeva asserts that "this hypercathexis of thing-presentations by word-presentations permits the former to become conscious, something they could never do without this

hypercathexis, for “thought proceeds in systems so far remote from the original perceptual residues that they have no longer retained anything of the qualities of those residues, and, in order to become conscious, need to be reinforced by new qualities” (Kristeva, 1980, pp. 216-217). Her approach – that of explaining how thing-cathexes, via hypercathexis with word presentations, can attain consciousness – thus implies a method for understanding the conscious awareness of the subjective experience of musical objects defined by texture, duration, loudness or timbre. According to Kristeva, this subjectivity would be invisible and unknown if not for the Freudian hypercathexis between thing-presentations and word presentations. However, this is only the beginning of her analysis, which now proceeds to develop the interaction between the Kristevan Semiotic and the Lacanian Symbolic registers.

In elaborating this interaction, Kristeva explains that for Freud, thing-presentations indicate “the pressure of the unconscious drive linked to (if not provoked by) objects” (Kristeva, 1980, p. 217), whereas conscious thought processes result from a repression which “hold(s) at bay thing-presentations and their corresponding instinctual pressures” (Kristeva, p. 217). This complex of drives is replaced within the Symbolic register by the sign that both represents and nullifies it. Kristeva’s describes Freud’s explanation of this transition as the moving “from perception to symbolic function by the economy of *unification* and *rejection* engendering the symbolic function, the separation between subject and object, and the imposition of repression” (Kristeva, p. 234, footnote 5). She emphasizes however, that even following this stage, a bodily aspect remains associated with word-presentations, in which drive pressure consists of three aspects: one directed to

external objects; the aspect of being a sign itself (i.e. representing itself as a drive); and the aspect originating in the physical voice or otherwise within the body. In the transition to the Imaginary and Symbolic stages, Kristeva explains that these drives are repressed, “transforming this complex and heterogeneous pressure into a *sign* directed at someone else within a communicative system, i.e. transforming it into language” (Kristeva, pp. 217-218).

From this perspective, electroacoustic composition can then be described as a language in which the sound-objects on the one hand appear as signs due to primary repression of drive pressures, and on the other hand show traces of the bodily Semiotic in which they originated. There is thus a double linkage between word-presentations and the body: “First, as representations of an 'exterior' object denoted by the word, as well as representations of the pressure itself, which, although intraorganic, nevertheless relates the speaking subject to the object. Second, as representations of an 'interior object', an internal perception, *an eroticization of the body proper during the act of formulating the word as a symbolic element*” (Kristeva, p. 217; my italics, suggesting the pleasure taken in artificially formulating sound complexes from raw acoustic elements during the process of electroacoustic composition).

Bellin (1984) writes that “Freud describes a word-presentation as a consisting of closed complex of multiple images – reading-, writing-, motor-, and sound-images”, and explains that from this, “it is only the sound image that links the word to its object presentation” (Bellin, 1984, p. 7). This assertion is backed by Gibeault's reference to the

Freudian “sound image specifically representing the word” (Gibeault, 2005). Kristeva's particular approach to word-presentations is to refer to “the coupling (of) the inside and the outside of the body” (Kristeva, 1980, p. 217) by which means she describes the vocal apparatus generating the sound to the external sound object. The emphasis (by Bellin and Gibeault) upon the Freudian ‘sound image’ in word-presentations is therefore related to Kristeva's analysis of the pressures of bodily drives originating within the Semiotic. Later in this thesis, this linkage will assist my own analysis in that it will enable me to adapt Kristeva's theory of colour as used in artistic practice to my particular case of employing musical texture in electroacoustic composition. The primacy of the Freudian sound image in the hypercathexis of thing-presentations is especially significant when the ‘thing’ in question is itself a sound with physical characteristics such as texture, pitch, loudness and duration. Situating this within the Kristevan framework then permits further analysis of the semiotic and symbolic aspects of musical-acoustic perception.

In applying the notion of a ‘word-presentation’ to artistic practice, Kristeva describes a ‘triple register’ comprising “a pressure marking an outside, another linked to the body proper, and a sign”, which is then “invested in the fragile, ephemeral, and compact phase of the symbolic function's genesis” (Kristeva, 1980, p. 218). As mentioned previously, the psychoanalytic term for the genesis of the symbolic function is *Bejahung*, denoting the primordial archaic act of symbolization itself. This is a subtle process that “forsakes the distance which kept apart 'thought' from 'drives' and 'thing-presentations' and thus culminated in isolating the ego” (Kristeva, p. 218). In scientific practice and metalanguage, this distance is vast, as drives and thing-presentations are suppressed and

replaced by the Symbol. However, in artistic practice they are brought closer together, provided the artist can avoid the neurotic foreclosure of all signification that results from the complete denial of the existence and importance of the Symbolic within the domain of the 'True-Real'.

Kristeva regards the triple register of exterior drive, interior drive and signifier as constituting a word-presentation, that is then the critical element transforming mundane communicative language into artistic practice: "this pivotal order – both an 'energetic pressure' (instinctual drive) and an 'imprint' (signifier) – modifies both the symbolic (because it cathects it with instinctual drive and thing-presentation) and ... (also modifies) ... thing-presentations (because it cathects them with signifying relationships that the perceptions themselves could not have insofar as their cathexes 'correspond only to relationships between thing-presentations'.)" By themselves, perceptions, or thing-presentations, are based on archaic 'thing-cathexes' that logically and diachronically precede signification. Kristeva's 'pivotal order', or 'Freudian metapsychological triad, invests these archaic thing-presentations with signifying relationships, enabling them to carry subjective meaning. However, this critical triad, intervening at the genesis of the Symbolic, does not work at the level of language (although it does influence it); indeed it actually "frustrates both 'representation' (as it rather involves taking in instinctual pressures) and the 'word' ... (suggesting instead) an elementary *formal apparatus* ... (constituting) the presyntactic and prelogical primary processes of displacement, condensation and repetition" (Kristeva, p. 218). *Colour* can then be understood as the Kristevan triple register of exterior drive, interior drive and signifier "articulated ... within

the domain of visual perceptions: an instinctual pressure linked to external visible objects; the same pressure causing the eroticizing of the body proper via visual perception and gesture; and the insertion of this pressure under the impact of censorship as a sign in a system of representation” (Kristeva, p. 219). Previously, Kristeva explained that word-presentations may invest thing-presentations with excess psychic energy, enabling these unconscious elements to attain conscious subjectivity. In accordance with her view of the indefinable Semiotic drives as finding their way into the Symbolic and being inscribed there, Kristeva then describes word-presentations as retaining links to bodily drive pressures, specifically comprising three aspects: originating within the body; directed to the outside world; and constituting a subjective sign connecting the speaking subject to an object. As these aspects describe word-presentations, they are likewise associated with conscious subjectivity, and as such form Kristeva's ‘pivotal order’ imbuing the Symbolic with Semiotic drive traces, and conversely granting subjective awareness to the Semiotic through the hypercathexis of thing-presentations. This intermixing of the Symbolic with the Semiotic is essential for artistic practice (as discussed previously) and is here applied to the notion of artistic perception – specifically, colour. The notion of an ‘instinctual pressure linked to external visible objects’ refers to the hypercathected Semiotic drives (or thing-cathexes in the Freudian terminology), while the ‘eroticizing of the body proper via visual perception and gesture’ evokes the pleasurable act of *Bejahung* (the act of formulating a word as a symbolic element). Kristeva’s reference to ‘the insertion of this pressure under the impact of censorship as a sign in a system of representation’ describes the transition and induction into the Symbolic order, during which drives are repressed and transformed into external

signs.

Kristeva is always keen to balance the importance of the Semiotic with that of the Symbolic, and similarly regards colour perception as the combined influence of both registers, or “as a complex economy effecting the condensation of an excitation moving towards its referent, of a physiologically supported drive, and of 'ideological values' germane to a given culture ... a preeminently composite element, colour condenses 'objectivity', 'subjectivity', and the intrasystemic organization of pictorial practice”. The specific condition of the subject is important here, “especially, the psychology of each perception's instinctual cathexis, depending on the phases the concrete subject goes through with reference to its own history ... of imposing repression” (Kristeva, 1980, p 219). In relating this to my own history, I note that learning electroacoustic composition immediately followed the completion of my Science masters thesis. Science writing – a form of meta-language – required the repression of subjectivity and bodily drives. Following this experience, my desire to re-acquire an experience of subjectivity and connection to the ‘lost’ Semiotic was critical to the decision to study music. This desire also influenced my choice of composing style – particularly the assemblage of raw physical sound samples into an electroacoustic art-form conveying my sense and experience of the Semiotic.

In developing the interaction between the Semiotic and the Symbolic, Kristeva notes that “in a painting, color is pulled from the unconscious into a symbolic order” (Kristeva, 1980, p. 220) and this is attractive to the individual subject desiring unity, who must rely

upon the Imaginary and Symbolic registers in order to achieve a semblance of unified coherent identity. However, at the same time colour is withdrawn from the painting towards the unconscious, where it ‘escapes censorship’, i.e. escapes the formulation, delineation, articulation and repression of the Symbolic. This can happen via the direct physiological aspect of vision, in which (Kristeva quoting Matisse) “a ‘*retinal sensation*’ ... destroys the calm of the surface and the contour” that Matisse likens to “a *tactile vitality* comparable to the ‘vibrato’ of the violin or voice” (Kristeva, p. 219; her italics). In the context of this thesis, Matisse thus provides an important link between the retinal sensation of vision (and colour), and the texture or timbre (the ‘tactile vitality’) of acoustic sound. In extending this correlation, the eardrum is then posited as the acoustic analogue of the retina).

The bypassing of colour (and by analogy, physical sound) from Symbolic repression – its direct effect upon the unconscious – means that colour, although coded into the Symbolic within a painting, can never be wholly constrained by the forms and laws of the Symbolic: “contrary to delineated *form* and *space*, as well as to *drawing* and *composition* subjected to the strict codes of representation and verisimilitude, color enjoys considerable freedom” (Kristeva, 1980, p. 220). On the one hand, colour is encoded into the design and ‘rules’ of a painting and is thus co-opted into the external Symbolic. However, the direct unconscious affect of colour, and its linkage to Kristevan Semiotic drives, also guarantee a transgressive and destructive impact upon the Symbolic, “in which the subject, for whom the thetic is not a repression of the semiotic chora but instead a position either taken on or undergone, can call into question the thetic so that a

new disposition may be articulated” (Kristeva, 1984, p. 51). As previously explained, during this dynamic signifying process subjective meaning is constantly postulated, destroyed, and then replaced by a new meaning, or ‘thesis’. This principle can then be related to Kristeva’s theory of colour via the process of “the momentary dialectic of law – the laying down of One Meaning so that it might be pulverized, multiplied into plural meanings. Color is the shattering of unity. Thus, it is through color – colors – that the subject escapes its alienation within a code (representational, ideological, symbolic, and so forth) that it, as conscious subject, accepts” (Kristeva, 1980, p. 221). Hence, as a particular formulation of Kristeva’s idea of *heterogeneity*, colour multiplies and differentiates meaning ‘into a scale of differences’ through the excess and hypercathected instinctual drives of the Semiotic. The relation of this to tone-colour perception in music is alluded to at several points by Kristeva – for instance the “*tactile vitality* comparable to the ‘vibrato’ of the violin or voice” (Kristeva, p. 210) and “the chromatic apparatus, like rhythm for language” (Kristeva, p. 221). I now proceed to a more extensive analysis of the parallels between the two sensuous modalities of electroacoustic music itself.

The ‘rhythm for language’ mentioned here by Kristeva comprises an important trace of the Semiotic within the Symbolic: “(t)he Platonic *khora* ... generates the semiotic, which becomes a rhythmical space, a space we inhabit as humans. This is a musicalized and thus timeful space” (Lechte, 2009, p. 81). With this connection of time itself to the Semiotic and hence to *signifiante*, heterogeneity, and excess meaning, time is thereby situated within poetry. Analyses of poetry as an inscription of the Semiotic are usually applied to written language; however, they are also applied by Kristeva (and others) to

music and dance. In the special case of electroacoustic music, in which traditional instruments playing music constrained to a beat are replaced by a multiplicity of pre-recorded sound samples, time becomes free and heterogeneous. Its previously fixed and singular metaphysical presence within a rigid time metric (i.e. a musical time signature) is now dissolved through the editing and transformation of the sound samples into identities of any length or duration.

Julio D'Escrivan (1989) explains that “(t)he composition of electroacoustic music is articulated through the manipulation of *time* perceived. *Time* is therefore a *poetic* element ('Poetics' understood as the theory of artistic production as opposed to 'aesthetics', the theory of the beautiful in artistic production)” (D'Escrivan, 1989, p 197). Therefore, “(b)ecause we are dealing with *recordings of sound* and not the *sounds themselves*, we find that the basic untreated material is *already imbued with time*” (D'Escrivan, p. 198). The correlation between the visual and the aural domains previously suggested by Kristeva and Matisse is here developed by D'Escrivan in his analysis of the editing process within electroacoustic composition. In this practice, using any number of styles and methodologies, pre-existing sound samples are spliced, transformed and recombined to form new aural identities. D'Escrivan notes the correlation with cinema, quoting the Russian film director Tarkovsky: “Editing brings together shots which are already filled with time, and organizes the unified, living structure inherent in the film and the time that pulsates through the blood vessels of the film, making it alive, is of varying rhythmical pressure” (D'Escrivan, p. 199). In the Kristevan Semiotic, drives arise in pulsations and rhythms, and from her theory of colour perception, instinctual pressures are linked to

external visible objects and inserted into symbolic representation following repression. The subjective passage of time is then felt as the passage, life, decay and replacement of these pressures, with the constant destruction and renewal of the *thetic*. Within the audiovisual domain of film, “time flows through the film not because, but in spite of the editing” (D’Escrivan, p. 199), that is to say that this occurs in spite of the metonymic collage of separate, individual frames and shots of varying and heterogeneous rhythms and durations. Similarly, in electroacoustic music various separate elements are edited and recombined into a metonymic aural narrative in which time itself is re-composed and the music is then subjectively experienced via the Kristevan ‘triple register’ of instinctual drives which act as the “pivotal order” mediating between Symbolic recognition and pre-verbal Semiotic experience, enabling the latter to attain conscious awareness.

The other main aspect of electroacoustic music is its *timbral*, or textural characteristic. In the discussion above, the Semiotic nature of musical texture was hinted at with Matisse's description of a “*tactile vitality* comparable to the 'vibrato' of the violin or voice” (Kristeva, 1980, p. 210) and a correspondence was noted between the retina and the eardrum, each being a surface upon which disturbance occurs, allowing an irruption of instinctual drives towards an external referent. In a remark analogous to this idea, D'Escrivan quotes the electroacoustic composer and theorist Denis Smalley: “Texture ... is concerned with internal behaviour patterning, energy directed inwards or reinjected” (D’Escrivan, p. 199). By analogy, the Kristevan model suggests that acoustic texture appears as an external representation of the internal Semiotic, which can then be consciously experienced by virtue of her ‘pivotal order’. Kristeva's analysis of colour –

namely, its transgressive aspect threatening formal identity, together with its mediating role within culture – can then be adapted to explain the predominantly Semiotic characteristic of acoustic textural representation. As with colour, acoustic texture – although embodied within the symbolic form of a composition – is experienced physically and instinctually, without the need for a referent. Furthermore, in the particular instance of electroacoustic music, the composition is wholly derived from pre-recorded sound samples, and so the visual links between a sound (e.g. a violin) and the source that produced it (the violinist) are weakened. The listener may recognize sound-sources from certain sound recordings (such as voices, wind, or rain), but these are broadcasted by and emanate from loudspeakers and not from the gestures of visible and present concert performers. Smalley (1994, p. 38) calls these visibly apparent gestures “source-cause textures” and argues that when they are dissipated (as with electroacoustic music), “access to any deeper, primal, tensile level is not mediated” (Smalley, p. 39) by recognition or knowledge of the sound source. With this further distancing from symbolic mediation, electroacoustic composition arrives closer to the aural equivalent of Matisse's direct ‘tactile vitality’, and, through Kristeva’s ‘triple register’ of exterior drive, interior drive and signifier, a conscious perception of dynamic acoustic textures is enabled.

CHAPTER 4

VISUAL AND AURAL METHODOLOGY

Introduction

Perhaps because of its subjective and experiential nature, autoethnography has evolved into many varying forms. Narratives, lived experience, reflexive ethnography, and impressionistic accounts are only several of a wide range of practices. As previously discussed, autoethnographic methodology varies from narrative inquiry to interactive interviewing and co-constructed narrative (Ellis & Bochner, 2000). Gaining an understanding of life experienced within the context of a particular culture is the overall goal of autoethnography. Much of contemporary autoethnography tends towards the evocative or dramatic narrative as exemplified by Ellis (2004), Ellis and Bochner (1996, 2000), and Richardson (2000). Within this practice, methodology combines with presentation to produce the story-as-research-text from which many and various interpretations may be derived, hence avoiding a single or unitary analysis. In response to the issues of validity raised by those skeptical of the useful quality of such work, standards of honesty, reliability and authenticity of meaning are posited. These standards must be sufficiently robust as to evoke a sense of verisimilitude or believability for the reader. The preference of this school is to eschew description and analysis that would require a pre-existing understanding of the personal and social context of the story. This notion of generating meaning within the account itself is evocative of psychoanalytic dream interpretation, with which it may therefore be associated. Psychoanalysis posits the unconscious as inaccessible to conscious thought and perception; hence its only access to

interpreting the dynamics of the unconscious is through a later verbal account as expressed by the analysand. There is thus a correlation between the methodologies of psychoanalysis and those of autoethnography, as both regard textual account as the essential (and only available) source of meaning, generated as it were ‘on the fly’, i.e. in the moment of telling itself.

The degree and depth of subjective participation of the researcher varies with each study: with for instance group member research, in which the focus is on cultural and group ethnography from a personal viewpoint; or personal lived experience in comparative isolation. In my case, during the composition and revision of the piece being presented and studied here, my background encompassed both extremes. In the early stages of composition I was immersed in a structured and supportive academic environment, and living together with other students in a university dormitory. In the latter stages, during which the piece underwent several revisions, I had long since completed the university course and was living alone; my social circle was then limited to friends and family. Musically, my interactions were limited to internet interest groups. My electronic compositions are still present on various public websites, and have featured as part of a curated installation, yet I never visited the art gallery (which is interstate) nor met the curator in person. All the communication for the exhibit was done electronically, including the transfer of the compositions themselves. Throughout this process I acted completely alone from my place of residence, and this therefore is an example of a physically isolated actor who nonetheless is able to participate in cultural and group activities. Over the course of the compositional process, I thus experienced two social

identities: firstly, as a student composer within a supportive environment, and then as a lone composer whose interactions with musical peers was limited to participation within internet groups.

If this double identity of isolated practitioner and group participant were to be treated by the personal narrative approach, the result could perhaps appear as a story in which themes of isolation, belonging and the need for personal life direction combine to produce an evocative and meaningful impression of an adult self-learner in contemporary urban Australia. However, this is not the goal and purpose of this project, which is to use psychoanalytic theory to interpret the data I generate as a researcher examining myself as a self-learning subject. Given the analytic nature of my chosen theoretical framework, I do not regard the evocative autoethnography as the mode of presentation best suited to my research. Although sympathetic to the call-from-the-heart elicited by Ellis and Bochner, I have chosen a more traditional and descriptive approach to analysis and presentation, i.e. the methodology of *analytical autoethnography* outlined previously. I regard striking a balance between expressive revelation and traditional analytic practice as necessary for authentic autoethnographic practice within my research. This descriptive analytical approach towards autoethnography then correlates with, and reinforces, the analytical perspectives (towards subjectivity) of Freud, Lacan and Kristeva. The two methodologies – analytic autoethnography and psychoanalysis – complement one another in the study of the genesis of subjectivity within the context of (self-)learning a musical discipline.

Autoethnography as Methodology

This data for analysis will be presented as visual computer ‘screenshots’ corresponding to the developing stages and facets of the electroacoustic composition. The data thus provides imagery and evidence of the compositional process. It constitutes autoethnographic data inasmuch as its social history is characterized firstly by an academic or teaching environment accompanied by student interactions, and then later by internet participation with an electroacoustic community. In the broader sense, the ethnographic basis of the data lies in the traditions of *musique concrete* – timbral soundscapes defined and composed as a new type of music – developed by Karlheinz Stockhausen and Pierre Schaeffer (among others) in the 1950s.

Imagery as Autoethnographic Data

Practitioners of autoethnography are known to allow for, and even promote, the use of multiple and novel types of sources for serving as data as previously discussed (Ellis & Bochner, 2000; Vryan, 2006; Wall, 2006; Janesick, 1999). Other researchers also allow for the use of images and diagrams as sources of data (Duncan, 2004). The gradual acceptance of the validity of imagery for qualitative inquiry is alluded to by Fischman (2001) as indicative of contemporary culture in which “images have become an omnipresent and overpowering means of circulating signs, symbols and information” (Fischman, 2001, p. 29). In later analyzing this imagery, I will follow the precedents of Lechte’s (1990) Kristevan analysis of Jackson Pollock’s ‘Blue Poles’ and Julia Kristeva’s (1980) analysis of Giotto’s frescoes at Padua. Although both these studies are intended as explanatory or analytical expositions of the theoretical viewpoints of the authors, they are

also clearly written as experiential first-person narratives. The ‘I’ (of Kristeva or Lechte) is always present in these analyses, which do not hide the subjective experience of the authors as they encounter and interact with imagery of these artworks. In a similar manner, my own analysis of imagery will involve the ‘I’ as researcher interacting with (and interpreting) the imagery presented as autoethnographic data, from a psychoanalytic perspective.

Derrida, Kristeva and the *Re*-turn of Music

Previously, in discussing the importance of Freud’s telling of the *Fort/Da* game in the genesis of subjectivity, I demonstrated the manner in which Lacanian theory interprets the game as a learning process through which a child displays and expresses essential notions of reality. As explained, the ‘learning’ in this process relates to the construction of the child’s identity within the Lacanian Symbolic. Lemaire (1977) shows how the example of the *Fort/Da* “allows a better understanding of how language distances us from the lived experience of the Real” (p. 52), as the game illustrates the process by which “the child moves from the mother to the reel and finally to language” (p. 52). The game, or rather its Lacanian interpretation, hence functions as “the inaugural moment of all future displacement, all metaphors and all language” (p. 52). Thus, for Lacan, the experience in which the child learns language is logically connected to and dependent upon the very constitution of separate alienated identity. Following this, I then referred to Derrida (1987), who extends Lacan’s analysis into an exposition of the notions of *return*, *recall*, and *representation*. In describing the *Fort/Da* as a game expressing disappearance followed by return, or absence followed by representation, Derrida emphasizes the

importance of the prefix *-re*: ‘re-turn’, ‘re-presentation’ and ‘re-appearance’: his “*re-* of the return, the additional turn of repetition and re-appearance” (Derrida, p. 317) constitute a persistent rhythm that is the very purpose of the game. This does not merely signify an object’s single departure and return, or even a series (or cycle) of these, but is rather meant to invoke a metaphysical notion of departure and return, i.e. “the presentation of itself of representation, the return of itself to the return” (Derrida, p. 318). From Derrida’s metaphysical perspective, *disappearance* and *return* are now constituted within a (repetitive) *re*-presentation of the departure/returning, which in itself then becomes a representation in the telling: “the re-turning re-turns ... the re-turn is not only of an object but of itself ... it is its own object ... (and thus) ... that what causes to return itself returns to itself” (Derrida, p. 318).

Correlating this discussion to musical composition enables me to seek and take note of an incessant flow of repetitive returns, the disappearances and re-appearances in music. From the psychoanalytic perspective, this *re*-flow can be understood as the postulations and presentations of the Kristevan Thetic as a musical identity, followed by the destruction of these presentations by the forces of the Kristevan Semiotic, and then followed yet again by the *re*-presenting, or the *re*-turning, of the Thetic, as an entirely new musical proposition. Combining Derrida with Kristeva in this way thus enables a perspective that can explain both the constructive and destructive interactions between the Thetic, the Symbolic and the Semiotic (as understood by Kristeva), and the critical, or essential repetition and renewal of this process (as explained by Derrida). After the destruction by semiotic forces of a given musical identity, a musical thetic will re-appear

– as a new musical form –because “that what causes to return itself returns to itself”, from the perspective of Derrida's metaphysical and teleologically ordered Ontology. This then allows for an explanation of the never-ending flow of time through music, which supersedes more immediate notions of start, stop and restart and by which music itself is situated and constituted within ‘musical time’.

The Analysis: Imagery as Dream Interpretation

Previously, in adapting Kristeva's theory of colour perception to a theory of aural texture perception, I explained the various psychoanalytic dynamics enabling the circumventing of conscious symbolic repression during colour perception. Through bypassing the Symbolic, colour perception (and by extension, physical sound) directly affects and impinges upon the unconscious. Hence, although colour in a painting is always coded into the Symbolic domain, it (colour) can never be clearly defined by the forms and laws of the Symbolic. Its direct association with the Semiotic ensures a transgressive and destructive impact upon the Symbolic, corresponding to the attack of excess Negativity and of the Semiotic upon the Thetic during artistic practice. This is Kristeva's dynamic signifying process – *signifiance* – in which subjective meaning is constantly postulated, destroyed, and then replaced by newly-generated meaning. As explained previously in relation to Kristeva's theory of colour perception, the correlation for colour is the process of “the momentary dialectic of law – the laying down of One Meaning so that it might be pulverized, multiplied into plural meanings. Color is the shattering of unity. Thus, it is through color – colors – that the subject escapes its alienation within a code (representational, ideological, symbolic, and so forth) that it, as conscious subject,

accepts” (Kristeva, *Desire*, p.221).

These notions are critical to my analysis of the subjective aspects of electroacoustic music, in which aural textures impinge directly on instinctual drives, with the resultant music having different subjective meaning for different listeners. Instead of a singular, unified ‘meaning’ derived from this music, a multiplicity or heterogeneity of meaning can be experienced, in this music, in which the physical-acoustic element dominates. Furthermore, “the subject escap(ing) its alienation within a code” aptly describes my transition from learning and practising science and metalanguage to electroacoustic composition.

In further elaborating essential notions of acoustic timbre and musical time, I noted that the editing process in an electroacoustic composition which uses pre-existing sound samples as its raw material, involves the splicing, transformation and recombination of these samples to form new acoustic identities. This process can be regarded as corresponding to the Kristevan concept of the positing of the Thetic (selecting the original samples) followed by the Semiotic pulverizing of this Thetic (splicing and transforming the samples); and then followed by a musical identity that is then the positing of a new musical thetic. This musical cycle thus matches the now-familiar pattern of the Kristevan cycle of positing the Thetic, followed by Negativity and destruction, and then followed by the positing of a new Thetic. In claiming a linkage between the editing process and this Kristevan cycle of signification, I am performing an intuitive leap perhaps similar in character to dream interpretation, in which actions and

objects (the editing of sound samples) behave as metaphors and metonyms for the underlying drives of the unconscious. These latter, being repressed, are inaccessible to the conscious, although they always strive for conscious expression through the alternate and deceptive modes of condensation and displacement. As Freud and Kristeva have shown, the unconscious drives, though subjected to primal repression, can still be expressed and represented through dream accounts, poetry, literary narrative, dance, and visual art. Hence, the visual data presented here can serve as a basis for analysis, just as a dream account can provide the material for a dream interpretation. As the analyst, I can interpret the visual data in a manner analogous to a psychoanalyst approaching a dream account, i.e. searching for these condensations and displacements, metaphors and metonyms, impulses, drives and stases, followed by the constant *re-turn* and *re-newal* of unconscious psychic energy. Before I do this however, I must first derive and explain the basis for justifying the use of scientific visual imagery to allow for meaningful representations of the audio editing process. In the general sense, this could be achieved by a simple application of Lacan's analysis of totalized imagery to the example of representations of external phenomena – in this instance, scientific and audio diagrams. However, I present this argument here in greater detail in order to provide a sense for the reader of the depth of my own autoethnographic journey from science to music. By giving a step-by-step description of the procedure of which the 'right-hand rule' is derived, followed later by the outline of a computerized astronomical night-sky simulation, I am then explain the relevance to my thesis of their usage. Although these are at first appearances purely scientific expositions, I present them as examples of scientific imagery that (as I will show later) indicate the power and influence of Lacanian

méconnaissance in the construction of meaningful and workable – if ultimately deceptive – models of physical reality. In doing so, I then intend to extend these conclusions to form a meaningful psychoanalytic basis for the visual and scientific portrayal of acoustic and musical phenomena, to be outlined in the following chapter.

Lacan, Body-Image and the “Right-Hand Rule”

In the practice of Physics, there is a visual methodology known as the ‘right-hand rule’. This methodology begins with a visualization of a set of directions, or *vectors*; the visualization is then used to orient the scientific practitioner towards a specific direction that is diagrammatically indicated within a system of connected lines, or *axes*. The following discussion explains how these vectors and axes are defined and used, and then attempts to address their significance for this thesis from a psychoanalytic perspective.

A vector is drawn as an arrow pointing in a particular direction and of a specified size. Both the direction and size of the vector together represent a particular physical quantity being studied, for instance the direction and speed of a moving object, or the orientation and intensity of an electric voltage. In this visual symbolism, ‘direction’ thus both orients an object or phenomenon for the external observer, and also specifies its exact size or magnitude.

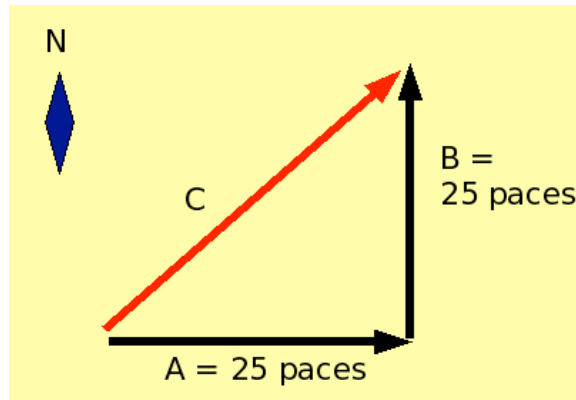


Fig. 1. Three vectors representing distances travelled

The above diagram shows three vectors. The rules of display in Physics practice are that all the vectors in the diagram must relate to the same type of object or action, for instance in this case, each arrow represents a particular distance travelled, and not for instance, one arrow symbolizing a distance, another arrow a velocity, and a third the intensity and direction of a force. Distance, velocity and force are specifically defined within physics as descriptive entities clearly distinct from one another. It is not permitted to intermix different types in a vector diagram because the purpose of the diagram is to add or multiply the vectors, and for this to be possible they must all be of the same physical ‘species’. In the above diagram, all the arrows (vectors) designate a distance travelled. Whether this distance was covered by a male, a female, a child or an old man is not relevant to the diagram, which is restricted to displaying the distances in the abstract as arrows of size and direction, then performing mathematical calculations using these arrows. For example, the vector ‘A’ designates a distance travelled towards the direction of the right, with a ‘size’ of 25 paces. The vector ‘B’ is a distance covered towards the direction of ‘up’; also with a magnitude of 25 paces. The ‘C’ vector is then the result of adding the ‘A’ and ‘B’ vectors together. Visually this is accomplished by ‘joining’ the

first two vectors together (while retaining their respective sizes and directions). The red arrow ‘C’ is then drawn to connect the tail of ‘A’ to the head of ‘B’, thus visually representing the result a type of *direct leap* from the ‘A’ to ‘B’, and indicating the *vector addition* of the first two vectors. As with the other vectors, ‘C’ has both an exact size, and a specific direction. It can therefore be described as the end result of (and exactly equivalent to) walking 25 paces to the right followed by another 25 paces upwards. Hence, physical phenomena can be represented as abstract symbols which designate directions and sizes. These vectors can then be geometrically manipulated to generate new information (in this case, the equivalent vector ‘C’). The usage of the words ‘to the right’ and ‘upwards’ are for ease of explanation only: in Physics practice, the directions of the vectors are usually specified more exactly with reference to an abstract system of orientation. In the diagram above, this abstract orientation is given by the blue diamond-shape that designates upwards as “North”. Hence, within this orientation system, the vector ‘A’ points ‘East’ and ‘B’ points ‘North’.

In leading up to a discussion of the right-hand rule – its definition, usage and relevance to a psychoanalytic perspective upon the visual domain in scientific practice – I must now present and explain a more abstract system of orientation commonly used in Physics and Mathematics, namely the *Cartesian set of axes*, as this forms the diagrammatic basis for the visual representation of the right-hand rule. The Cartesian axis system displays all the cardinal directions (North, South, East and West) as a network of lines originating from a single point:

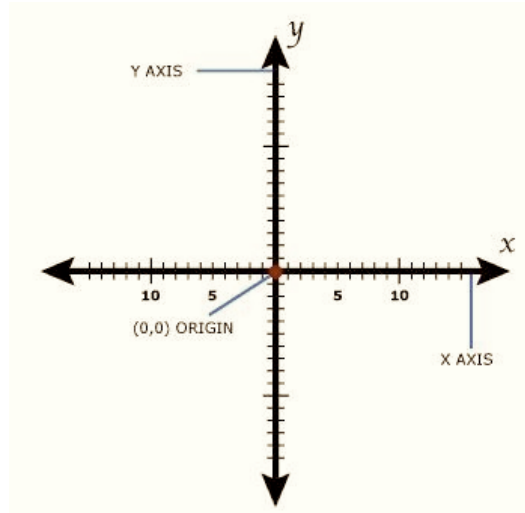


Fig. 2. Two-dimensional Cartesian axis system

In this diagram, two lines, or ‘axes’, are shown originating from a single point (0,0) named the *origin*. These two axes are to be viewed as constituting a map of a two-dimensional surface, for example (the idea of) a sheet of paper. The horizontal axis ‘x’ designates an East-West direction on the ‘sheet’: East of the “Origin” is to the right; West is to the left. The vertical axis ‘y’ then indicates the North-South direction: upwards from the ‘Origin’ is North; downwards is South. The axes can then be segmented (i.e. the small horizontal bars in the diagram), and numerical values can be assigned to these segments. The advantage of such a system of orientation is that objects may then be precisely defined as points in a visually represented space:

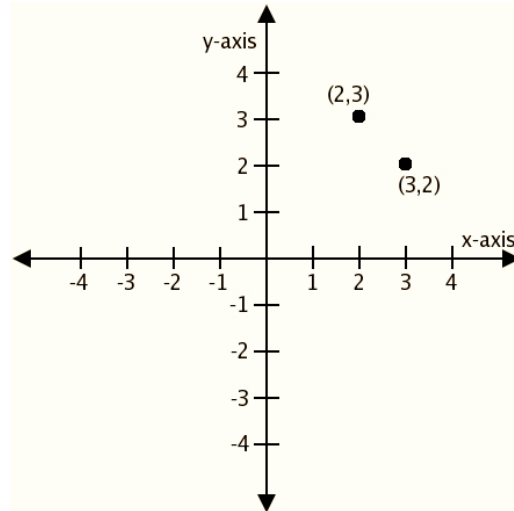


Fig. 3. Cartesian axis system showing location of objects or points

In this diagram, the numbers (2,3) and (3,2) are called *co-ordinates* that precisely specify the location of the points in the context of the diagram. As with vectors, mathematical and geometric operations can then be performed on these points, which are now characterized as exact numbers within a grid constrained by a set of axes. As with vector addition and multiplication, such mathematical operations may then result in the generation (as abstract visualizations) of new information and knowledge of the system being examined.

For Lacanian theory, it is critically significant that these diagrams and their operations have no actual bearing, or truthful relation with, ‘physical reality’ (or the Lacanian *Real*); and a similar argument and analogy could be made with musical notation. As reflective visual representations, they are (from the Lacanian perspective) essentially constituted as deceptive imagery that intrinsically cannot provide a truthful experience of the objects or phenomena being displayed, just as the reflected mirror image of an infant could not give

the child a truthful experience of inner unity. As with the reflected image in the Mirror Stage, there is an intrinsic disconnection between the image and the actual physical object (or human body). This can be regarded as a type of essential *dissymmetry*, inasmuch as the image can never be ‘reflected’ or truthfully ‘mapped’ onto the real object itself. The importance and implications of this will be demonstrated further in this section.

The two-dimensional Cartesian axis system shown above can also be extended to a third dimension, in which a third, new ‘z-axis’ now constitutes the system as capable of orienting objects within three-dimensional space. This point is significant to my discussion, as the right-hand rule is conceived of and represented upon a three-axis Cartesian system embedded within a three-dimensional space. On a flat (two-dimensional) sheet of paper (or blackboard) the ‘z-axis’ is drawn as a third arrow at right angles to each of the other two ‘x’ and ‘y’ axes:

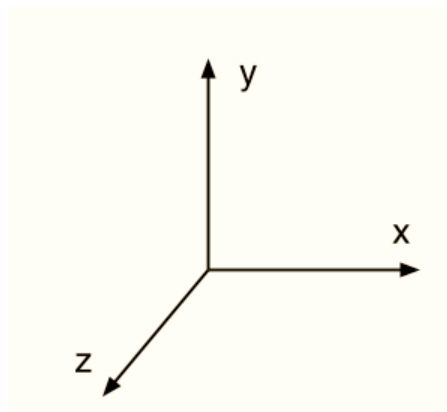


Fig. 4. Three-Dimensional Cartesian axis system

In this diagram, the x- and y-axes are supposedly viewed as lying within the plane of the

paper (or blackboard), i.e. as with the two-dimensional axis system. The z-axis is then viewed as ‘coming out of the page’ towards the viewer; however the visual requirements of representing it on a two-dimensional sheet clearly constrains its literal visual appearance to lying on in the same plane as the other two axes. This is still another example of the ‘dissymmetry’ alluded to here; in this case, the z-axis is literally lies ‘within the page’; however its *representation* is that of a direction reaching out of the page towards the eye of the viewer. Therefore, the z-axis of the image is *asymmetric* with respect to a physical experience of three-dimensional space, inasmuch as it cannot constitute any actual physical experience of ‘coming out of the page’; it can at best only *represent* this idea for the viewer. It should be noted here that even the term ‘three-dimensional space’ is also a representation, i.e. in this instance a linguistic, and conceptual one, comprising the similarly conceptual ideas of ‘up-down’, ‘left-right’, and ‘front-back’). Its archaic origins – in the genesis of the awareness of space itself during infancy – have been described by Peers (2012) and discussed previously in this thesis.

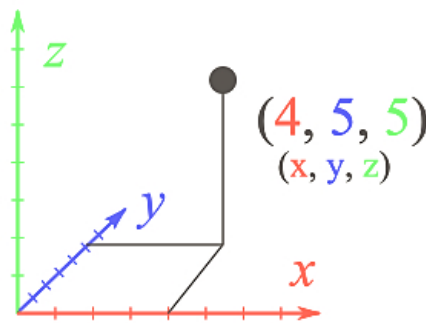


Fig. 5. A point specified within Three-dimensional Cartesian co-ordinates

In developing the exposition of co-ordinate axes into an explanation of the significant

right-hand rule, I must now explain how, in Physics practice, vector addition may be extended into a more complex operation known as *vector multiplication*. The difficulties in visually representing the result of *multiplying* vectors are similar to those (discussed above) of representing a third axis, because the vector resulting from multiplying two original vectors no longer exists within the plane (or ‘sheet’) of the diagram, and hence no longer ‘within the page itself’. Instead, the direction of a vector resulting from multiplying two vectors lies at right angles to the plane containing the original two vectors. Hence this resultant vector is said to project away and ‘out of’ the plane of the original two vectors. This is similar to the case of the ‘z-axis’ which I described as ‘coming out of the page towards’ a viewer. In the diagram below, the perspective of the three-dimensional co-ordinate system has been adjusted so that the z-axis now points upward, instead of ‘outward’. This is permissible within physics; for the ‘transcendental viewer’ observing from a distance, it is as though the entire co-ordinate system has merely been rotated upwards by ninety degrees. As explained above, provided the relationship between the parts remains consistent, such a rotation is not regarded as affecting the final mathematical result. However, in a very different sense, it may be significant to the intuitive, feeling subject who is expected to be able to enact this visual ‘twist’ within the privacy and subjectivity of his own mind. Later, I will argue that the ability to perform an imaginative visual transformation is closely related to the notion of Lacanian ‘misrecognition’, or *méconnaissance*.

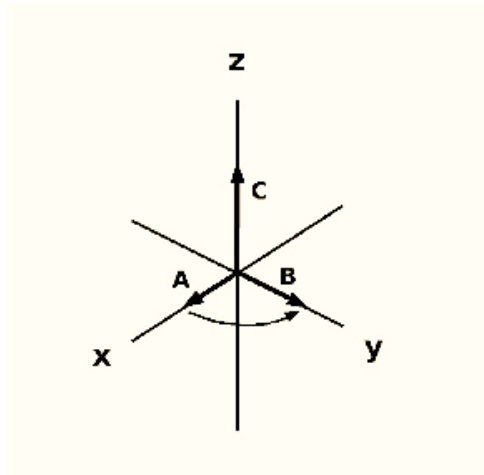


Fig. 6. Multiplication of two vectors A and B to yield third vector C

In the above representation, two vectors ‘A’ and ‘B’ undergo a mathematical operation of vector multiplication, resulting in the third vector ‘C’.

With this exposition, I can now explain the relevance of the Lacanian body-image (as defined by Grosz and discussed previously) to the practice of Physics. In the preceding diagram, the original vectors to be multiplied were ‘A’ and ‘B’, represented as arrows lying a single ‘plane’, or ‘sheet’. The resultant vector ‘C’ was then (imaginatively) projected ‘out of’ this plane. The visual representation here was given in the form of arrows, letters, and a curved line. However, this mathematical operation can also be represented by the use of the human hand as metaphor, in which the original two vectors ‘A’ and ‘B’ are represented by the thumb and first finger of the right hand, and the vector ‘C’ shown by the direction of the second finger:

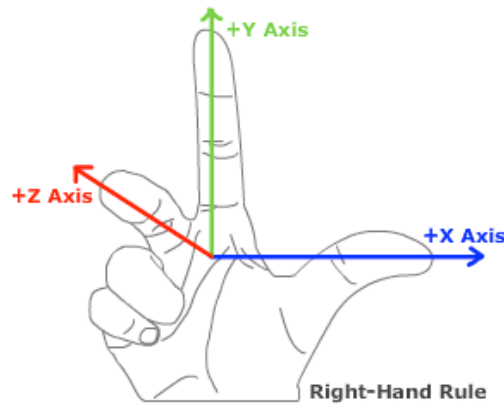


Fig. 7. The Right-Hand Rule

Grosz (1990, p. 46) points out that the hands and fingers are especially prominent in the body-image as they are “at (the) points of greatest contact between the introceptive sensations and (the) extroceptive perceptions”, However, despite the efficacy and intimacy of the hands and fingers within this body-metaphor, it should again be emphasized that Lacanian theory understands the identification of the body-image to be intrinsically limited and even false, or misrecognized. The process is essentially visual: Grosz argues for the formation of separate identity during the mirror stage being dependent upon the emphasis of the visual over the other kinds of perception: “Of all the senses, the visual remains the one which most readily confirms the separation of subject from object” (Grosz, p. 38), involving a ‘distancing function’ quite different to the direct contact between subject and object characteristic of the tactile or taste senses. Furthermore, “the visual is the most amenable of the senses to spatialization” (Grosz, p. 38), i.e. capable of presenting a unified image in a single instant instead of over time as would be required using the other senses – for instance, as by determining the shape of a complex object by touch alone. Thus, although the visual identification of subject and

object is fundamentally flawed in Lacanian theory, it is nonetheless enables totalized spatialization and complex representation, as will be demonstrated later.

From this it can be deduced that the *méconnaissance* (misrecognition) of the mirror stage enables the learning subject to later physically identify with diagrams and images that would otherwise have no bearing on him or upon his body. For this to succeed, the learner must adopt these diagrams and incorporate them as learned (or received) knowledge. A process of body identification needs to occur, which must be based on a basic misrecognition of the image as a truthful reflection of self. Mental body exercises such as the right-hand rule facilitate this identification, but do not guarantee its truthfulness, as ultimately we are still considering an object or concept which is alien to – and alienated from – an essential, physical experience of self. However even with this proviso, Lacanian *méconnaissance* is the basis for all identifications between the conscious subject and visual representation, and hence facilitates the later learning of abstract received knowledge in the form of language, diagrams, symbols, and the mathematical manipulations to which they may be subjected.

From this conclusion I now derive the basis for justifying the use of scientific-acoustic visual imagery to permit meaningful representations of the audio editing processes. In the above exposition, the right-hand rule was used to demonstrate an intrinsic link between body-image and Lacanian *méconnaissance*. It was chosen to provide an example of *méconnaissance* in action within the Lacanian Symbolic (rather than within musical or other examples) due to its indication of the linkage between body self-image and abstract

diagrammatic representation. This linkage is relevant to my thesis since – although electroacoustic music (normally) does not directly involve body-representation within the Symbolic – the genesis of the imaginary self does constitute the basis and core of the Lacanian Mirror Stage. The preceding discussion of the activity and uses of this imagined body-identity within the Symbolic can then form the basis for an extended analysis of the linkage of overall subjectivity with scientific diagrams and representation that follows in the next section. This will then lead to my argument for the use of acoustic waveform imagery as autoethnographic data capable of being usefully examined from a psychoanalytic perspective.

The Stellarium, Lacanian *Méconnaissance*, and Self-Learning

In the above explanation of misrecognition as the basis for identifications between the conscious subject and the visual world, the discussion began by outlining the use of arrows in Physics to represent quantity and direction. These were named *vectors*, and the possibilities for their manipulation via mathematical operations was then covered. These vectors were then placed into the visual context of a *Cartesian co-ordinate system*, i.e. into a diagram whose ‘x’ and ‘y’ axes constitute a representation of two-dimensional space, in which points may be precisely located with the use of numbers, or *co-ordinates*. This explanation was then extended to the three-dimensional Cartesian system by the addition of a third ‘z’ axis, which was described as being imaginatively projected ‘out of the page’ towards the conscious viewer. The further presentation of this projection by the human hand, i.e. the *right-hand rule*, was then illustrated. A Lacanian explanation for the successful usage of both the ‘z’ axis and the human hand as visual metaphors for Physics

was then given in terms of the ‘body-image’ and of intrinsic misrecognition, or *méconnaissance*. From this perspective, the archaic basis of the human capacity to identify with (hence understand, interpret and manipulate) diagrams and images lies in Lacan’s Mirror Stage, i.e. at the critical moment of identification between an infant and the deceptive unity of its reflected image. The use of the human hand to represent directions is thus facilitated by this essential self-identification between body and reflected image. Furthermore, the ability to imagine, and then visualize the shape, of a space situated *outside* the subjective self has similar origins within the Mirror Stage. This was previously explained (in the Theory chapter), as which the advent of the Lacanian Imaginary during which an infant “imagine(s) a space for which he constitutes the centre. The self is thus initiated as a *presence* (something which does not change, and for which other things ‘appear’) by way of reflecting on the shape and form ... of his space” (Peers, 2012, p. 5). This constitution of self as a stable presence within an imagined space containing objects of interest, can now be illustrated by the example of a computer-generated planetarium known as the *Stellarium*.

The Stellarium is an interactive planetarium displayed on the flat screen of a computer. The observer sees a spherical three-dimensional space, i.e. the night sky, as an image projected onto a two dimensional flat screen. This already raises questions of *méconnaissance* with regard to the visual mapping of an imagined curved surface onto a very different flat surface. Here, I focus on studying a single issue: the difference between the Inside and the Outside as experienced by the viewer trying to orientate himself with respect to the image seen on the screen. Specifically I now discuss the

astronomical *Ecliptic*, which, for an observer who locating himself at the centre of his imagined space, is a line tracing the path of the Sun as it appears to move across the surface of this space. Since the space imagined to surround the subjective observer is spherical – the *Celestial Sphere* – the trace of this path on the spatial surface is curved:



Fig. 8. Stellarium showing the Sun lying along curve of the Ecliptic

However, if viewed as if looking *at* the Earth from a very different perspective, i.e. from *outside* not only the Earth but indeed the entire (imagined) Celestial Sphere, the Ecliptic then appears as a circle encompassing the Earth:

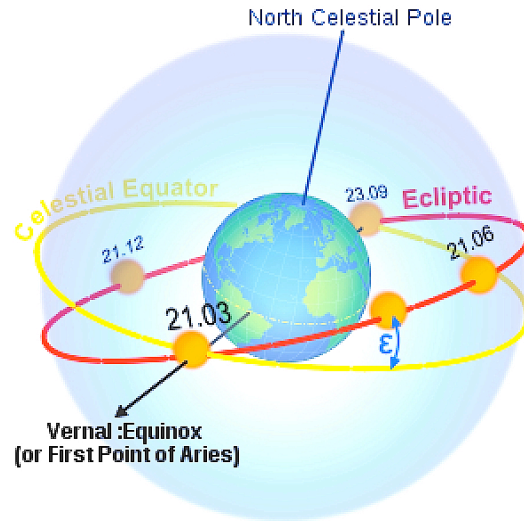


Fig. 9. Celestial Sphere as imagined from a ‘transcendental’ perspective

This diagram represents an opposing mixture of two imaginary perspectives: on the one hand, Earth situated at the centre of a cosmos (the Sun orbiting the Earth along the red path of the Ecliptic) – this is historically known as the *geocentric* perspective. However, the entire cosmos is also represented as if viewed from a distant external vantage point. This latter notion – historically named as the *Copernican* or *Heliocentric* perspective – can then be abstracted further to represent the Ecliptic as a *plane* (or sheet). The Ecliptic is now visualized as a two-dimensional surface containing all the points in the path of Earth’s orbit around the Sun (or of the Sun’s orbit around the Earth in the geocentric perspective):

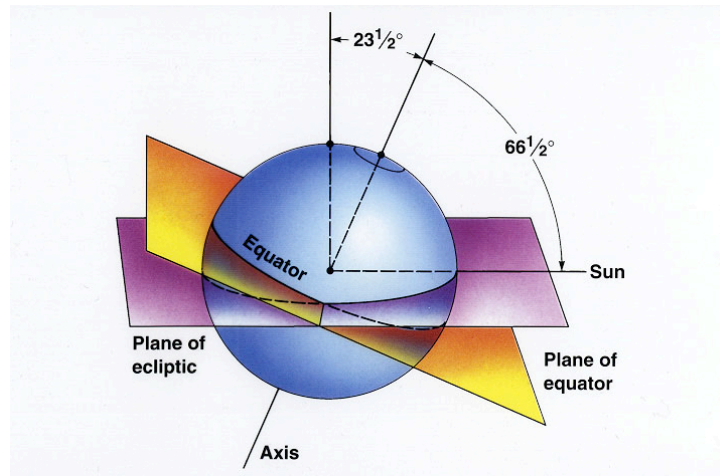


Fig. 10. Transcendental perspective showing planar representation

Speaking strictly from the point of view of scientific visualization, these two ‘opposing’ perspectives – the Geocentric and the ‘transcendental’ or Copernican – are exactly equivalent or identical, as they illustrate the same phenomena. For the subjective observer however, an intuitive leap is required to understand the similarities and connections between these two perspectives – an imaginative leap whose issues are similar in nature to that required by an intuitive rotation of the Cartesian co-ordinate system described earlier.

Understanding the Ecliptic can be difficult when it is only defined by the use of words, which, although descriptive, seem dry and insufficient without the use of images. On the other hand, diagrams are also insufficient, as it can be hard to orient one’s self with respect to them, generating the ‘intuitive leap’. Staring at them, and reading the accompanying description, the subject can wonder: how can the plane of the Earth’s orbit around the Sun relate to an imaginary curved line seen by the observer on the ground? How are the two connected in the mind and experience of the observer? On the one hand,

the diagrams and explanations of the Ecliptic plane are given and shown from the (transcendental) perspective of the Outside, i.e. of a Copernican, heliocentric observer watching a model of planets circling the Sun. On the other hand the line of the Ecliptic across the night sky as seen from the ground is from the perspective of the 'Inside', i.e. denoting not merely a line drawn inside the Earth's sphere as seen by an *external* transcendent observer, but a line lying actually *inside*, within the space, and seen only from the perspective of the Earth-based observer. Thus the Ecliptic appears in both viewpoints – from the Inside and from the Outside of the Celestial Sphere – and only the *knowledge of their common identity* can connect, or suture, these differing viewpoints for the observer needing to make the intuitive leap from Inside (or physically grounded) to Outside (or transcendent). Drawing upon my previous explanations of the genesis of subjectivity according to Lacan, I conclude that this integration of radically differing visualizations can be located within the Symbolic, i.e. the domain of thought, concept, and unification of imagery and idea. However, the innate capacity to generate this integration has its subjectively historical basis in the advent of the Imaginary, i.e. with the powerful, jubilant (albeit mistaken) integration of subjectivity with (deceptive, asymmetric) reflected imagery.

With these discussions of the Lacanian body-image together with the genesis of a sense of space populated by meaningful objects, followed then by the integration of differing or asymmetric perspectives within the Symbolic, some insight is now possible into how the viewer of the Stellarium is able to imagine his own position within the inside of a celestial dome, even though the image he views is being projected onto a flat image on a

computer screen or sheet of paper. This insight is derived by means of a closer examination of the interactive workings of the Stellarium. The Stellarium is designed to function as a computer simulation of an actual planetarium, the design of which, viewed from an exterior perspective, appears as a half-dome encompassing the space above an audience:

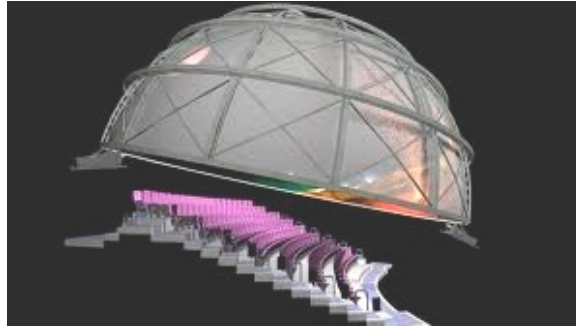


Fig. 11. Representation of Dorrance Planetarium, Arizona Science Center

The Stellarium does not provide any such kind of ‘transcendental’ perspective, as it does not need to; its function is restricted to providing the viewer with a simulation of the sky as would appear projected onto the *inside surface* of the top of a half-dome.

I begin with presenting an image from the Stellarium of the night sky. My intention is to show a ‘bare representation’ with no orienting scenery, markings, lines or diagrams added to the image:

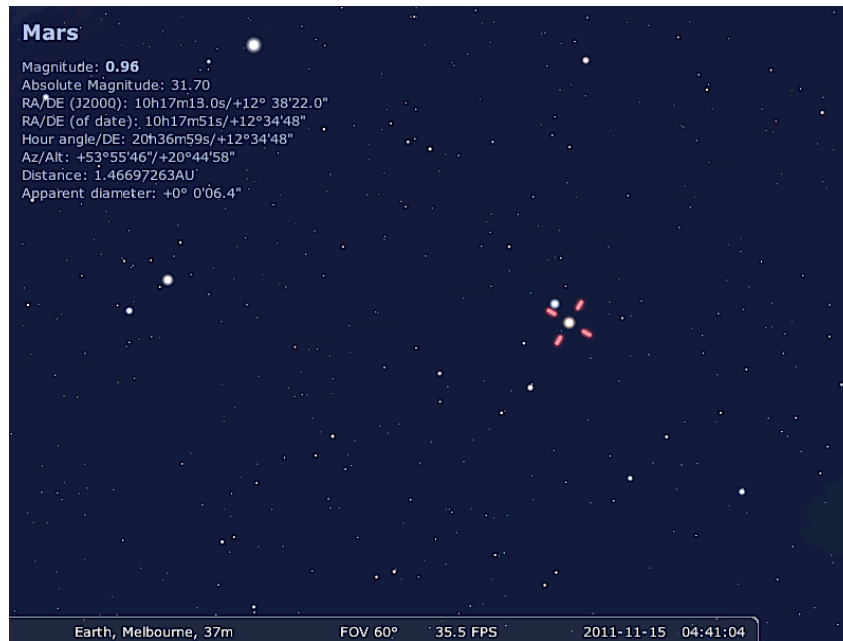


Fig. 12. The ‘raw’ night sky as seen from within the ‘space’ of the Stellarium

This intention – to represent the simplest possible imagery without any Symbolic referents – is frustrated here by the inclusion of labels and data relating to the planet Mars. Interestingly, although the visualization settings for the Stellarium are many and versatile, there is none provided to ‘switch off’ all referents. In any picture, at least one referent must be displayed, along with its associated astronomical information. In the above image, Mars is highlighted by the use of four red markers, which surround it. If I had pointed to any other part of the screen – even an apparently empty section – the Stellarium would then display textual data associated with any astronomical object calculated to exist at that location and at that time – even if the object is ‘known’ to be too faint for visual representation within the Stellarium – for instance:



Fig.13. Night Sky displaying data for an 'invisible' galaxy

Here, I pointed to a spot apparently situated within a void, but the Stellarium 'located' a galaxy there, highlighting its location with blue lines and displaying the information. No doubt this galaxy would be visible by the use of a powerful telescope, with similar accuracy of position in the night sky, calculated for that exact moment in time and location in space. The point here is to indicate that the Stellarium never functions as a provider of simple images within an imagined space – rather, it is designed to display information relating to every object known by Astronomers to exist within that constituted space. Whether or not a specific object can actually be visually displayed by the Stellarium is not as important as the representation of *information*. Hence, the Stellarium functions within the Lacanian Symbolic as the provider of textual and scientific knowledge. However, the human ability to switch between visual perspectives

ultimately originates within the Mirror Stage, as previously explained. With the following imagery, the addition of orienting scenery, lines and grids will be demonstrated with reference to both the Lacanian Imaginary and the Symbolic.

The next image is similar to the previous ones, but now includes scenery to ‘ground’ the viewer:

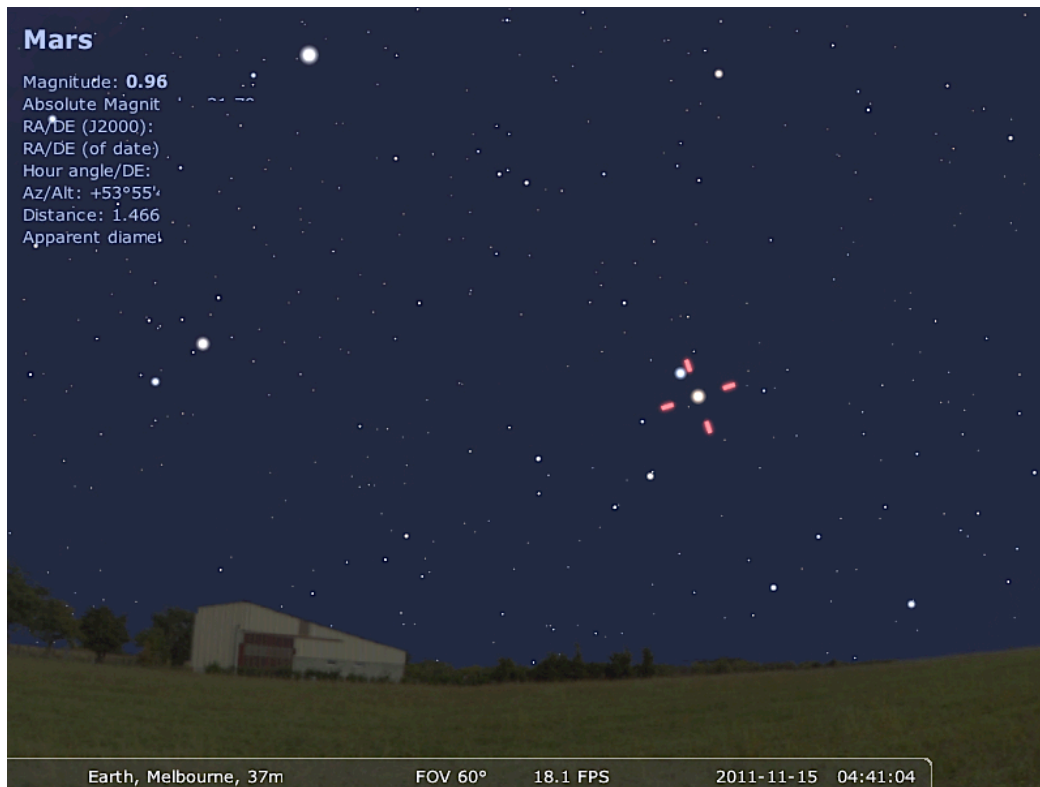


Fig. 14. Night Sky with added scenery

The addition of familiar objects helps to ‘reassure’ the viewer who may otherwise find stellar imagery and data confusing and disorienting. This ‘reassurance’ recalls the earlier notion of an ‘archaic space’ in which the recognition of a generated space centered upon the subject, originating during infancy, is then familiarized and internalized by the

viewing subject. Hence, the ‘grounding’ effect is situated within the Lacanian Imaginary; on the other hand, the naming and conscious recognition of the actual objects (house, tree, etc.) belongs to the Symbolic.

The next image now presents the night sky with scenery, together with an orienting system of curved grid lines:

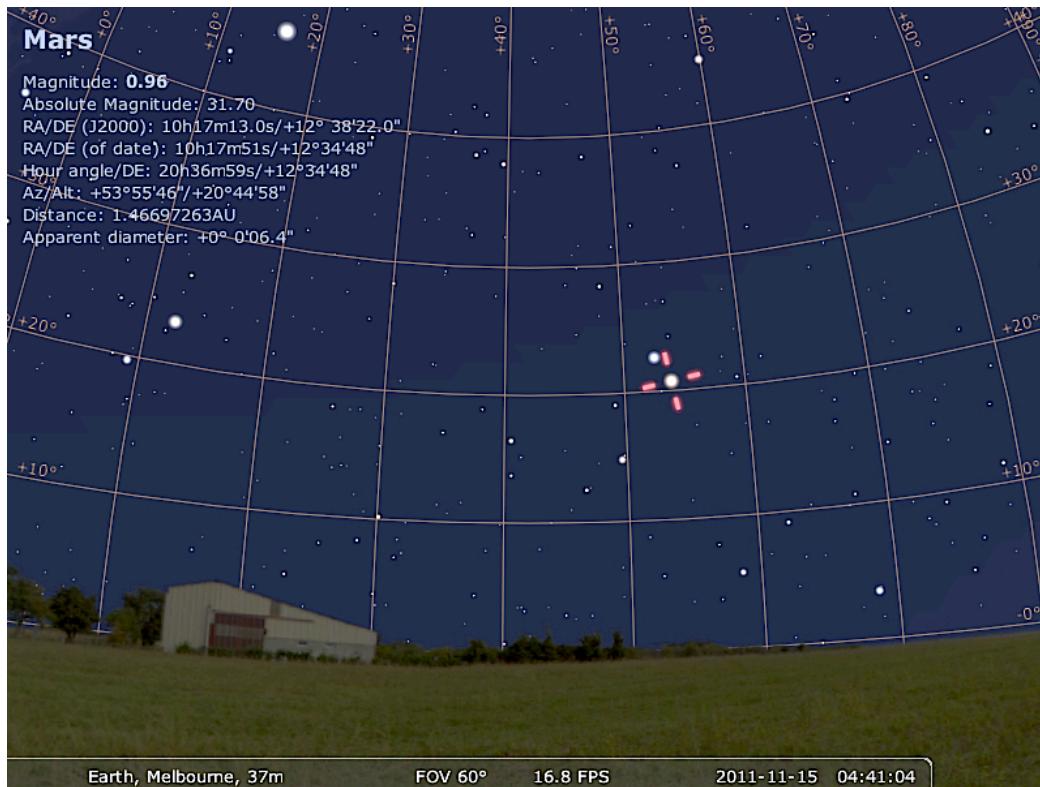


Fig. 15. Night Sky combined with scenery and grid lines for spatial orientation

The visual Symbolic is now extended to include an abstract network of lines, which together constitute an *azimuthal grid*. The lines are curved, as they are imagined to encompass the imagined space of the Stellarium’s ‘dome’ by tracing the curved surface this space, meeting at a point at its apex known as the *Zenith*:

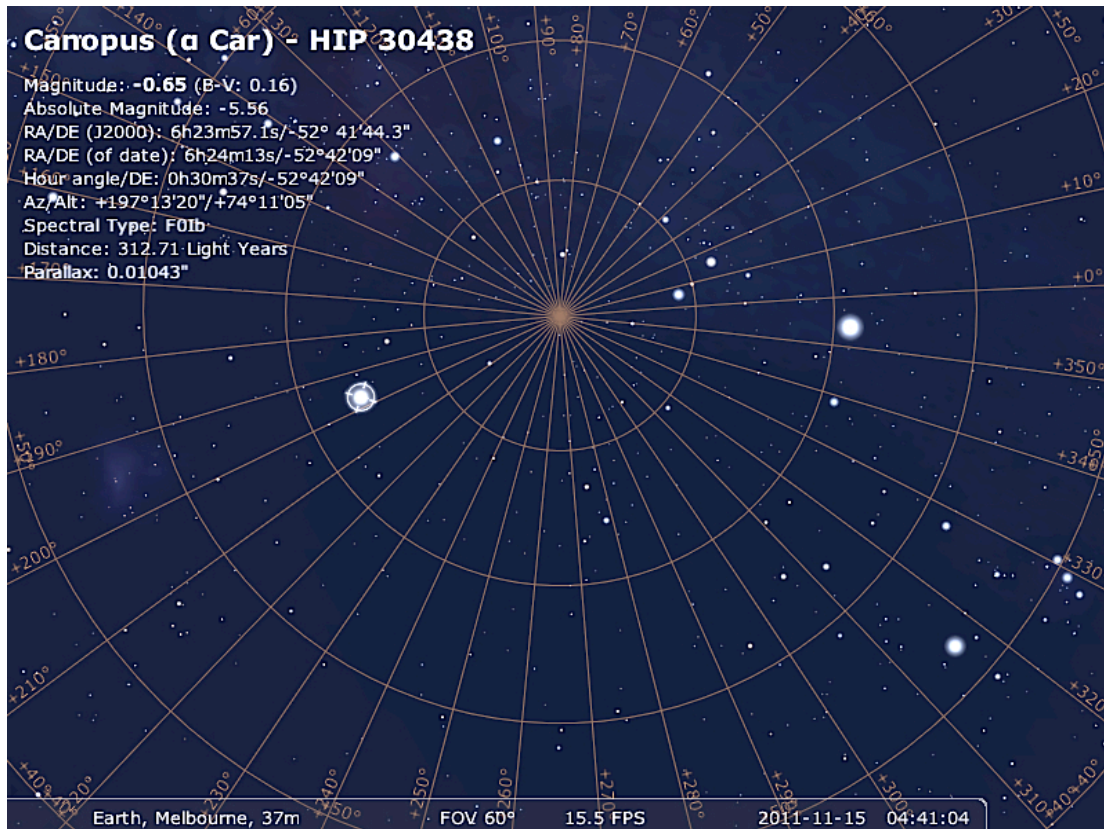


Fig. 16. Curved lines meeting 'inside' at the apex of the dome (at the Zenith)

The addition of this grid network thus assists the observer towards scientific orientation within the Symbolic, in this case specifically within astronomical practice. If the Ecliptic is now added to the earlier image, its location within the space of the 'dome' is then precisely specified by relating its position to the geometry and co-ordinates provided by the grid system:

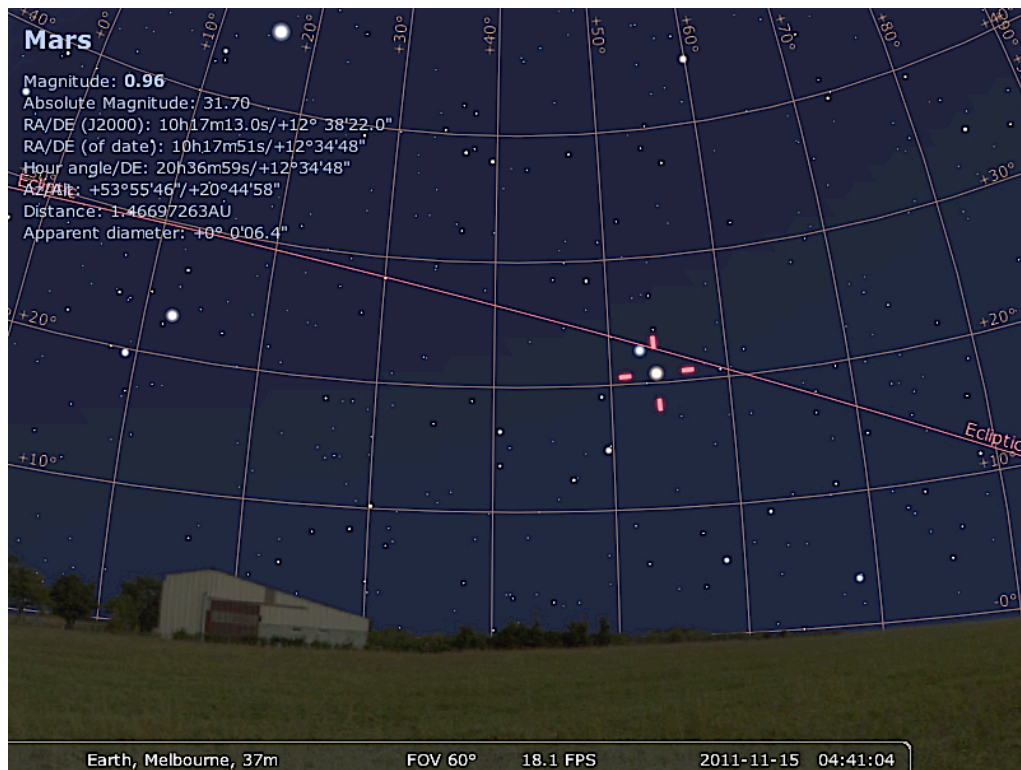


Fig. 17. Night Sky with ground scenery, Azimuthal grid, and the Ecliptic

From the perspective of the Imaginary, a new element has been brought into the scene of visualization. The trees, grass and buildings combined with the night sky constitute a clear unified, visual representation of scenery that can be perceived even by an infant who has passed into the Mirror Stage. However (from the perspective of the non-scientific layman) the addition of a symmetric system of grid lines does not seem to belong to the scene; they instead may appear as externally imposed, forcing the act of visualization into a disruptive and disorienting experience. Hence, the intention of the grid system to serve to orient perception is facilitated only for the scientific observer consciously trained within the Symbolic domain; the layman may well experience the opposite. This disorientation can be described in psychoanalytic terms as an *asymmetry* (or *dissymmetry*) encoded into the picture. From the subjective visualization

characteristic of the Mirror Stage, the symmetric grid lines do not *reflect* the other aspects of the scene in the sense that the ground scenery may be said to ‘reflect’ the night sky. Ground and sky can be said to ‘reflect’ each other in that they complement each other as related objects constituted within an imagined space, analogous to an infant observing his own reflection in a mirror. Thus far, I have emphasized the misidentification made by the by the infant between the fragmented impulses and sensations felt within his body and the deceptive unity presented by the external image. Here, I instead note that within Lacan’s schema, the reflected image nonetheless *belongs* to the infant: it is *his own* reflection. Hence, even allowing for the substitution of the image for inner experience together with its confusion as truthful identity, the reflected image ‘belongs’ to the subject; it remains his, and both infant and image taken together constitute the authentic scene described by Lacan. In this sense, the mirror image, no matter how deceptive, is *symmetrical* to the physical body of the infant, as it maps his body, point by point, onto a corresponding visual representation which *opposes* him in the sense analogous to the way two symmetrically opposite halves of a figure or picture oppose, and reflect, each other.

In this sense, the system of grid lines imposed upon a scene cannot be regarded as being symmetrical to the rest of the scene, as they are in no way ‘reflections’ of that scene. Within subjective visualization, the lines do not belong at all to the scene; they do not complement or reflect any aspect of it, and can thus be named as ‘asymmetric’. Nonetheless, this jarring asymmetry within subjective visualization does not prevent or hinder the use of the Stellarium as a scientific tool for orienting an observer around a night sky situated within an imagined curved space. Lacanian theory can contribute

toward understanding such ability to *conceptually* integrate the system of lines grid into the scene, by means of the idea of *méconnaissance*, previously explained within the context of conceptualizing and operating vectors and co-ordinates within the Cartesian system of axes. The misrecognition, or misidentification, between the subject and his unified external image helps explain the ability to subjectively integrate and combine ‘asymmetric’ visual facets of a representation. Specifically, *méconnaissance* can explain the readiness of the viewer to accept the image as representing the interior of a curved space, even though the literal representation is actually that of labelled, curved lines forcibly superimposed upon an unrelated scenic background.

In explaining the privileging of symmetry within visualization and the Imaginary, Grosz explains that “the child's recognition of its own (reflected) image means that it has adopted the perspective of exteriority on itself” (Grosz, 1990, p. 38); furthermore, the fact that the mirror-image is in fact symmetrically reversed also allows for a later ‘obsession with symmetry’ that figures so prominently in diagrams of the external physical environment. In this example of the geocentric planetarium perspective, the symmetry is spherically defined (as is most clear from *Fig.16* above, which displays the grid lines curving upwards to meet at the zenith). This exposition has extended Grosz’s ideas to the notion of *asymmetry* – an absence of reflective relations – between different aspects of Stellarium imagery. Although this could appear to mitigate against the requirement for symmetry, Grosz is not specifically arguing in favour of a *need* for symmetry, but rather only for an ‘obsession’ with symmetrical representations. From a dialectical perspective, an obsession with something can imply a personal investment not only for the identity

itself (in this case, symmetry) but also with its opposite, or negation (asymmetry). Such an ‘obsession’ can then explain the energy and motivation that the subject brings to bear upon the need to forcibly integrate the asymmetric facets of the Stellarium imagery into an operational unity functioning within the realm of the Symbolic.

The above discussion began with of a revisiting of the Lacanian body-image that – as explained in the previous section on vectors – allows for a subjective (mis)identification with objects. The efficacy of the Stellarium was then explained with reference to the Lacanian notion of the infant imagining a space at which it is the centre, allowing for the visualization of the celestial sphere. Lacanian *méconnaissance* makes possible the ‘suturing’ of the various dissymmetries within astronomical representative imagery into a conceptual unity. Finally, a subjective ‘obsession’ with symmetry (together with its negation) accounts for the motivation necessary to generate such unity from the visual dissonance.

Taken together, these can then be related to a Lacanian perspective on education (specifically, self-learning) by understanding them as *constituting learning processes* by which the subject learns to generate an imaginary space; to (mis)identify his body with that space; to perform intuitive leaps of visual perspective within that space, and finally, to unify, name and illustrate this within the Symbolic domain. The interpretation and analysis of my own visual data will involve similar identifications with imagery, specifically a set of images representative of computer music editing sessions. These images provide rich and varied memories of those sessions that I experience as dream-

like visualizations, and which I will describe and discuss in the next chapter. Together with these I will provide literary descriptions of the specific aural textures I understand to be associated with the images, and analyze these images and descriptions using the Kristevan notions of Semiotic Negativity overwhelming, disrupting and destroying various musical identities constructed during the course of the piece. The musical samples corresponding to the images are also provided on the compact disc that accompanies this thesis. In summary, such a ‘mapping’ of musical sound into a literary and visually illustrative text is, from the Lacanian perspective, possible only because of *méconnaissance* or forcible misrecognition of similarities and equivalences between image, sound, memory, and description. At the same time, it is the very possibility of generating the illusion of similarities between these identities that allows for the construction of unified visualization, interpretation and analysis. The subject learns to generate these types of (deceptive) identifications during the Mirror Stage, and then to manipulate and re-order them within the Symbolic. This ability is not taught to him; he learns it on his own by way of the logic of the reflected image, of the absence of the mother, and of the intrinsic significance to psychoanalysis of the *Fort/Da* game. Thus, the processes described above, in which subjective meaning is generated from visualized imagery, constitute a form of self-learning. Likewise, my descriptive usage of visual and acoustic data will constitute both a Kristevan Semiotic analysis and a demonstration of subjective self-learning from a Lacanian perspective.

CHAPTER 5

DATA AND ANALYSIS

Selecting the Samples for this Study

The images presented here are computer ‘screen shots’ of the music editing sessions during which the electroacoustic piece was constructed and developed from single and simple raw sound samples. During the editing process, they are displayed (by the software) as *acoustic waveforms*, a scientific term arising from the physical conception of sound as a series of *acoustic waves* travelling through the air. The term ‘*waveform*’ then extends this notion to imagining the waves as structures whose size and shape can be precisely measured and displayed as two-dimensional imagery. In these images, waveforms can be regarded as akin to time-lapse photography of acoustic phenomena. They are meant to be visualized within the context of the two-dimensional Cartesian axis system described previously, for instance:

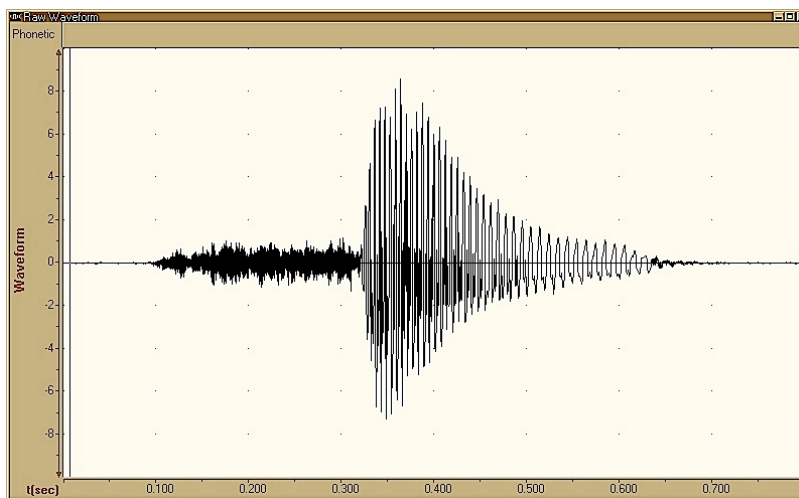


Fig. 1. Acoustic visual representation of the vocalized word ‘see’

In the above image, the horizontal axis displays increased gradations of time, beginning at ‘time zero’ and increasing up to ‘0.700’, i.e. seven tenths of a second. The vertical axis (labelled ‘waveform’) then shows the *variations in loudness* of the sound that occur over the course of this time interval. Viewed as a unified totality, the image constitutes the ‘shape’ of a pattern of loudness, as it appears imprinted onto a time-interval of a certain ‘size’ (here, seven-tenths of a second). As this image can be visualized instantly, i.e. without having to actually experience the time-interval, it can thus be described as ‘frozen’ into the form of a time-lapse recording referred to above. The acoustic sound is therefore visually characterized by this type of waveform ‘shape’; in the above picture, the waveform is a representation of a single vocalized word ‘see’. On the other hand, in the following representation – that of the complete composed piece – the waveform visually indicates five minutes of consolidated electroacoustic music:

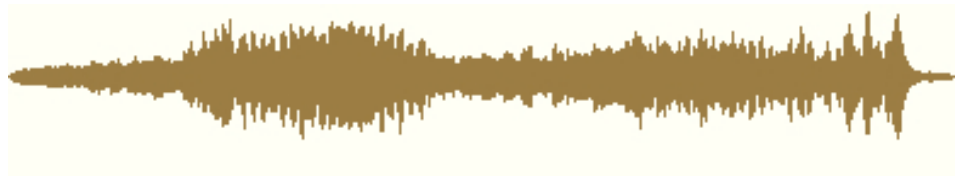


Fig. 1. Waveform representation of completed piece ‘Space Music’

(Complete piece can be heard on Audio Track 1 of the accompanying CD)

Similarly, in the individual examples to be shown below, each waveform corresponds to a specific sound, that I will name, label and describe. Hence, as scientific representations of acoustic data, the imagery selected for this study can be regarded as acoustic analogues of the vectors, co-ordinate systems, and symmetric astronomical grid lines, whose psychoanalytic implications were discussed in the previous section. Culturally, all these

systems are used to orient the observer into an imagined space within which the representation is constituted. Hence, meaning and operational function are both enabled for the observer within the Symbolic. However, subjectively the viewer finds himself having to adopt a system of visualization that is otherwise unrelated to intuitive perception and experience. In the previous section, the Lacanian concepts of the genesis of the notion of space during infancy, and of *méconnaissance* within the Imaginary domain, were used to explain the subjective ability to connect and unify disparate and unrelated aspects of a scene. These explanations are now adapted to the world of acoustics, in which a sound is described by words and represented by images, none of which have any actual, intrinsic, or truthful connection with the aural experience itself. The fact that I may nonetheless attempt such a presentation, in which language combines with images to portray, describe and analyse aural experience, can thus be justified with reference to the previous discussion of the Stellarium and the Cartesian co-ordinate system.

Learning to Compose: the *Fort/Da* as Archaic Prototype

Following from the previous discussions of the *Fort/Da* from the perspective of Lacan, Grosz, Peers and Derrida, I can now ask the question: *How did I learn to compose electroacoustic music without prior formal instruction?* In positing this I am effectively asking how musical subjectivity was constituted, as this question implies, and is closely connected to, the archaic learning experience of the *Fort-Da*. The perspectives of Lacan, Kristeva and Derrida together combine to indicate subjectivity as initially located in the mirror stage, i.e. where objects are recognized and conceived as unities externally

situated to the newly constituted subject. They *appear* within the context of an imaginary space constituted by the infant as a primordial response to the discord and disorientation of tactile fragmentation. They *re-appear* (and are *re-presented*) during the mirror-stage, and this is the indication, and critically also as the logical precondition, of subjectivity and of the Lacanian Subject. Adapting Lacan's (1966) own words, “it is in the object to which the opposition is applied in act ... that we must designate the subject”, I can therefore write: *it is in the object to which the opposition is applied in practice, i.e. the musical composition, that we must designate the subject, i.e. the composer*. Subjectivity is here constituted and represented by the composition, which re-presents (musical) events and objects appearing within the domain of a unified imaginary space. The ‘opposition’ refers to the primordial ‘splitting’ between subject and object that occurs during the Mirror Stage: both ‘subject’ and ‘object’ are generated in this phase, along with the intrinsic ‘split’ or ‘opposition’ that characterizes their tense and dynamic relationship. From this viewpoint, examining and analyzing the composition is then analogous to analyzing it both as a presentation and as a representation of subjectivity, i.e. of the composer as the subject constituted by the composition. An analysis of this musical representation of subjectivity can therefore serve to index the dialectical interaction between the Kristevan Semiotic and the Lacanian Symbolic generally, within the context of the learning agency of the *fort/da*.

Timbre as both Semiotic and Symbolic

Following on from the previous exposition of Kristeva’s Theory of Colour as adapted to electroacoustic music (Theory in Chapter 3 and Methodology in Chapter 4), I can now

present a schema of the psychoanalytic process of timbral composition. The composer begins by cathecting with certain sound objects; following which the thing-presentations corresponding to these – their immediate effect upon the Unconscious – can reach conscious awareness due to hypercathexis, or psychic reinforcement, by word-presentations. These latter comprise reading, writing, motor and aural aspects, with this last (the aural) connecting the word-presentation to the thing-presentation. For a sound object used in an editing session, the reading aspect is the visual representation and the name of the sound; the writing aspect corresponds to sound editing and processing that creates new sounds (with new names and forms); the motor aspect is the actual interactive process with the software using the computer keyboard; and the aural aspect is the sound itself, in all its various stages during the transformative process.

Due to the hypercathexis of the acoustic thing-presentations with their associated word-presentations, I am able to attain an awareness of the effect of the perception of the sound upon my body (it is pleasurable; hence the eroticizing aspect). Also, a double-linkage between the acoustic word-presentations and the body exists, coupling the recognition of the acoustic sound (as an external object) to its internal sensuous affect. In electroacoustic composition (as with artistic practice generally), a word-presentation, being a triple register of external drive, internal drive and a sign, is invested as a "pivotal order" at the delicate point of *Bejahung*, i.e. at the very genesis of the Symbolic. The result is the closing of the gap between 'thought' and 'drives', i.e. between the Symbolic and the Semiotic. Musical tone colour, or texture, is then the articulation of the triple register within the domain of aural perception, causing both eroticizing of the body and insertion

of musical texture (pulled out of the repressed unconscious) into the Symbolic as a sign in the music. Acoustic texture presents within the music as a Symbolic cultural element, but also occurs as a Semiotic transgressive, disruptive element threatening unity of musical form, as it generates heterogeneity and multiple meanings. Acoustic texture is thus consciously experienced both structurally (as form, within the Symbolic) and subjectively (as sensuous affect, within the Semiotic).

The Kristevan Semiotic and the Lacanian Symbolic will together figure prominently in the analysis of the various aspects of the composition demonstrated below. If the reader is to experience the conscious perception of acoustic texture (or timbre) explained above, the displaying of each visual waveform must be accompanied by the presentation of the actual sound that corresponds to it. The sounds of all the samples used for this piece are stored on the compact disc stored at the end of this thesis; in each of the following, an individual track name is listed along with the image to which it is correlated.

Presentation and Description of Data

As previously explained, the analysis of my piece following the example of Kristeva's 'semanalysis' of the visual art in 'Giotto's Joy' and of Lechte's intuitive analysis of Jackson Pollock's 'Blue Poles'. From that perspective, the composition can be regarded as consisting of both Semiotic and Symbolic components. For instance, the original unprocessed electric drone has Semiotic characteristics, as even though there is a recognizable tone or pitch, the *timbre* is raw and rough, like musical sandpaper. Once this raw drone is processed into a sound with an even clearer musical pitch or tone, it gains

more Symbolic aspect: it now has a more clearly defined pitch, and with a polished, controlled timbre. Although retaining its former Semiotic aspects it has now been ‘fixed’ into the Symbolic realm of material that can be used for music. The term ‘fix’ is used here in the sense of processing a photograph, in which the mass of chemicals is developed, or ‘fixed’ into a clear photographic image. In the electroacoustic instance this means ‘fixing’ the Semiotic sound by processing it and giving it a more clear tone and timbre than existed in the original raw sound. Hence, a type of sound object has been developed by means of the processing, which now belongs more clearly to the Symbolic, as (with its clearer pitch) it is more easily recognized and subjectively situated into an aural environment.



Fig. 2. Raw unprocessed electric drone

(Audio Track 2)

The rough edges of this waveform evoke the raw aspect of the sound. Its visual appearance perhaps resembles that of a stick, or a spear, hence evoking notions of aggression and rough, raw drive.

As additional layers are combined with this tone, the semiotic charge increases. The timbre of the arc welder is primarily Semiotic, as it has an irregular rhythm, with no clear pitch – either of which are necessary to recognize, or ‘fix’ the sound into the Symbolic.

On the other hand, the ‘hissing-breathing’ sound accompanying the drone does have a regular rhythm, which has double significance for the Kristevan Semiotic: rhythm – including clearly recognizable rhythm – is identified by Kristeva as a Semiotic aspect of speech and music; and, the sound of heavy breathing evokes memories of the physical body, i.e. of its drives and impulses that were subjectively felt by the infant before the advent of the Mirror Stage and the induction into the Symbolic.



Fig. 3. Arc Welder (unprocessed)

(Audio Track 3)

Jagged edges are evident in the arc welder waveform image, evoking the thin, harsh timbre of the sound. Such edges are visible in all waveforms to some degree; in the following sample they appear as a more refined series of small spikes, indicating a smoother, or more continuous, timbre than in the arc welder:

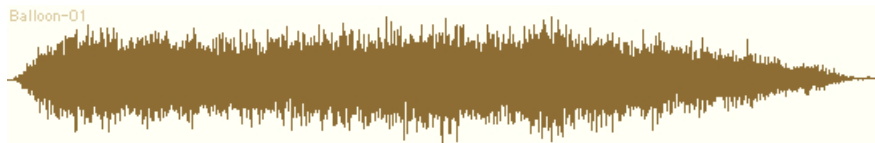


Fig. 4. Balloon Blowing sound (unprocessed)

(Audio Track 4)

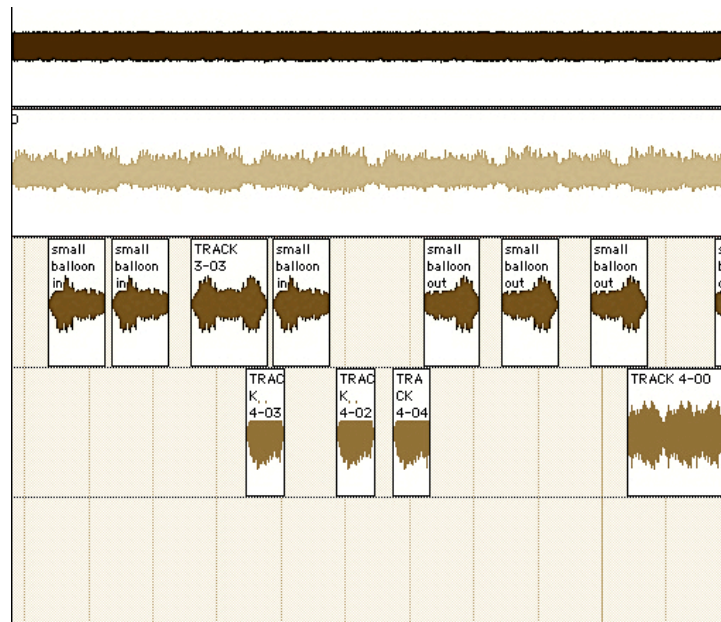
As with the electric drone, the image evokes drive energy and aggression, that correlates (in the sound sample) to the energetic blowing of air into a balloon. Such an obviously identifiable sound could seem as an unlikely inclusion into an abstract electroacoustic composition, since its identity can be perceived and recognized within the domain of the Symbolic. However I found its sonic impression to be sufficiently intense as to warrant its inclusion into the piece disguised as ‘pure timbre’. Hence, I was able to ignore considerations of its Symbolic references, instead treating the sound as purely Semiotic acoustic material to be freely electronically transformed into an entirely new sound – a sonic entity never heard before. This new entity is heard as the basis for a sequence of repeated ‘hissing breaths’ on Sound Track 6; in this transmuted form it is no longer clearly identifiable or nameable. My description of it as a ‘hissing breath’ should be regarded as a provisional concession to the linguistic and communicative requirements of this thesis.

On the other hand, the female droning tone is situated closer to the Symbolic due to its clarity of pitch and timbre, particularly after being processed into a smooth, clearly recognized aural object. Corresponding to this greater tonality and timbral purity, the edges of this waveform are less rough (jagged) than the previously:



Fig. 5. Female Droning Sound (processed) (Audio Track 5)

Layering the various sounds together then increases the total Semiotic charge, as this layering tends to increase the intensity of the combined sound. However (as suggested in my acoustic adaptation of Kristeva's theory of colour perception) the symbolic aspect of the overall sound is then also increased, as the greater 'tactile vitality' of this now-multiplied and increasingly varied timbre ultimately impinges more strongly upon conscious perception. Here, the greater dominance of the Symbolic is visually suggested by the faint rectangular grid lines around which the waveforms are positioned, as well as by the rigidly structural arrangement of the combined sound objects:



*Fig 6. Layering of raw sounds to form a more expressive and intense unity
(Audio Track 6)*

Over time, the Semiotic aspects of the piece are then intensified, as the music increases in

loudness as well as repetition – the latter implying Derrida’s notion of *return* and *re-presentation*. The manner by which the Semiotic then threatens and disrupts the Symbolic aspect of the unfolding piece can be understood through the very layering and juxtaposition of these various disparate sounds. As separate sound samples they have names: ‘arc welder’, ‘human voice’, etc.; but collectively – as placed into this piece – they have no logical or sensible connection or relation to each other, other than that provided by the mixture that I intuitively choose as sufficiently varied, while acoustically balanced, to suit an abstract yet expressive music. In Freudian terms this mixture and juxtaposition of seemingly unrelated elements corresponds to *condensation* in dream-imagery; in Kristevan terms, it is an expression of *heterogeneity*, that is a key characteristic of her Semiotic. From this perspective, the mixing and layering of these disparate sounds thus recreates an experience of the condensation of dream-imagery, and also of heterogeneity, hence emphasizing the Semiotic. The increased Semiotic charge then tends to challenge and disrupt the identities of the individual ‘place-names’ of the sound samples (that belong within the Symbolic).

At the same time, from the visual-editing perspective, the layering and combining of varied and disparate sounds recalls the combination and integration of ‘asymmetric’ facets of visual representation demonstrated previously through examples of the Stellarium. As that occurred within a visual context, its analogy here refers to the visual representation of the acoustic combination. In these examples, the different waveform images vary primarily by *shape*; hence, the nature of their combination refers to an integration of different shapes, whose respective forms have no intrinsic or sensible

relation to one another. The fact that I was nonetheless able to mix and balance these disparate images into a unified visual representation (i.e. into a single electronic editing session) recalls the role of Lacanian *méconnaissance* in forcing a visual unity within the Imaginary and the Symbolic, as discussed with reference to the Stellarium. At the same time, the intuitive capacity to mix unrelated sounds into an aural or sonic unity without instruction may correlate to an internal psychic experience of Kristevan heterogeneity occurring within the Semiotic domain. The expression and compositional action of heterogeneity would then be manifested as intuition rather than as formal process. This in turn can be related back to my ‘psychoanalytic compositional statement’ (above), which adapted to this point in the discussion could now read that ‘the subject is here constituted and represented through compositional processes’, i.e. that the composition, and hence the composer, are constituted through the practice of intuitive musical judgment generated by the subjective experience of Kristevan heterogeneity, Lacanian *méconnaissance*, the viscerally aural Semiotic, and the urge to combine diverse and unrelated sonic elements into a musical unity. From the Lacanian perspective, this tendency to unification can be traced back to the archaic identification (in the Mirror Stage) of fragmented bodily impulses and experiences with a unified visual reflection. In a psychoanalytic study of compositional processes, this would then necessitate emphasis of the importance of the visual domain during composition. Here, this is readily established with regard to the presence of the many and disparate waveform-images that are ultimately combined into the visual unity of the final product (Fig. 1). The validity of my argument is then critically dependent upon the fact that I could not have composed this piece without using the visual referents provided by the electronic editing software,

in which editing, processing and even simply listening to any sound requires the visual manipulation of its waveform (as well as of other visual tools in the software) by the composer.

The above exposition begins to describe the interaction of the Semiotic and the Symbolic in the first minute or so of the music. It should be noted that no aspect, or sound, is purely Semiotic or Symbolic: for instance the processed electric drone always keeps its raw Semiotic edge, and the processed female tone does not lose its sensuous character. Thus these sounds, while primarily Symbolic with respect to their clear identifiable pitch, nonetheless retain Semiotic characteristics. On the other hand, those sounds designated here as Semiotic – for instance the arc welder and the repetitive breathing – remain within the Symbolic inasmuch as they can also be clearly identified as ‘sound objects’, and their sound-source recognized and understood. Similarly, all the other sounds within this piece can be said to occupy this double identity of Semiotic and Symbolic. This dichotomy permits the composer to relocate recognizable and named sound samples into new and unknown aural domains. In the wider sense, the dialectic (or productive dynamic interaction) between the Semiotic and the Symbolic then corresponds to the production of artistic meaning as explained by Kristeva in her *True-Real*, in which a potentially psychotic descent into a pure Semiotic is balanced and buttressed by the artist through a provisional reliance upon the structural and socially anchoring aspects of the Symbolic.

The First Transition: Bursting at the Seams

I now demonstrate the manner in which one section of the music is completed, destroyed, and replaced by the next section in the piece. Later in the first section, the sound of a medley of female voices is introduced. As with heterogeneous non-semantic sounds, this sound is primarily Semiotic:

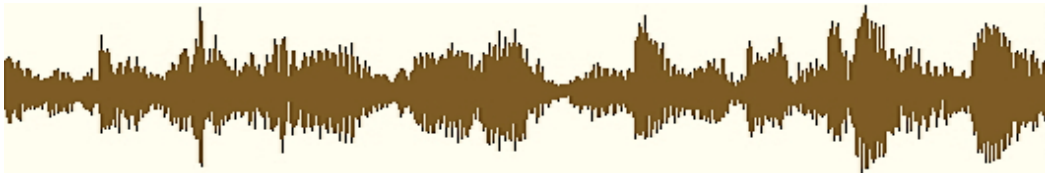


Fig. 7. Medley of female voices in a crowd (unprocessed)

(Audio Track 7)

As the various layered and combined sounds become louder, the expressive intensity of the piece correspondingly increases. With the addition of repeated and prolonged Semiotic breathing and welding sounds, the music finally reaches a point in which the Semiotic aspects completely disrupt the Symbolic integrity of this first musical section. Unity – indeed, musical structure itself – is no longer viable; the Semiotic aspects, increasing in loudness and repetition, have finally overwhelmed and pulverized it. This destructive dissolution is ‘announced’ by a series of short repeated electric ‘clapping’ sounds. These ‘claps’, which are characterized by an absence of pitch, clear timbre, or clear meaning, are primarily Semiotic. They dissolve the first section, which is no longer Symbolically viable, and inaugurate the beginning of the second section. In Kristevan terms, the intensity of the musical Semiotic has finally disrupted and destroyed the musical thetic of the first section, only in order to now postulate a new musical ‘idea’.

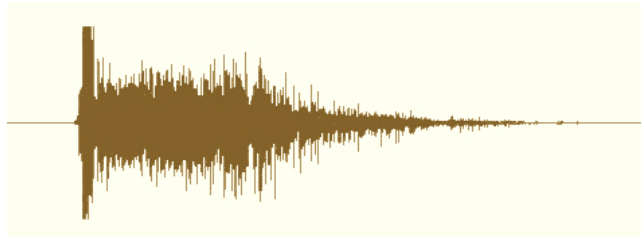


Fig. 8. Electric Clap (Audio Track 8)

In the above image, the sudden appearance of the ‘clap’ is clearly indicated by a heavy emphasis on the left hand side (i.e. at the beginning of the waveform), correlating acoustically to a sudden abrupt and startling onset. This ‘heavy onset’, or *attack*, is then seen to be followed by a multitude of smaller jagged edges suggesting a rather harsh sound that decays into a silence – all over the course of a short moment. This clap is repeated, and then presented as a succession of three in a group. These comprise the final series of claps that dissolve the first section of the piece, thereby setting the (sonic) scene for the beginning of the next section.



Fig. 9. Electric claps (Audio Track 9)

The end of this first section, viewed as a consolidated unity, then appears as the visualization of a type of ‘sonic club’, in which the increasing frequency of the ‘electric claps’, together with the increased intensity of the overall sound, can be imagined as

combining to form the ‘head’ of the ‘club’ on the right hand side of the image. Following this metaphor, the ‘club’ can then be named as the means by which the preceding section was pulverized and extinguished, creating a ‘vacancy’ in which a new musical thetic could be established.

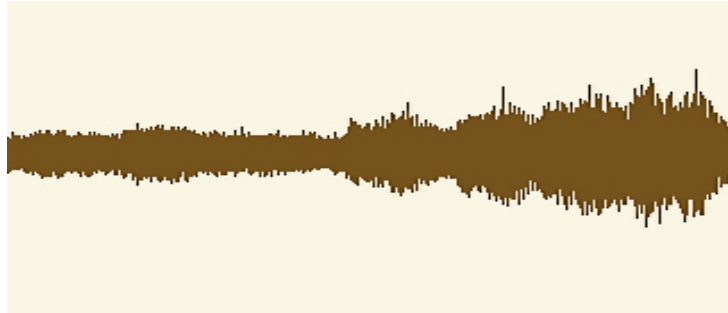


Fig. 10. End of first section, with claps (Audio Track 10)

The New Thetic: Sounds of Space

Following the dissolution of the first section, the piece begins afresh with a new sequence of sounds, which were selected for their eerie, raw, rough yet atmospheric character. As with the earlier samples, these sounds were intuitively edited and combined during a compositional process in which I edited and mixed the sounds in ways that were judged to be the most musical, i.e. in a manner that would emphasize their rhythmic and textural aspects while at the same time generating an eerie, other-worldly sonic experience. As I was not instructed on how to do this, I conclude that the strong psychic impression made upon me by these particular sounds – their raw Semiotic charge – can partly account for how I was able to intuitively arrange and reconstruct them according to a ‘workable’ musical scheme capable of generating and representing subjective meaning. I support this

assertion by recalling that it was listening to these particular sounds that initially inspired me to begin the piece, and which then encouraged me to work at it through to its conclusion, over a period of several years.

These sounds are known, both in the electroacoustic and the wider scientific communities, as 'Space Audio', or the 'Sounds of Space'. The University of Iowa website <http://www-pw.physics.uiowa.edu/space-audio> (2003 – 2013) describes them as "the sounds of space derived from spacecraft measurements obtained by Professor Donald Gurnett and the University of Iowa radio and plasma wave group". They are actually not at all acoustic in origin, but are instead the *sonification* (direct acoustic translation), of electromagnetic phenomena in the Earth's ionosphere and outer magnetic field, which correlate to visible auroral displays such as the Northern Lights. Their invisible electromagnetic radiation is detected and recorded by satellites, and the raw data then played directly through loudspeakers without any intervening treatment such as pitch or temporal transposition. The raw and eerie nature of the resultant sounds strongly impressed me with the feeling of listening directly to the wider universe beyond my own immediate experience, as if my subjective 'imagined space' had suddenly been vastly extended and expanded by means of a sonic experience. From the electroacoustic perspective, the fact that they are raw '8-bit' recordings (rather than the usual, smoother 16-bit or 24-bit variety) helps anchor their raw, rough, and untamed character into a subjective experience of a type of 'Universal Semiotic'.

The first of these sounds to emerge from the dissolution of the first section (after the

series of claps) has been named ‘Auroral Hiss’ by the Iowa Group. Although it is nominally a direct sonification of an auroral phenomenon in the ionosphere, it appears (and sounds) as a heavy, regular and rough breathing sound:

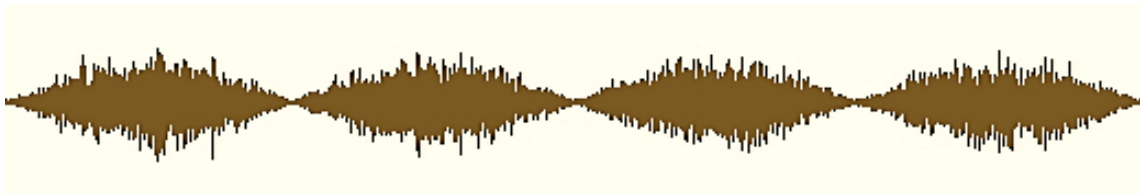


Fig. 11. Auroral Hiss (Audio Track 11)

The position of this sound in the piece can then be seen in middle part of the following diagram (Fig. 10), in which the raw, breathing ‘auroral hiss’ follows to the right of the ‘acoustic club’ that completes the first, introductory section. As in Fig. 10, there are four ‘breathing sounds’ visible here; after these, the music erupts into the conflagration of ‘Space Sounds’ that comprises the second section of the piece. In Fig. 10A, this latter ‘eruption’ is visible (to the right of the ‘breathing’) as a thicker and less clearly rhythmic portion of the overall waveform.

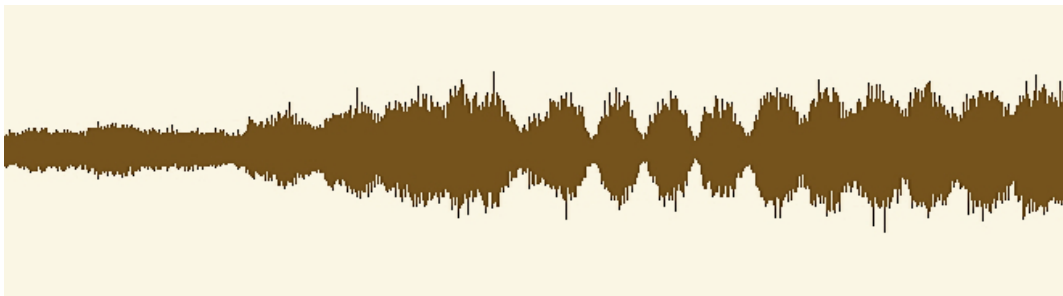


Fig. 10A. End of first section (Overview)

Following the introduction of the ‘breathing sound’, the next of the ‘space sounds’ is then introduced. This sound is named (by the Iowa Group) as ‘Auroral Kilometric Radiation’. It has a sharp, rough, bright and metallic-type timbre, combined with a continuous change in pitch whose effect is to produce a sinewy rhythm that I found reminiscent of a strangely archaic and physical experience of the Semiotic. Its visual waveform on the one hand suggests the shape of a reversed sword, thus evoking notions of a metallic cutting action; however, the image also recalls the breathing rhythm of the ‘auroral hiss’ – but a rhythm that is then interrupted by a sudden outburst or ‘spike’ near the end of the sound (on the right hand side). This ‘spike’ (reminiscent of a previous ‘electric clap’ albeit reversed) is then followed by a return to the original rhythm (at the end of the sound). Although no actual breathing sound is heard here, the evocative nature of the image does suggest a certain regularity, that is then disrupted by a sudden noise, but which then resumes again afterwards. From a psychoanalytic perspective, this may correlate to the Kristevan notion of the Thetic (the ‘breathing pattern’ that is visually, if not aurally apparent) being destroyed by Semiotic Negativity (the ‘spike’), followed by the establishing of a new thetic, i.e. the continuation, or *re-presentation*, of the original visual pattern. This continuation, although similar to the original pattern, is not strictly identical to it, as the sound sample is not mechanically manufactured or synthesized, but is instead a raw and direct acoustic translation from nature. In the Kristevan sense, the continuation of the visual ‘breathing pattern’ cannot be regarded as identical to the original pattern, as it occurs after the Semiotic disruption of the ‘spike’, that serves to destroy the original appearance of Symbolic unity and regularity – even if only for a moment. Thus, whatever occurs after this disruption is fundamentally new, both to Symbolic representation and to

the Semiotic experience of the listener, who feels or intuits the progressive motion of the sound as it develops in time as a raw, fresh and lifelike sound.

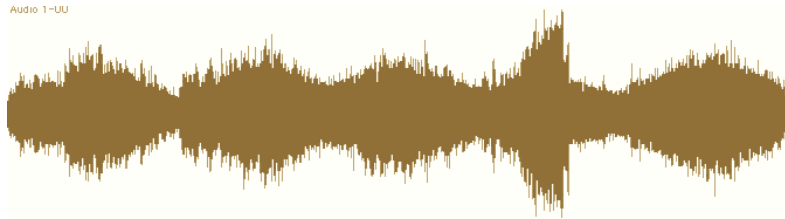


Fig. 12. Auroral Kilometric Radiation (Audio Track 12)

In deciding how to place this sound into the composition, my experience of the ‘sinewy’ and ‘metallic’ character of this sound intuitively suggested that it could be used as a type of ‘sonic rope’ that I could use to bound, tie, tame and ‘wrap around’ the primary (and in my experience the most impressive) ‘space sound’ for my piece, named by the Iowa Group as “Earth Proton Whistlers”:



Fig. 13. Earth Proton Whistlers (Audio Track 13)

The sheer intensity and raw thickness of this sound – its visual metaphor for a rough, earthy stick combined with an acoustic evocation of a type of Universal Semiotic – both invited its inclusion into the piece while also demanding a musical context into which it

could be placed. In part, this context was already previously established by the eerie and dramatic build-up of the introductory section of the piece. However, I realized that simply placing it in the piece without combining it with additional sounds to balance and modify its strange raw intensity, could be baffling and inconclusive to the listener. From a psychoanalytic viewpoint, its Semiotic charge needed to be tamed, balanced and challenged by a structural Symbolic aspect. Correlating this to my earlier discussion of Kristeva's 'True-Real' in artistic production, I can conclude that during the composition process, I intuitively recognized that in order to avoid an overwhelming sense of raw psychic energy lying beyond the domain of language and structure, I would need to establish it within a musical structure. This was done by combining it with the 'sinewy metallic cord' of the previous sound, as well as with the regular, easily identifiable 'breathing rhythm' of the Auroral Hiss. Once again (as throughout this piece), the combining or layering of individual sounds on the one hand tends to increase the intensity, and hence the Semiotic charge of the sonic experience, while however helping to develop and establish the combined sound as a new, identifiable acoustic entity clearly situated in the Lacanian Symbolic.

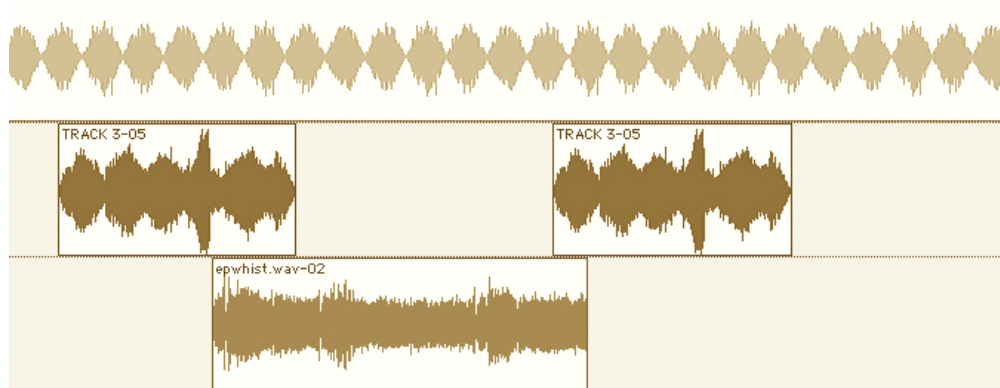


Fig. 14. Combined Auroral Sounds (Audio Track 14)

Thus, the need to intuitively balance the raw (sonic) experience of the Kristevan Semiotic with the necessity of a structure (corresponding to the Lacanian Symbolic) helped to inspire and encourage me to learn how to compose this piece on my own. This again evokes Kristeva's notion of the 'True-Real', in which she describes the particular strength of the artist who is able to avoid a descent into psychosis (i.e. a purely Semiotic experience of life) through the introduction of structure and pattern. Here, the contrast between raw semiotic sound and symbolic structure is even more apparent in Fig. 14A (below), which displays an overview from the beginning of the piece until the end of the Auroral section. This image presents a clearly defined pattern, in which the introduction and the disruptive 'sonic club' of the electric claps is followed by the 'auroral hiss', that then erupts into the thick and dense texture of the combined auroral sounds. At the right hand side of the picture, the mixed auroral sounds are seen to have dissipated, leaving in their wake the singular 'auroral hiss', which then itself dissolves, setting the stage for the next development in the piece.

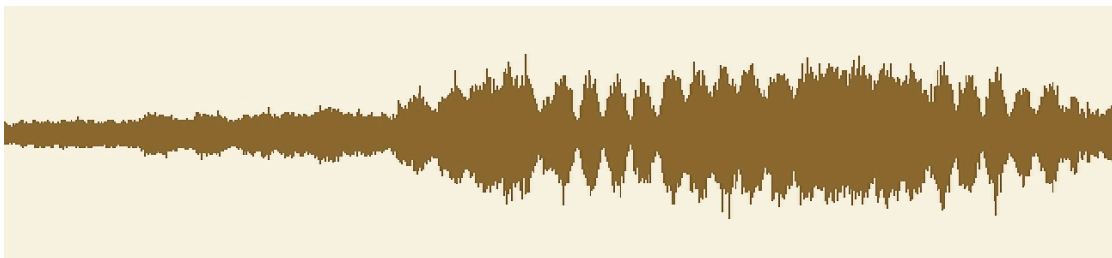


Fig. 14A. Overview of beginning of piece until end of Auroral section

Mid-Section: Continuing the Journey within the Eerie

Although the Auroral section has now been dissolved, its eerie, other-worldly emotive character is nonetheless prolonged, albeit now by the use of music different to the 'space

sounds'. This section can be regarded as a 'mirror' to the original introduction inasmuch as it is similarly comprised only of processed physical sound samples – there are no Auroral sounds in this section. Thus, in this sense it is a *return* to the original section – it 'reflects' it and in that sense can be regarded as musically symmetric to it. Hence, from a Lacanian perspective (i.e. with regard to the notion of the *Fort/Da* as intrinsic to the genesis of self-learning) it provides further structure to the overall piece, in that the *return* to the use of physical (non-Auroral) sound samples is reminiscent of the return of the reel to the child, as evoked and discussed by Lacan and Derrida.

At around two minutes into the piece, with the dissolution of the 'auroral hiss', there is a short bridge connecting the end of the Auroral section to the beginning of the new, middle section of the piece. At this point, three sounds are returned: the female drone, the arc welder – and the 'sinewy metallic' auroral sound, that is heard for only a few moments, as if to 'wrap up' the end of the combined Auroral section. Once this last auroral sound vanishes, we hear the continuation of the female drone and the arc welder, which are now combined with a new sound whose pitch and texture has been specially processed to evoke an other-worldly character. This is indicative of a new presentation of the 'return' inasmuch as the emotive characters of the female drone and welder sounds are now transformed into a *re-presentation* of the eerie atmosphere. The 'eerie' is *returned*, albeit now in a more ethereal and tonal manner. The recurrence of the 'eerie' establishes an emphasis of its dramatic nature which the new section of the piece then attempts to transform into a softer, more contemplative and ethereal character. Thus, the workings of the *Fort/Da* are again suggested in the 're-presentation' of these sounds and

of the eeriness: having extended and returned the reel in the first section, I now repeat the process, although now within a more dramatic, eerie context. Likewise, having evoked the atmosphere of distant other worlds in the second section, I here re-present the strangeness of that sonic experience, now transformed into inner, singular contemplation. With an understanding of these ‘re-presentations’, the *Fort/Da* can then suggest an indication, or a model, of how I was able to intuitively learn how to arrive at this process through self-learning.

In order to complete the combination of sounds that I judged necessary to generate the atmospheric eeriness of this new section, a new sound was then introduced to combine with the female drone and welding sounds. This is a prolonged, processed undulating tone whose original acoustic sample consists of a raw buzzing sound – which acoustically speaking, is a dramatic composite of various pitches and textures:



Fig. 15. Multipitched Buzz (Audio Track 15)

Although this image appears similar to the original electric drone and to the balloon-blowing sound, its acoustic qualities are very different from those other two sounds. In this instance, the image does not do justice to the components of the sound itself; from the viewpoint of Freudian dream-analysis it could be regarded as *hiding* the direct aural experience in a type of *visual condensation* which, in its similarity to other sonic identities, hence disguises its true nature (as a multi-pitched buzz of singular character).

This may be indicative of Freudian aspects of the compositional self-learning process, as I recall that upon viewing its waveform and hearing its sound, my instinct was immediately to electronically transform the buzz into yet another acoustic ‘disguise’, namely as a prolonged ‘musical sigh’. This ‘singing sigh’ combines with the female drone and arc welder just after the end of the auroral section and continues without interruption until the end of the new section (three and a half minutes into the piece). As explained, the combination of the ‘sigh’ with the other sounds was chosen to accentuate the strange and out-worldly character of the piece that had been established in the previous auroral section. That this choice was both deliberate and instinctive testifies to the influence and effect of both the *Fort/Da* and of impulses native to the Kristevan Semiotic. The raw multi-pitched buzz is now processed into a sound with obvious tonal qualities, thereby increasing its symbolic aspect. This is reminiscent of my treatment of the original electric drone mentioned above, and as such suggests a ‘return’ of a process previously learnt and now repeated. On the other hand, the deliberate yet instinctive disguising of this startlingly rough buzz into a condensed and prolonged ‘singing musical sigh’ evokes Freudian notions of the dream as a condensed disguise of impulses – impulses that for Kristeva constitute the domain of the Semiotic.

Into this extended, dreamy mid-section (just after the half-way point of the piece) the sound of beeps begins to softly intrude, as if to awake the listener from a pervading sonic dream. A beep is heard softly once, then repeatedly in a series, that becomes neither louder (more intense) nor softer (less intense). Rather than changing their loudness, I judged the constant yet soft presence of the beeps to be just sufficiently intrusive as to

allow a balance between gently ‘awakening’ the listener while simultaneously extending and enhancing – though not yet disrupting – the hallucinogenic character of the mid-section. As with all the other sounds used, the initial symbolic identity of the beeps had already been destroyed through their electronic processing and their embedding into the singular and abstract wider sonic context; here, they are only referred to as ‘beeps’ for the purposes of logical exposition as part of this thesis, which by necessity is situated within the Symbolic.

Seen in their original state (as a raw sound sample), the image of the beeps appears rough and multi-edged, while at the same time suggesting a purposeful trajectory in time (i.e. towards the right of the picture) – as if evoking an abstract representation of the journey of an elaborate spaceship in science-fiction:



Fig. 16. Beeps (Audio Track 16)

On the other hand, the Geiger Counter waveform (below) suggests an image of a multitude of fence-posts or a series of individual match-sticks without any continuous visual texture or directionality, corresponding to pure, point-like and disconnected acoustic texture without tonality:



Fig. 17. Geiger Counter (Audio Track 17)

The Geiger Counter sound immediately follows the softly sounding beeps, as if replying to (and contrasting) their gentle yet insistent ringing. Even when processed and embedded into the piece, the Geiger Counter sound is more raw and primitive, as it has no clear pitch. Its soft, grating series of clicks answers and replaces the series of beeps that precedes and then accompanies it. In terms of loudness, the barely-audible volume of these clicks is similar to that of the beeps; they do not become louder, as I wanted to rely only on the Semiotic affect of their rough texture (and not an increased volume) as a device to gradually ‘awaken the listener’, who would thus eventually be prepared, or ‘primed’, to encounter the next dramatic eruption. In this decision I was guided by my (social) understanding of the nature of effective electroacoustic music, in which dramatic sonic experiences can occur through changes in timbre alone.

With the Geiger Counter clicks immediately following the beeps, the ‘undulating dream’ begins to be sonically torn apart, and the music is then set to transform into a sense of dramatic urgency. At this point, the sound of telemetry erupts into the piece, beginning softly but quickly becoming persistently louder during repetition. The visual representation of the Telemetry waveform suggests a lively, life-like and organic Semiotic acoustic effect, as if evoked by the notion and the image of a strange, unknown, dense yet physically articulated marine creature.



Fig. 18. Telemetry (Audio Track 18)

I judged this sample suitable for use in my piece at this point as the dramatic Semiotic effect of its insistent, even aggressive sound is aurally balanced by its clearly tonal (or pitched) quality, which then mitigates any tendency towards a possible unpleasant harshness. There is also another, different type of balance at work here, in which the Semiotic immediacy of the experience of the sound is combined with a subjective awareness during listening, of its origins as electronic data belonging to the Symbolic domain. This mixture of the Semiotic and Symbolic is then combined with the clicks of the Geiger Counter, that, newly re-introduced, now become louder and more insistent in their own right. As a result, the smooth yet aggressive tonal quality of the Telemetry is now combined with the primitive raw stuttering of the Geiger clicks, allowing for a balance between pitched and un-pitched sounds, i.e. between tonality and pure texture. The overall effect is of an increase in dramatic tension accompanied by a growing intuitive expectation of a sonic catastrophe; this also recalls the increasing semiotic charge described in relation to the end of the first, introductory section of the piece. As before, I conclude that the capacity to compose these dramatic musical ‘build-ups’ through processes of self-learning can be understood in terms of a semiotic experience of the disparate sounds – specifically, of the capacity to register and become aware of their affective aural impact as previously explained during my psychoanalytic exposition of the conscious perception of timbre.

After some moments, as the insistently repetitive combination of telemetry and Geiger Counter noises increases in loudness, the sound of women's voices (originally heard in the first section) is re-introduced to the mix. Before this point, the music had reached a dramatic peak, and a change was imminent. In the first section, the unintelligible medley of voices was used as a semiotic device to help generate the dissolution of that section; the voices were then followed by a series of semiotic 'electric claps' that effectively destroyed the identity (or thetic) of that section. Here, their re-introduction serves a similar purpose, in that they dissolve and conclude the dream-like mid-section, thereby permitting and inaugurating the introduction of the next, fourth section of the piece. As re-introduction, or return, their presence suggests a similar reliance on the repetition of the *Fort-Da* experience, and (as with other similar instances) I thus conclude that my intuitive inclusion of them at this point was in effect 'composed by' my living of this psychoanalytic process.



Fig. 19. Overview of Auroral Section through Middle to Claps

(Audio Track 19)

The visual overview of the entire mid-section (beginning from the end of the Auroral 'breathing' and lasting until the re-introduction of the medley of voices and electric 'claps') clearly indicates a smoother and less dense texture than the previous auroral

section or the subsequent telemetry, Geiger clicks, and claps. This image also evokes the notion of an articulated sculpture, and the conclusion that a successful artistic unity of diverse multiplicities should always contain both Symbolic and Semiotic elements, i.e. indicative of tendencies both towards unity and to disruptive heterogeneity.

Second Auroral Episode

Following the claps at the end of the middle section, the piece presents the listener with a new series of ‘returns’, consisting firstly of the re-introduction of the auroral ‘metallic rope’ sound; secondly, in the repetition of its previous use as a means of bridging disparate sections of the piece; then also, in the actual re-introduction of an auroral section as such; and finally, with regard to the similarities of the new auroral sounds to the ones previously heard in the original auroral section. In this new auroral section, the first sound to be heard is (as before) a rough, raw, regular breathing sound, named by the Iowa Group as ‘Magnetosphere Cusp’:

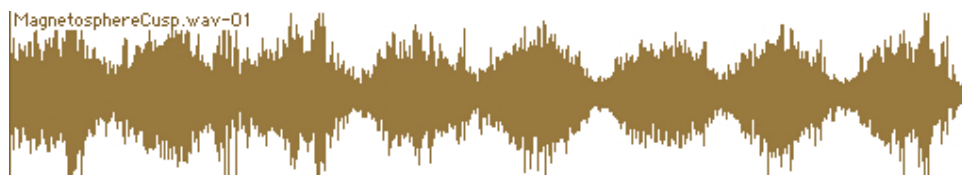


Fig. 20. Magnetosphere Cusp (Audio Track 20)

This waveform, while closely resembling the previous ‘Auroral Hiss’, is rougher around the edges; this can be clearly seen in the image, and heard in the sound itself as the addition of a series of subterranean bubbling noises evoking an archaic, semiotic experience of a hot mud-pool or similar viscous liquid environment. During the process

of composition, the affective sonic experience of this bubbling sound suggested a dramatic emphasis – a type of sonic highlighting – that would be emphasized by the addition of another layer of sound. The earlier semiotic medley of voices was chosen as a suitable sonic counterpart to this bubbling and breathing – their re-introduction (by now having spanned multiple occurrences) again correlating to the repetitions and returns of the *Fort-Da*. However, besides this notion of return, there was also an aesthetic consideration, namely the inclusion of the voice medley as a type of sonic counterpart acting *a priori* to musically balance a new sound to be introduced immediately afterward. This latter sound is named by the Iowa Group as (again) ‘Auroral Kilometric Radiation’ (or ‘AKR’) – here, it is prefixed by the label ‘second’ to indicate its singular identity, which is quite different to the first ‘AKR’ sound sample. Visually, it is not at all similar to the ‘reversed sword’ of the earlier ‘AKR’ sample, nor does its sound evoke any type of ‘bright metallic rope’. Rather, the image appears as a long alternating series of small and large thin spikes; on the other hand, the corresponding sound is characterized by a train of strange faint babbling voices, that are apparently radio station emissions detected by the satellite that were then mixed into the recording of the ionospheric phenomena. The distinct, even slightly sharp aural character of these faint babbling voices seems to correspond to the string of small, mixed yet clearly identifiable spikes in the associated image:

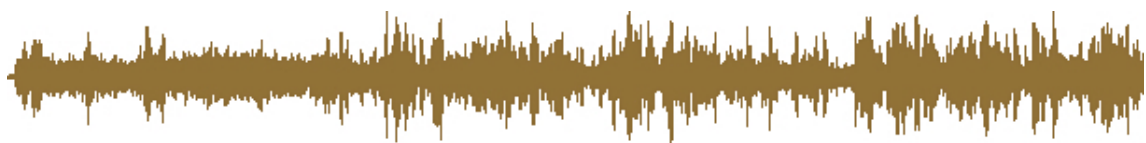


Fig. 21. Second Auroral Kilometric Radiation (Audio Track 21)

The semiotic aural impression of these voices – the unsettling effect of them upon me as an echo of human voices swamped and subsumed by the vast noise of a greater cosmos – then warranted their inclusion into a composition inspired by the notion of a cosmic space. However, merely introducing this faint voice babble without any prelude or reference to other prior elements within the piece seemed inadequate and clumsy. To remedy this anticipated weakness I ‘implanted’ a few seconds of the medley of women’s voices to return at a moment just before the commencement of the ‘AKR voices’. The latter then occurs or ‘appears’ to the listener as a type of response or reply to the (already familiar) women’s voice medley that immediately precedes it.

The combination of ‘Magnetosphere Cusp’ and ‘second AKR’ sound samples then plays over some forty seconds, after which time I felt and judged the dramatic tension to have sufficiently dissipated to the point where the music was now set to dissolve once again and begin afresh – this time into its fifth and final section. As before, electric claps signal the destruction of the ‘Thetic’ of this second auroral section of the piece, and likewise, the ‘metallic rope’ of the first AKR again serves to bind the end of the section to the beginning of the next. This final, concluding section is in one sense a recapitulation of various elements which have already been previously heard: the female drone; the arc-welder; the ‘undulating sigh’; the ‘Auroral Hiss’; the ‘second AKR’; and the original electric drone heard at the beginning of the piece. From another perspective however, it is a freshly composed section, as these sounds are now heard in a new combination and as a

different sequence than had previously occurred in the composition. (This singular identity is clearly apparent in the representation below, whose unique shape does not resemble any other part of the music.) One example of this re-situating of previously encountered sonic events into a new musical context – a ‘composition of returns’ in Lacanian terms – can be found in the return of the electric drone, which is now encountered as enabling a dissolution or fade-out of music rather than as an introduction. Another instance is given by the ‘electric claps’, that previously had been deployed to signal the end of a section prior to the beginning of a new one; here, they are instead used to facilitate the dissolving of the entire piece into its final silence.

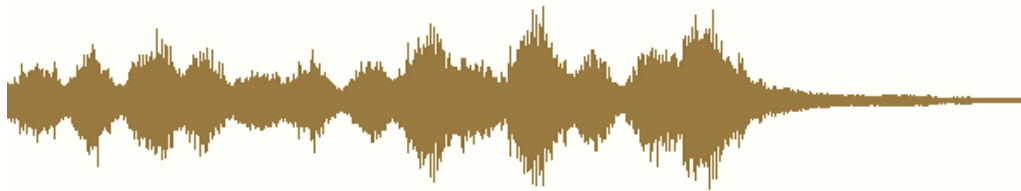


Fig. 22. Latter section of second Auroral passage until end of piece

(Audio Track 22)

Evolution of Piece: from Acoustic Morass to Sonic Articulation

In this section I present successive iterations of the composition, beginning with the earliest (and most primitive) attempt and proceeding to the final and most polished version of the piece. In doing so, I attempt to argue that these examples of the evolution of the piece can be used to demonstrate Lacanian notions of self-learning combined with the genesis of an artistic social identity.

After previewing and choosing the individual sounds, my first compositional act was to lay down as many tracks as the software would permit, so as to discover how they would sound together and thus gain a sense as to what type of semiotic affect would emerge from combining them without thought to structure, articulation or delineation. The result was a morass of electronic and mechanical sounds mixed with the auroral ‘Space sounds’. There is no introduction or lead-in; the intensity of the affect is immediate and undifferentiated, and changes in textural density only occur when individual sounds have expired on their own. Hence, there is no deliberate or intuitive structure posited at this stage, which in psychoanalytic terms could be regarded as corresponding to the Lacanian Real of the pre-conscious infant experiencing the world as an undifferentiated universe of pure sensation.

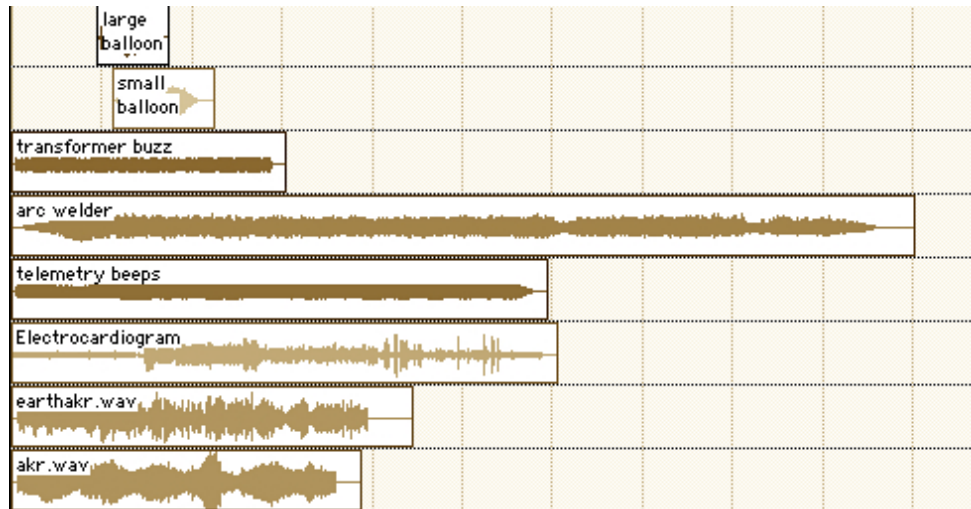


Fig. 23. 1st July 2003 – Overview

(Audio Track 23)

However, the screen shot of the next compositional iteration now clearly indicates an urge to organize the sound material into a structure: the various sound samples have now been edited, spliced, removed, replaced and rearranged into a specific articulated and recognizable pattern. Thus, from an early stage the compositional process involved the urge to arrange (or compose) the acoustic elements – the direct semiotic experience – into a sensible, unified musical structure. From the Lacanian perspective, this may correspond to the Imaginary stage during which the infant, now cognizant of external shapes and reflections, attempts to structure a unified and subjectively meaningful self-identity. In Lacan's formulation, the dominant drive is scopic or visual; this study instead focuses upon aural and musical perception. In either instance, the Mirror Stage suggests a fundamental need to organize perceptual sensation into a unity that then 'reflects' subjectivity back to the creator of this unity: in Lacan's example, the subject is the infant; in this autoethnographic study, it is the artist-as-learner.

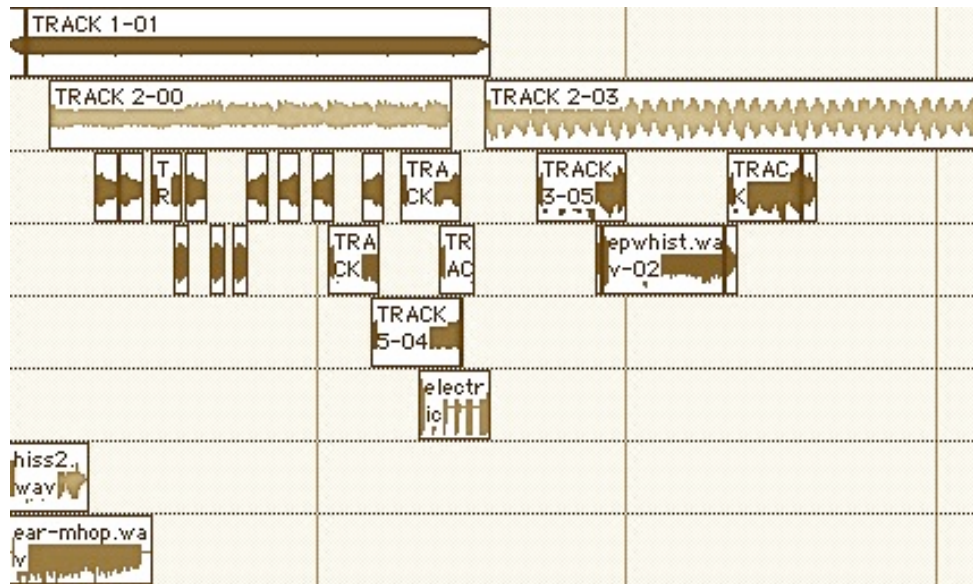


Fig. 24. 2nd July 2003 – Partial Overview

By the third iteration, the permanent structural template for the whole piece has been formulated as an A-B-A-B-A sequence in which an introduction composed of the combination of various sounds is followed by a section with ‘Space Sounds’, which is in turn followed by another ‘combined sound-sample’ section. This then leads to a second auroral section which yields to a third physical-acoustic section that closes and concludes the piece. In this later version, the sounds are still in their raw state, i.e. they are not electronically processed; for example, in the first section they are still clearly electrical and mechanical (the drone, the arc welder and the balloon-blowing). Likewise, in the middle section -the second ‘A’ section) the multi-pitched buzz has not yet been post-processed into an ethereal undulating ‘song’. Furthermore, there are no vocal elements at this stage of composition, such as the female drone or the voices that figure so prominently in the final version and which – through their recognizable origins – help to ‘anchor’ the piece in the Symbolic. Overall, the compositional editing is still rudimentary

and rough, without thought (at this stage) to refinement or complexity: for instance, the piece finishes with a single ‘electric clap’ instead of a series of claps followed by the decay-to-silence of the electric drone in the final version. Hence, this version suggests that my attention was initially drawn to composing the most significant features of the piece before attending to finer details or to developing a smoother, more luxuriant and subjectively absorptive or immersive sound. At this stage I was most concerned with first establishing the overall sequential structure; with positioning within this sequence those sounds that were most significant to me; and with establishing the ‘electric claps’ as compositional ‘agents of change’, acting to transform one section into the next one.

Audio Track 24: 3rd July 2003 (no screen shot available)

With the next compositional iteration, the balloon-blowing sounds and the multipitched buzz were then electronically processed into the various other-worldly ‘singing sighs’ characteristic of the final version. Overall, the piece has now been more carefully edited and treated to produce a smoother sound, and the concluding moments now yield to a more gentle decay. At the time of composition, I regarded this as the final version of the piece, not realizing that I would wish to return to it at a later stage.

Audio Track 25: 4th July 2003 (no screen shot available)

Upon re-examining the composition several years later, I realized that I could now apply techniques of reverberation and amplification (that I had learned in the interim) to

increase the semiotic affect of the overall sonic texture and to accentuate the spatial depth of the musical sound. The previous iterations of the piece had relied upon left-right panning to situate the various sounds within the compositional space. With the application of reverberation, the ‘range’ of the space was now expanded to include a front-to-back dimension that was now combined with the ‘left-right’ dimension to produce an illusion of a three-dimensional space, allowing for a greater sense of subjective immersion and hence personal identification of the listener with the piece. This latter revision now highlights the next stage of my compositional learning process, namely the close consideration and the manipulation of factors affecting another listener’s experience of my music. One factor was the carefully detailed and varied application of reverberation to various points throughout the piece; the other technique used was to simply amplify whichever components of the piece I felt needed to impinge more strongly upon the listener’s perceptual awareness. In both instances, the aim was to intensify the semiotic experience for the listener. In Lacanian terms this can be viewed as the desire to reach out towards an ‘Other’, which in the musical context signifies either a single listener or a collective audience. During the interim four-year period, i.e. after completing the first iterations of this composition and before my later return to it, I had apparently successfully formed an inner or subjective sense of myself as a composer, which from the Lacanian perspective would be seen as corresponding to the unified image of the Mirror Stage. I had produced a subjective self-image as an artist, but did not yet feel that my piece, belonged to the outside world – it could not yet be *desired* by an audience – as my musical identity had hitherto been entirely developed without the influence and direction of external educational institutions, teachers, and peers. Not

knowing whether my music could become acceptable to an audience, I began to feel the desire to revise and improve my piece, specifically with respect to increasing its affective impact upon other people. Seen from the Lacanian perspective, my compositional learning processes had reached the stage at which subjectivity would now be oriented more effectively towards the awareness and consideration of, and a communication towards, the desire of an outside world situated within the domain of the Symbolic. At the same time, the previous iterations of the composition indicate that the foundations for this evolution towards the Symbolic were clearly situated within the Imaginary, i.e. within my own earliest and private experience of the raw sounds, together with intuitive and naïve notions of how they could be presented, re-presented, and returned. In this way, the examples indicating the evolution of my piece evoke Lacanian psychoanalytic concepts of an evolution of artistic subjectivity from the ‘subjective-Imaginary’ to the ‘social-Symbolic’.



Fig. 26. 2007 Version (Complete consolidated waveform)

(Audio Track 26)

Thus, within my own autoethnographic context, the induction of the artist into the Lacanian Symbolic appears as a learning process, during which I revised the earlier raw

versions of the composition with a later view to a new awareness of its effect upon another listener or audience. During this process, I began to realize that the listener (and hence the piece itself) would benefit by introducing the use of musical ‘anchors’ – specifically, those relating to tonality and to sonic source recognition. With this increasing consideration of the experience of the ‘Other’, I now considered the possibility of the disorienting effect of this music upon someone else. I began to sense the difficulties for a listener hearing the physical-acoustic samples used throughout the piece as pure sound, contextually disconnected from their actual original source of production. Furthermore, the ‘Space sounds’, that I had subjectively experienced as so evocative, are not apparently connected to any source of production whatsoever; this surely would further disorient an inexperienced listener. With that in mind, I intuitively chose to tonally ‘anchor’ the piece by including vocal sounds that would be instantly recognizable as real-world and human acoustic elements: the female singing drone; the medley of female voices; and finally, a voice uttering the first person singular ‘I’. As discussed previously in this section, these vocal elements were positioned at key moments throughout the piece – for example, the medley of voices that helps build up the tension leading to the end of the first section, or that (later in the piece) introduces and counterpoints the faint babble of the final auroral sound. Besides their use as dramatic devices however, their inclusion and blending into the piece as recognizable human sound sources lends an immediate warmth that was previously lacking in earlier iterations. In this sense, they serve as ‘sonic signposts’ (or ‘textural anchors’) that help the listener orient towards an easier acceptance of the immersive acoustic experience. In order to encourage and emphasize this acceptance, I used the software to ‘tune’ both the

female drone and the voice singing the singular ‘I’ to form basic harmonic relationships with the tone of the original electric drone, i.e. either in octaves or in fifths. These two harmonic connections – octaves and fifths – are the most immediately and easily recognizable and acceptable tonal relationships in Western music, as well as in music of other cultures. Their ‘tuning’ in this piece serves as an extra ‘sonic anchor’, namely that of pure and basic tonality. The next iteration of the piece (below) thus includes both these ‘textural anchors’ and the ‘tonal anchors’. With the inclusion of these, I felt the piece to have attained maturity. In the musical context of this study, I had undergone a subjective compositional learning process that can be regarded as a parallel, or a reproduction, of the Lacanian genesis and evolution of subjectivity, followed by the subsequent creation of a forcibly-unified social and musical identity situated within the Symbolic.

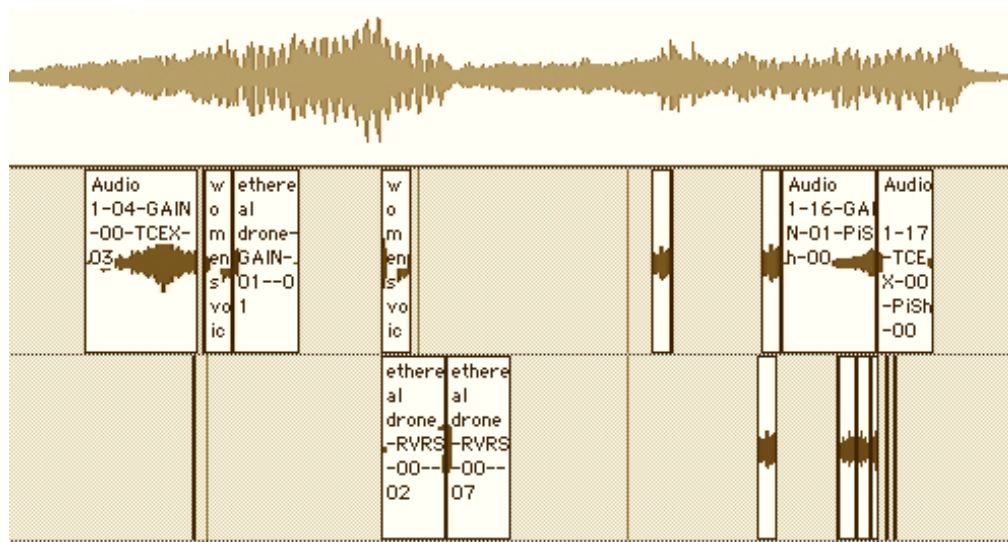


Fig. 27. 2008 Final Master, showing additions of vocal and ‘real-world’ sounds

(Audio Track 27)

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