

**Towards Weird Realism in Music: An
Investigation into Composing with
Improvisation and Found Objects**

Johnson, D.M.

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CDs accompanying the dissertation:

CD 1:

Azathoth from the album *The Thing of the Idols*

Shamanic Incantation No.5 from the album *The Ghost Piano Book*

Grodek No.4 from the album *The Ghost Piano Book*

CD 2:

Qo'nos chal VeS: Opera in One Act sung in Klingon

ABSTRACT

This dissertation considers the implications of using recordings of free improvisations on world music instruments and other instruments as source material for fixed media musical compositions. Generating material in this way demanded the formulation of new working methods which inevitably impacted on the character and style of the work produced. A methodology was evolved based on aspects of the performance practice of free-jazz improvisation. The individual style of free-jazz improvisation was a major part of the syntax of the created music. This further enabled novelty in that an improvised based-style replaces the conventional Western reliance on notation and its associated compositional techniques. Rather, sound is generated spontaneously and guided only by aural monitoring of it. A fascination with the sounds of world instruments led to an exploration of the sounds of those instruments in new contexts. Instruments, both world and western classical, became treated as found objects or utilised in 'studies in ignorance' in the manner of Sun Ra.¹ The improvised material was then manipulated using computer software and structured into fixed-media works. Gesture, texture and timbre dominate these structures rather than preconceived themes or harmonic schemes. Most of the music presented with the thesis is text based or inspired by text; this provides further structural underpinning. I wished to explore the relationship between the Weird Realist aesthetic as posited by Graham Harman in the works of H.P. Lovecraft and an analogous musical response. The separation of quality from object in Lovecraft chimed with experiences of sensory distortion when under shamanic trance and this resulted in *Shamanic Incantation No. 5*, the only non-text based work. A fascination with fantasy in general led to the composition of an opera in Klingon in which the text and music combine to present a series of tableaux that hint at aspects of sacred violence and the breakdown of shared values in times of war. As if to underline this point, *Grodek No.4* presents a collage

¹ A key recording in this respect is Sun Ra, *Strange Strings*, El Saturn 502, 1966, explored later in the thesis.

of disturbing materials drawn from stride jazz piano, free improvisation and expressionist *sprechgesang*; all of which combine in a new context to illuminate Georg Trakl's poem on the horrors of violence. As a result of these compositional procedures a cogent sound world using improvisation and electronics was created. The influence of Weird Realism and the use of world instruments stimulated ideas about how musical material can be distorted and re-contextualised. The combination of improvisatory and 'composed' elements was fruitful and shows a way of working with two different types of intuition, one in real time, the other not. This suggests possibilities for further exploring the combining of different experiential modes in creative work.

1. INTRODUCTION

This paper accompanies the following tracks chosen from CDs that I have made during my research for the degree of PhD at Kingston University:

- From *The Thing of the Idols: Lovecraft Tone Poems*: Azathoth Dreams
- From *The Ghost Piano Book*: Shamanic Incantation No. 5
- From *Shamanic Ritual Service*: Grodek No.4
- *Qo'noS chal VeS (Green Skies of Qo'noS - Opera in One Act – sung in Klingon)*: All 18 tracks.

In this paper I examine the philosophical and aesthetic background to my work, the methodology of creating fixed media works using a combination of different musical disciplines, and I undertake some analysis of the music, both descriptive, allusive, and in terms of intended psychological effect. The paper draws on ideas that have fed into the musical works; these are mainly from outside music yet they form the contextual framework for the compositions.

Many important thinkers have informed my approach from a wide variety of disciplines, hence the referencing of such diverse figures as Jean Baudrillard, Carl Jung, H.P. Lovecraft, Graham Harman, Edmund Husserl, René Girard, Lucien Lévy-Bruhl, and Samuel Taylor Coleridge. There are of course musical influences too, principally jazz musicians such as Sun Ra, Charles Mingus, Cecil Taylor and Miles Davis but also, Karlheinz Stockhausen, Ignaz Friedman, Reynaldo Hahn, the Sabri Brothers, Hindustani tabla playing and ritual singing of Kerala. The musical contextual framework reflects my listening over many years. I undertook no paper analysis of other pieces of music prior or during the composition of the music presented here. There is an additional CD which includes some pieces mentioned in the text so that aural comparisons can be made. I make no secret of my love for horror

fiction, cartoons and sci-fi TV programmes as a formative influence. I am not seeking an overriding unity of conception in my work, precisely the opposite, since I believe a cogent musical work can show a significant input of thought from other disciplines without becoming a potpourri of ill-chosen odours. I have held in a delicate balance the wildness of a free-jazz aesthetic with limiting principles of structure, texture and timbre to assist this cogency. If there is a main theme that illustrates the trajectory of these seemingly strange conjugations of music, anthropology, horror fiction and electronics, it is the idea of weird realism. My main guide in this idea has been Graham Harman and his work on H.P. Lovecraft. My work is a glimpse of a Lovecraftian world of music that reflects a current interpretative challenge to the previous view of his writing as merely inhabiting the world of pulp fiction.² I have sought to find music that is analogous to aspects of weird realism. The analogous use relates primarily to Lovecraft's sensory explorations involving the break between objects and their qualities; something that will be discussed in relation to the works of the portfolio.

I would summarise the contextual framework as follows: the music has been created as a response to both musical and non-musical ideas. The musical framework is largely taken from the idea of using my practice as a free-jazz musician as a springboard for compositions; improvisation was the means by which all the material was generated. This places the music within the context of my own specific style as an improviser and by extension within the wider context of free-jazz generally. I have used the improvisations to create fixed media recordings, rather in the manner of the studio albums of Sun Ra or Miles Davis. I have used world instruments in new contexts and have treated them in many cases like *objet trouvé*. This practice is drawn from the contextual framework of musicians like Sun Ra and artists like Pablo Picasso. The text based nature of the music places it in the

² For Edmund Wilson's attacks on Lovecraft see the reviews quoted in Graham Harman, *Weird Realism: Lovecraft and Philosophy*, Winchester, Zero, 2012, p.7.

context of literary figures within fantasy fiction. It also locates the themes of those texts within a wider anthropological and philosophical context, with particular reference to Girard and Baudrillard. The themes of theatrical ritual and sacredly sanctioned violence with reference to Girard and Baudrillard are explored through the medium of an opera that uses alien TV characters. I have made use of metaphors drawn from other media as a stimulus to ways of thinking about music. Some of these come from science and have shown ways of using processes of transformation to structure music. I show how these themes within the contextual framework operate in the music during the course of the thesis.

2. PHILOSOPHICAL BACKGROUND

2.1. Weird Realism

My desire to make musical interpretations of fantasy fiction has led to an assessment of some recent philosophical writings on such authors as H.P. Lovecraft. These have impacted on my approach to composing music for Lovecraftian tone poems and Klingon opera alike. A number of these writings by Harman and Michel Houellebecq, together with the extensive literature on shamanism by Jeremy Narby, Graham Hancock and R. Gordon Wasson, were important in developing a language for the *Ghost-Piano Book* and the *Shamanic Ritual Service*. Both Lovecraft and shamanism posit a weird realist world where normal sensory description breaks down. I tried to find analogies between this world and ways of composing that might best provide a sort of musical commentary on some of these ideas.

For many years Lovecraft's reputation has been growing. He has gradually emerged from the pigeonhole of genre fiction to become in the opinion of a growing number of literary critics and philosophers a major stylist in twentieth-century literature. Writers such as S.T. Joshi, Michel Houellebecq and Graham Harman have in different ways paved the way for Lovecraft's rise in the literary Pantheon. Joshi has written a 'life and works';³ Houellebecq has written an extended essay in an enthusiastic style that touches on many reasons why Lovecraft is more than just a pulp writer;⁴ Harman has written a philosophical analysis of Lovecraft's style leading him to the conclusion that a new type of reality is being presented in the writer's work.⁵ This is what Harman calls 'weird realism'. What the reclusive and

³ S.T. Joshi, *I Am Providence: The Life and Times of H. P. Lovecraft*, New York, Hippocampus Press, 2010

⁴ Michel Houellebecq, *H.P. Lovecraft: Against the World, Against Life*, (English trans. by Dorna Khazeni 2005), London, Weidenfeld and Nicholson, 1991.

⁵ Harman, Op. cit.

almost penniless contributor to pulp fantasy magazines would make of all this attention is hard to say, yet Harman and others make a strong case for Lovecraft the original stylist.

Having been reading not just Lovecraft but also other great writers in the fantasy genre such as Arthur Machen, Algernon Blackwood, M.R. James, Lord Dunsany and Sheridan Le Fanu, since I was a child, it was with great pleasure that I found Harman precisely pinpointing philosophical reasons why it was that I kept going back into their fantasy worlds at the expense of other more 'serious' writers. It is because they (and most particularly Lovecraft) created a weird reality that is not entirely graspable and yet horribly possible, however tenuously, thus stimulating the inquisitive impulse of the reader to inhabit that unfathomable world. Lovecraft's triumph is that he makes his language do the work of partial revelation rather than relying on detailed and sensational description. As will be seen in the main part of the thesis I make analogous use of this aspect of Lovecraft's writing by the use of instruments largely divorced from traditional contexts and playing styles. Electronic morphology also plays a part.

Harman is quite clear what he means by 'weird realism' and it in no sense meant to be synonymous with 'alternative reality'. This latter concept is more easily and cheaply achieved by the bamboozling of the reader with fake science that hides trite convention and made-up words that force the reader into instant submission to the writer's omnipotent power, whilst not preventing the writing sounding ultimately banal. Lovecraft himself attacks this kind of writing in his essay *Some Notes on Interplanetary Fiction*.⁶ He warns against the trivialising of the improbable or impossible by having it 'presented as a commonplace narrative of objective acts and conventional emotions in the ordinary tone and manner of popular romance.'⁷ Harman gives his own example of this cheap kind of

⁶ H.P. Lovecraft, *Some Notes on Interplanetary Fiction*, *Collected Essays Volume 2*, New York, Hippocampus Press, 2004-2007.

⁷ *Ibid.* p.178.

effect by positing a writer who presents matter-of-factly, the following: ‘Zartran the half-alien hero slays the enemy on distant ice-planet Orthumak with an argon-based neuron degenerator, and then marries the princess inside a volcano while wearing heat-resistant triple neonoid fabrics.’⁸ Lovecraft is not interested in this kind of writing, where once the made-up science and funny names are taken away, trite conventionality is revealed. For Lovecraft, the essential aspect of fantasy writing is to try to show how ordinary people react when their reality is undercut by the improbable and the impossible. Only then can the attempts at description do the emotional work of the characters as they are struck by the horror of what they perceive.

Lovecraft is the master of this much more subtle style of writing, where the characters wrestle with the impossibility of truly describing what their senses tell them. Indeed, it is the very confounding of the senses that is Lovecraft’s great gift to literature. I’ve used analogy based on this sensory confounding throughout the music presented in ways that will be explored later. The philosopher Robin Mackay characterises this shift from the certainties of the sensual world as a compulsion ‘to *live the problem* of the rational corrosion of our cherished self-image’.⁹ The following passages of Lovecraft show how subtle this process of sensual confusion is. The first is from *The Call of Cthulhu* (1928): ‘and Johansen swears [Parker] was swallowed up by an angle of masonry which shouldn’t have been there; an angle which was acute, but behaved as if it were obtuse.’¹⁰ As if being swallowed by masonry was not bad enough, Lovecraft further confounds the horror by questioning the angle of the stonework itself. The lack of sensationalism in the language

⁸ G. Harman, Op. cit. p22.

⁹ R. Mackay, *Editorial Introduction*, in *Collapse: Philosophical Research and Development Volume IV*, p.5, Falmouth, Urbanomic, 2012 Emphasis in original.

¹⁰ H.P. Lovecraft, *The Call of Cthulhu*, in *Necronomicon: The Best Weird Tales of H.P. Lovecraft*, London, Gollancz, 2008, p.224. Here Lovecraft provides an illustration of Coleridge’s remark ‘a simile is not expected to go on all fours’. See John Cooper Hill, *Imagination in Coleridge*, London, Macmillan, 1978, Chapter 9, footnote 3. Coleridge’s admonition to poets is here turned into a cosmic horror by Lovecraft.

allows us to feel the shudder of the narrator in a style unsullied by pointless pulp description; quadruple neodolithium bricks are not required to create the weird realist tone of the passage. The second example is from *The Colour Out of Space* (1927): 'The colour, which resembled some of the bands in the meteor's strange spectrum, was almost impossible to describe; and it was only by analogy that they called it a colour at all.'¹¹ Here colour is subjected to the same 'impossibility' as angle and yet the narrator still struggles to describe it. Other examples from Lovecraft's stories could illustrate similar points, many related to other-worldly music produced by insect like voices or blasphemous flutes, music that Lovecraft's protagonists fail to fully describe.¹² Harman even gives a succinct definition of the weird realist universe that Lovecraft struggles to survey: 'There are many truths and there is one reality, but their relationship must remain oblique rather than direct.'¹³ The idea of a blasphemous flute is a good example of this; it remains a disturbingly indistinct concept, we are never told in what way the flute is blasphemous; the specifics of an alternative reality for the flute are not described, it remains suspended in an unexplained weird reality. The idea of a blasphemous flute inspired a way of conceiving instruments as somehow blaspheming against themselves by way of distortion and contextual shift. As will be seen most of the instruments and indeed the vocalisations involve sonic metamorphosis. The phrase blasphemous flute itself requires an analysis as this relates to the way I use it in my own relationship to instruments. Although 'blasphemous' is not specific (the nature of the blasphemy is not known) 'flute' is; taken together they imply a blasphemy against 'flute-ness'. As will be heard in my music the instrumental sources are apparent; I do not distort instruments so that their origins cannot be discerned. There are departures and distortions from 'piano-ness', 'sona-ness', 'gayageum-ness' etc. The sonic

¹¹ H.P. Lovecraft, *The Colour Out of Space*, in *Necronomicon*, Op. cit. p.171.

¹² For an evocation of blasphemous flutes hear the eponymous 4th track of my *The Thing of the Idols*. Lovecraft often took a weird realist view of the flute; its Arcadian innocence violated by 'nameless paws' in *The Haunter of the Dark* (1935) and its blaspheming revealed in the prose-poem, *Nyarlahotep* (1920)

¹³ Harman, Op. cit. p.262.

distortions couldn't work in a weird realist context if there was no remnant of the original instrumental sound, in other words, no 'flute-ness'. In this way, a sound can refer to itself, since without this reference the departure from the norm cannot be registered. This is a confounding of expectation through sensory distortion. Throughout the thesis this aspect of departure from instrumental norms is explored.

Harman provides a detailed background to some of the philosophical ideas that Lovecraft's writing seems to illustrate and these ideas relate to the nature of reality itself. Harman locates the origin of Lovecraftian weird realism in the philosophical writings of Edmund Husserl (1859-1938). Husserl's theory concerning the relationship between objects and their qualities forms one of the main pillars of Harman's argument:

'While Hume thinks that objects are a simple amassing of familiar qualities, Lovecraft resembles Braque, Picasso and the philosopher Edmund Husserl by slicing an object into vast cross-sections of qualities, planes, or adumbrations, which even when added up do not exhaust the reality of the object they compose.'¹⁴

French symbolist poetry seems to suggest a new reality based on a pre-empting of Husserlian perception; Charles Baudelaire, Paul Verlaine and Stéphane Mallarmé were exploring this strange world from the late 1850s onwards¹⁵, some fifty years before Husserl produced his work, *Ideas*.¹⁶ As suggested by Harman, the cubist painters of the early decades of the 20th century, particularly Picasso and Braque, start to paint strange figures with body parts arranged almost topographically rather than according to mere surface appearance. Figures have recognisable qualities but become composite structures that obey a new set of rules, or in fact defy any known rules. It could be said that Cézanne's

¹⁴ Harman, Op. cit. p.3.

¹⁵ It should be noted that Baudelaire was the French translator of Edgar Allan Poe, another great American fantasy horror writer.

¹⁶ E.Husserl, *Ideas*, Oxford, Routledge, 2011.

theories of the cube, the sphere, the cone and the cylinder suggest a Husserlian view of reality. Cézanne's study of geometric forms was a springboard for experiments in form that anticipate Cubism: 'One must first of all study geometric forms: the cone, the cube, the cylinder, the sphere. When one knows how to render these things in their form and their planes, one ought to know how to paint.'¹⁷

Husserl's work, *Ideas*, appeared from 1913 onwards and presents a philosophical framework through which the radical works of the Symbolists and Cubists can be viewed. Husserlian slicing of reality is pertinent to a discussion of Lovecraft. Objects seem curiously unable to accrue the qualities we might expect of them; hence the weirdness of colours by analogy and acute angles behaving obtusely. Qualities are undoubtedly there but they refuse to conform. The horror arises in Lovecraft as the characters wrestle with an attempt to describe something that evades full understanding. In this way Lovecraft illustrates a point made by George J. Sieg: 'The only consistent signifier of Horror is not the *monster*, but rather its *victim*'.¹⁸ By extension the reader can become something of a victim as the horror is transmitted from the page, particularly if they identify with the victims in the story. The listener of a weird realist piece of music may also become a victim in this way, but this would of course depend on how any individual reacts to the music. Victimhood will be further explored below in relation to René Girard and its relation to sacred violence, one of implications of the libretto. In the opera victims abound; that is not to say that listeners will feel drawn into the orbit of victimhood but it is part of the intention that they are; this could be as true for Lovecraft as for myself. One might even suggest that instruments themselves are drawn into a victim status. The distortions and cultural changes that are wrought upon them negate normal expectations and outcomes. How this

¹⁷ Letter to Émile Bernard, 15 April 1904, cited in Émile Bernard, *Souvenirs sur Paul Cézanne*, Paris, Chez Michel, 1925. English translation in Erle Loran, *Cézanne's Composition: Analysis of his Form with Diagrams and Photographs of his Motifs*, Berkeley, University of California Press, 1943, p.9

¹⁸ George J. Sieg, *Infinite Regress into Self-Referential Horror: The Gnosis of the Victim*, in *Collapse, Volume IV*, Op. cit. p. 33. Emphasis in original.

is perceived as doing violence to instruments might again depend on individual viewpoints but the concept has at least some resonance with the idea of the victim in Weird Realist fiction.

There is of course a major difficulty in realising Lovecraftian concepts musically; it is the same difficulty that graphic artists and illustrators have faced when dealing with his work. The sensual shifting and slicing of reality that Lovecraft writes about defy true representation. In the end the composer and artist can only approximate Lovecraftian horror. In this sense, all a composer or artist can do is to do what Lovecraft does; try to instil the feeling of horror by the very impossibility of human thought and experience to adequately comprehend what is beheld. This impossibility is not unlike those modern physicists who postulate a 10-dimensional universe and try to imagine how our reality would look in this vastly expanded system. Edwin Abbott's *Flatland* (1884) was a very early fantasy based on these notions which many physicists and mathematicians are now actively pursuing.¹⁹

The distinct 'otherness' of the objects and creatures that reveal themselves to Lovecraft's characters hint at a delirious xenophobic paranoia; it is indeed not hard to find racial undertones in Lovecraft's work. While his views would not be easily excused today, one can't help but feel that his fiction in some senses presents an attempt to dramatise the armouring of the closed world of Anglo-Saxon scholars at Miskatonic University against the tide of the ungodly.²⁰ In many of Lovecraft's short stories there is a clear distinction made between the bookish white professors and the eldritch forces they encounter – forces

¹⁹ Edwin Abbott's *Flatlands: A Romance in Many Dimensions*, London, Seeley, 1884.

²⁰ Lovecraft's 'heroes' or more properly 'victims' are often white Anglo-Saxon scholars or antiquarians whose slightly fusty and uneventful world is penetrated by unknowable forces, which are characterised as racially decadent. One is reminded of the similar paranoia evinced by the 'yellow peril' passages in Andrei Bely's *Petersburg*, which dates from 1916, the year Lovecraft published his first story: *The Alchemist*. Kaiser Wilhelm II made his 'gelbe Gefahr' comments some twenty years before this date; literary figures mined this theme subsequently, not least Sax Rohmer in his Fu Manchu novels.

often channelled through 'alien' races. *The Shadow Over Innsmouth* features characters whose sinister qualities are not only defined by race but even by 'biological degeneration rather than alienage'.²¹ The role of xenophobic paranoia in my Klingon opera is important. It links themes of otherness not only to weird realism but also to ancient sacred practices and the part violence plays in the Klingon world. I have moulded a Klingon pseudo-anthropology, in order to bring out these themes, padding out the largely stereotypical presentation of the threatening alien as shown in the TV series, *Star Trek*,²² by extending their culture by means of oracles, the propitiation of goddesses, a code of honour and elaborate funereal rituals. Many of these behaviours accrue to the social function of state-sanctioned violence and the relationship between ritual and victimhood. The ritualised treatment of the dead is certainly a new aspect of Klingon culture and presents a strand of behaviour at odds with the TV Klingons who perform no such rites. These themes, although not so boldly stated, operate under the surface of my opera. Rather than literary narrative connectivity or character-based psychology, these themes form the core of the work and drive its processes and structure. The quasi-propaganda tableaux structure of the Klingon opera was well suited to hint at these ritualistic revelations. I now examine the influence of such ritual practices of human origin on my work.

²¹ H.P. Lovecraft, *The Shadow Over Innsmouth*, in *Necronomicon*, London, Gollancz, 2008, p.513.

²² *Star Trek*, created by Gene Roddenberry, CBS/Paramount, 1966 – present (2015)

2.2. Shamanism and Sacred Violence

For many years I have been studying shamanism from around the world. Long dismissed as a primitive pre-religion²³, there is now a growing body of work that examines anthropological implications in the context of what was 'reality' for those societies rather than what modern man considers 'primitive'. The father figure of this approach in relation to individual psychology is C.G. Jung, who radically shifted the interpretation of the utterances of mental patients from one suggesting delusion to one suggesting belief. Jung was already clear about this when he was training as a young medical student: 'My aim was to show that delusions and hallucinations were not just specific symptoms of mental disease but also had a human meaning'.²⁴ Although Jung knew the importance of diagnosis, he felt it was not the only aspect: 'The crucial thing is the story. For it alone shows the human background and the human suffering, and only at that point can the doctor's therapy begin to operate'.²⁵ Already here is the kernel of his later break with Freud who was to use his apparent squeamishness about trauma to develop his theory of fantasy and repression, in contrast to Jung who became more open to the validity and truthfulness of traumatic experience. Some recent authors have made links between Jung's understanding of human consciousness and the symbols and rituals found in shamanic practice.²⁶ These ideas of the power of the unconscious and conscious mind have influenced my desire to explore shamanic and ritual-dominated music.

René Girard has examined sacred practices in the light of ancient societies and has challenged the prevailing view as evinced by Sir James Frazer and Lucien Lévy-Bruhle that

²³ Many negative responses to the study of shamanism are summarised in Stacy Leigh Pigg, *The Credible and the Credulous: The Question of "Villagers' Beliefs" in Nepal*, *Cultural Anthropology*, Volume 11, Issue 2, p.160-201, Houston, Rice University, 1996.

²⁴ C.G. Jung, *Memories, Dreams, Reflections*, London, Routledge and Kegan Paul, 1963, p.112.

²⁵ *Ibid.* p.124.

²⁶ Especially Robert E. Ryan, *Shamanism and the Psychology of C.G. Jung*, London, Vega, 2002, *passim*.

ancient societies were somehow in the grip of infantile delusion.²⁷ Instead, rather like Jung with his schizophrenic patients, Girard looks at what conclusions can be drawn if one is to suppose that the behaviour of the ancients reflected what was real for them. In this way Girard reveals how concepts of justice, scapegoating and sacred appeasement operate in a way that is consistent with known facts about, say, ancient Greece or ancient Israel. Instead of condemning the 'primitivism' of ancient societies, Girard encourages us to think about what these apparent crude rituals and sacrifices replaced: 'The role of sacrifice is to stem this rising tide of indiscriminate substitutions and redirect violence into "proper" channels.'²⁸ This has implications for the libretto of my opera. The role of sacredly-sanctioned violence against the 'other' forms the main theme in the opera. The extreme measures taken by Klingon society (they go to war) has to be set up through the "proper" channels; the scapegoating of the Qaaks must be sanctioned in hallowed precincts. Additionally, the deities established throughout many of Lovecraft's stories are mirrored by those deities I made up for use in the Klingon opera and by the snake-like beings that many shamanic practitioners report seeing under trance conditions. Scapegoating is a major aspect of Girard's writing; I believe it to be an essential ingredient in horror as well. There are many hapless victims in Lovecraft's work (my favourite being when Walter Gilman is eaten *through* by the giant rat, Brown Jenkin in *The Dreams in the Witch House* (1932)).²⁹ In the Klingon world there are many victims too; their society seems to be set up for mass violence and fear of aliens. Sieg's observation about the constant signifier being the victim rather than the monster is again pertinent.³⁰

²⁷ The seminal work in this field is René Girard, *Violence and the Sacred*, (trans. Gregory), Baltimore, Johns Hopkins University, 1977. For his disagreement with the views of Frazer and Lévy-Bruhl, see p.30. See also Sir James Frazer, *The Golden Bough*, 1906-1915 and Lucien Lévy-Bruhl, *How Natives Think*, 1910. However, see section 5.8. of this paper in which I show how Lévy-Bruhl managed to re-interpret his own work in a less ethnocentric way.

²⁸ Girard, Op. cit. p.10.

²⁹ H.P. Lovecraft, *Necronomicon*, Op. cit. pp.358-387.

³⁰ Sieg, Op. cit.

Shamanism, with its priestly caste devoted to an exposure of a parallel reality accessed by some kind of austerity practice (self-starving, not sleeping or the consumption of psychotropic drugs), has impacted considerably on the works that make up *The Ghost Piano Book* and *Shamanic Ritual Service*. I created a body of work that reflects on my own shamanic vision experience. My options for adopting austerity practices were limited by the difficulty in obtaining ayahuasca, the so called ‘vine of the soul’ – *Banisteriopsis Caapi* – used extensively by Amazonian shamans.³¹ Neither was it possible to access the ergot fungus (genus *Claviceps*), described by Wasson, et al. as the hallucinogenic ingredient in the drink, kykeon, consumed by the ancient Greeks at the temple of Eleusis.³² I was thereby restricted to the options of starvation and self-induced insomnia. I was able to access the entoptic regions of trance, those regions preceding actual figurative visions. Alas, the oft-mentioned shamanic snakes eluded me.³³ The green dots and pale red grids to be seen in the cover art of *The Ghost Piano Book* CD are my own pictorial record of the trance; the snakes and human figures are derived from San rock art, thought to be an example of trance records.³⁴ Current debate about the kind of reality revealed by shamanic trance is divided between those who say that it is based purely on internal symbols within consciousness³⁵ and others who posit a model based on the idea of portals to another type of universe populated by twin snakes that communicate from another dimension with the shamanic priest. A slightly different slant in the direction of visionary enhancement of real objects is put forward by Aldous Huxley in the account of his famous auto-experiment of 3

³¹ See R. Evans Schultes and R. F. Raffauf, *Vine of the Soul*, Oracle, Synergetic Press, 1992.

³² R. Gordon Wasson, Carl A. Ruck and Albert Hofmann, *The Road to Eleusis: Unveiling the Secret of the Mysteries*, New York, Harcourt, 1978.

³³ Narby and Hancock both mention snakes. These authors will be referred to below.

³⁴ See Graham Hancock, *Supernatural*, London, Random House, 2005, pp.85-93 for a detailed discussion about San rock art. Also of interest are the paintings of the Peruvian shaman, Pablo Amaringo, who depicted his ayahuasca-induced visions in paintings of vivid colour. Many are populated by snakes.

³⁵ See particularly David Lewis Williams, *The Mind in the Cave*, London, Thames and Hudson, 2002.

May 1952.³⁶ These arguments are reviewed in Graham Hancock's magisterial, if somewhat speculative, *Supernatural*.³⁷ The most startling theory is that put forward by Jeremy Narby, who suggests the possibility that DNA in the form of entwined snakes (a form that alludes to both the double helix and the caduceus) actually makes contact with the shaman under trance, thus explaining, in Narby's view, the otherwise unlikely discovery by trial and error alone, of the vast library of plant medicine available to shamanics.³⁸

Fig. 1. Caduceus³⁹



From the trance experience I retained a memory of images and shapes and these formed the inspiration behind a desire to create a distinct kind of music that might best provide an aural component to a shamanic event. *Shamanic Ritual Service* (which follows quite closely the structure of a typical shamanic journey as outlined by Hancock) and *The Ghost Piano Book* are the result of these desires.

³⁶ Aldous Huxley, *The Doors of Perception*, London, Chatto and Windus, 1954.

³⁷ Graham Hancock, Op. cit.

³⁸ Jeremy Narby, *The Cosmic Serpent: DNA and the Origins of Knowledge*, London, Penguin, 1998.

³⁹ From Royalty Free Stock images www.123rf.com (last accessed 28.v.2014)

Taking weird realism and shamanism together, I suggest that the exposure of unfamiliar realities where object and quality are sliced in the manner of Husserl, reveal similarities in horrific effects on the receiver. The Husserlian view of qualities not accruing with their objects in predictable ways is seen both in the dislocated images of shamanic trance visions with its enhanced colours, wild, vegetal growths and talking snakes, and also with Lovecraft's sensual distortion of angles, colours, and the hideous indescribability of alien bodies. The terror caused by Lovecraft's monsters (and felt by the reader) resonates with that often experienced by those under shamanic trance; the behaviour of the snakes is not always benevolent and the physical discomfort caused by the austerities is often considerable.⁴⁰ To perceive such a link between, on the one hand, works of fiction and, on the other, shamanic practice dating back thousands of years has led to my pursuing related means of expression in my musical works. These means might be described using words like 'plastic', 'labile', 'flux', 'vegetal', 'volatile'. Musical terms would include 'microtonal', 'unmetred rhythm', 'density', 'texture', 'sound metamorphosis'. These general terms I hope to explicate in more detail when individual works are analysed. I will show how these ideas related to Husserl, Lovecraft, Harman and the study of Shamanic practices have informed my work. Their influence cannot only be seen in the philosophical groundwork I needed for my work but also in the way I have evolved musical techniques to solve the challenges of an attempted 'weird realism' in music. In a sense I have attempted a musical dislocation where melodies cannot attach to recognisable harmonies, where rhythms pulse with horror, where textures fan out from recognisable sources to decaying versions of themselves.

Before a description of compositional methods can begin, the musical materials assembled for my work must be surveyed.

⁴⁰ For a good description of physical symptoms see Hancock, *Supernatural*, Op. cit. pp.3-12. In my own experience the starvation austerity was uncomfortable and the visions were eerie, to say the least.

3. MUSICAL MATERIALS AND GENERAL COMPOSITIONAL PROCEDURES

In this section I have called ‘materials’ both instruments and some general aesthetic principles that I have utilised.

3.1. Background in composing and improvising

Before my PhD studies I had mainly been working in two fields: notated music and jazz improvisation. These fields were largely kept separate from each other. My notated music runs to several hundred opera and includes symphonies, tone poems, chamber music, song cycles and many works for piano.⁴¹ My jazz playing was further divided into subgenres: classic stride piano,⁴² post-bop⁴³ and free improvisation.⁴⁴ Weird realist precursors can be found in two specific notated pieces: *Ixaxar* (2003) for orchestra (based on the short story by Arthur Machen) and *Accursed Leaves from the Necronomicon* (2007) for piano which includes as a superscription a spoof paragraph in Lovecraftian style which among other things forbids performance of the very work it introduces. Other Lovecraft inspired pieces include two works for solo violin, one of which is viewable on YouTube.⁴⁵ As my studies progressed and weird realist themes emerged I found fruitful union between compositional and improvisational techniques.

My work as a free-jazz improviser started to form a prominent part in the aesthetic.

Influences from Cecil Taylor can be felt in the way that free improvisations allow for minimal long range repetition; I was interested in the breakdown of formal structures

⁴¹ Hear *Chisato Kusunoki plays Medtner, Chopin, Schubert, Hackbridge Johnson and Liapunov* (2007), Tableaux Records.

⁴² Hear the following CDs: *Prisoner of Love* (2008), *Where are You?* (2010) and *Live at NPL* (2011) – all Tableaux Records.

⁴³ See the following CDs: Dave Hackbridge Johnson and His Constellation: *Mescal* (1990) and *In the Offing* (1991) – both Tableaux Records.

⁴⁴ Hear Evorcicy, *Communique No.1*, Private Recording 2000.

⁴⁵ *The Eldritch Cry of the Proto-Shoggoths* <http://youtu.be/mexhjenQUQ8> (last accessed 13.ii.2014)

dominated by a hierarchy of recognisable themes. Much of Taylor's music proceeds by an interchange of gestures that are related in some way (often rhythmically) but which don't form a network of themes as such. They are more like riffs which form part of his overall syntax as an improviser. Free improvisers all develop their own syntax in this way; it is one of the reasons the stylistic characteristics of such diverse figures as Taylor, Ornette Coleman and Albert Ayler, to name just a few examples, are so distinctive. As I have my own style as an improviser my own repertoire of riffs forms part of the improvising process. This is a general comment about the way I improvise; it locates my style broadly within musicians who came to prominence in free-jazz in the late 1950s, such as Taylor, Coleman, Coltrane and Sun Ra. It informs all the material that I used for the compositions in the portfolio. The creation of long strands of melody was certainly inspired by Taylor and most particularly by his alto player of many years standing, Jimmy Lyons. From these strands I was able to make choices as to whether to leave them untouched or isolate segments for manipulation or repetition. This method is somewhat similar to the use of jazz licks which are used to create improvisations in jazz solos. This use of a repertoire of licks, which is no less prevalent in the styles of Taylor and Lyons than it is with more straight ahead players, is a factor in providing shape and motivic structure in the Klingon and Lovecraft-based works. The lines in my work do not follow harmonic structures in the same way as standards-based jazz but are more akin to Taylor's methods and the 'time-no-changes'⁴⁶ improvising in the late 1950s groups of Ornette Coleman and the early to mid-1960s groups of Miles Davis. In the visual arts one is reminded of Klee's 'an active line on a walk, moving freely, without goal. A walk for a walk's sake. The mobility agent is a point, shifting its position forward'⁴⁷. Drawing an analogy with Klee's point, one might say that a melody is a note taken for a walk. This rather closely matches the feeling of reacting in a moment-by-

⁴⁶ This phrase describes the practice of Davis' 1960s groups that often contained improvised sections of free melodic improvisation against a regular metre.

⁴⁷ Paul Klee, (trans. Sibyl Moholy-Nagy) *Pedagogical Sketchbook*, New York, Praeger, 1953, p.16

momentary way when in the act of improvising melodic strands. The melody creates its own structure, balancing elements of pitch and rhythm to create a 'line drawing' in sound. The aesthetic freedom that non-harmonically derived melody gives to the composer chimed with my need to respond to the wild terror of Lovecraft imagery and the volatile and violent world of the Klingons.

Cecil Taylor is of key importance to me and it is worthwhile to spend some time on his work. A good example of a Taylor recording that shows many influences on my work is *The Eighth* (recorded live 1981, released 1986, unedited version released 1989). At that time Taylor's group consisted of himself on piano with Jimmy Lyons, alto sax; William Parker, bass and Rashid Bakr, drums.⁴⁸ I first heard this work when I bought the original LP version which was edited. The record label Hat Hut subsequently released an unedited version and it is this complete version I will discuss as it resembles more closely my experience of hearing Taylor live. First: a brief narrative account of the piece, followed by the elements that attracted me and whose influence can be felt in my work.

The Eighth has certain structural characteristics that can be heard in many of his recordings. The piece begins with a slow searching section that introduces some very fragmentary motifs played in 'question and answer' by the piano and saxophone. This section is quickly dispensed with and a free collective improvisation section is launched with unremitting complexity. In some performances of Taylor's group that I attended these types of section could last for as long as 60 minutes; a constant flux of sound involving a composite texture created from the interaction of all four members of the group. Its characteristics are more easily experienced through listening than through verbal

⁴⁸ Cecil Taylor, *The Eighth*, Hat Hut, 1989. The whole album can be heard on youtube split into four sections and I refer to these sections in my discussion of the work. Here are the 4 links which correspond to the subtitles 1/4, 2/4, 3/4 and 4/4: <https://youtu.be/LoDETTuHyBc>, <https://youtu.be/ritX258yK8Y>, <https://youtu.be/Jml6TW7ykWl>, https://youtu.be/zrg0_6-KWvU. (Last accessed 2.ii.2016).

description, true of all music but particularly so with Taylor since there are no footholds for the purpose of delineating specifics; the music rather exists in a vortex of its own complexity where the speed of execution and rhythmic flow borders on frenzy. It might be termed energy music. Such an onslaught of musical information is not dissimilar to collective improvisations found in Sun Ra's work. These collective energy bursts are exhilarating in their own right but work equally well when framed by the fragmentary motifs in a more reflective mood as here.

The Eighth continues with sections that more obviously highlight one instrument over the others, like the traditional solos of bebop or hard bop groups. The solos are often much longer than those of their bop models and create their own internal structures, often again with speed of notes and rhythms being a main feature. *The Eighth* features other moments where more discernible motifs appear with hints of modality (e.g. the alto section that starts near the beginning of 3/4), yet these sections are short and often breathing spaces between high energy sections. Within a minute of Lyons' contemplative exploration of a motif he is already winding up the tempo into a flurry of phrases in Coltrane-like sheets of sound style. There is no link between the motif and the ensuing solo; the purpose of such sections seems to be to provide repose not to invite motivic exploration or to trigger a passage based on the suggestive mode of the motif; the music being broadly atonal throughout.

At times Taylor and Lyons have the habit of combining to create a sound continuum of fast and furious arpeggiation and clusters of sound that whirl up and down the pitch spectrum at great speed; not so much a sheet of sound but a whole laundry. This noticeably happens in a passage beginning at 6 minutes into 3/4.

On repeated listening the 'target' of this alternation of collective improvising, solos and sections of repose would appear to be a longer passage beginning at about 12 minutes into

3/4; it's the final section of the piece and acts like a coda. Here Taylor starts to explore more obviously modal material and this is confirmed by Lyons' subsequent exploration of the same ideas and modes. The previous complexity throws this simpler episode into relief and it has a more composed feel to it.

Other aspects of the performance have also been influential and again they are characteristics of many performances of Taylor's groups throughout his career including those I have been fortunate enough to hear. There is a certain amount of chanting accompanied by drumming at the start of *The Eighth*. In live performances that I saw this usually accompanied the distinctly ritualistic entrance of the group; Taylor chanting and reading his own poems while the drummer played the apron of the stage or any other available percussive surface on his way to the drum set. There is a further section of chanting starting about 17 minutes into 2/4 on YouTube, and during the bowed bass solo that follows, snatches of chant can be heard. The combination of vocalising and free jazz has been influential in my music, indeed it links to the Klingon opera where singing has been combined with instrumentation derived from improvising.

All of the above characteristics were evident during the many times I heard Taylor live in the 1980s and 1990s at Ronnie Scott's jazz club, the Jazz Café, the Royal Festival Hall and other venues. The recordings only capture some of the visceral aspects of Taylor's art; live performances were shocking, exhausting even, and yet after immersion the intensity of expression made the experience musically enlightening for me. This intensity and complexity has been important in the formation of my own aesthetic.

I was under no illusions about the notated or notatable aspects of the music. However as an amusing aside I did notice William Parker arrive on stage at Ronnie Scott's one evening in the early 1990s with a sheaf of manuscript paper, sheets of which he turned during the performance. Halfway through a particularly thorny episode during a 1 hour 50 minute

piece one of these sheets fell off his music stand and landed at the edge of the stage just in front of where I was sitting. There was no music on it; merely a list of horses with the current betting. My attention to this was rewarded with a knowing wink from the bass player.

In summary the influence of Taylor on my work can be seen in a number of ways:

Collective improvising – in the many passages of the opera where there are various instrumental lines combine, e.g. the battle scene between the Klingons and the Qaaks, the passage for 3 gayageums, the sona trio in the Klingon Battle Song, the combination of different improvisations in Grodek and the combining of improvisationally derived piano parts in the Lovecraft piece.

The playing of Lyons – his playing for me is linked to Coltrane and Bismillah Khan in terms of the use of sheets of sound which finds expression in the sona playing throughout the opera and the bass clarinet in the battle scene of the opera. In a more general way, sheets of sound have influenced an approach to complex texture that has been a preoccupation of much of my work.

Continuum of sound – the passage mentioned above relating to Taylor and Lyons' combining to create a vortex of sound is of a type that has influenced aspects of my work where the whole pitch gamut might be in play and subjected to rapid rhythms. The *Death of the Qaaks* from the Klingon opera is a case in point; the continuum effect achieved by the condensing of previous material. As with Taylor's groups there is no attempt to pin these vortices to a motif or modal framework. In *Shamanic Incantation No. 4*, I have created a different type of sound continuum from those of Taylor and Lyons, one that grows more slowly and gradually fills the pitch gamut. Its reliance on texture relates it to those passages in Taylor where such textures occur, albeit at breakneck speed. The

tendency for passages in Taylor's work of this nature to assume a composite texture where instrumental sounds blend as if to blur the distinctions between them is a powerful influence in the war related music in the opera.

The use of unmetred rhythm – this has influenced me in a general way; like Taylor's music the music in the portfolio is reliant to a large extent on free rhythm and free counterpoint of parts. This is excepting those passages where I wished to create unison effects e.g. when the Klingon generals or soldiers sing or when I combine yangqin parts to create the slow moving chorale-like structures that appear in the narrator's prologue and epilogue. Even then there are no barlines as such and although parts may sound in unison the overall rhythm is still quite irregular. Apart from these cases the different layers of the music are not synchronised as if to barred or structures. Rhythms of course occur all the way through but they are achieved by the adjustment and shifting instrumental and vocal layers by ear to achieve the desired effect.

Moments of repose in Taylor's work – these are characteristic of his work generally and they tend to get lost in the frenzy that surrounds them. There are such moments in my opera, not just to provide structural variance and relief but also because the libretto demands them, e.g. the music for swan priestesses, the mourning music for the Klingon mother. My decision to give the swan priestesses more tonally based music derives partly from my musical response to the need to characterise the priestesses but partly from a purely musical need derived from Taylor, i.e. to provide a moment of repose that hints at a mode or tonal underpinning. As with, Taylor these rare moments of reflection occur in the midst of atonal or microtonal material characterised by a considerable lack of repose.

I have mentioned the extraordinary effect of hearing Taylor live. His performances often ran to upwards of 90 minutes without a break. After an interval another set of similar length would begin. Only towards the end of the concert were shorter pieces played in the manner of encores. Apart from the brief moments of repose mentioned above in relation to *The Eighth*, much of the music inhabited the frenzied world of the sound continuum; an energy music. The effect it had on me personally was akin to being in a trance state; a total immersion into the sound world that seemed to blot out thought or awareness of surroundings, even a sense of normal time; a state far from easy to describe unless experienced in the moment. Friends who have attended Taylor concerts with me have reported similar feelings, both in the mind and in the body; one even reported a feeling of nausea brought on by the unrelenting nature of the music. A trance inducing music would suggest parallels with shamanic experience where perception of space, time and mental and physical reactions are well attested in shamanic literature⁴⁹ and were part of my own shamanic experience discussed later. To feel these types of reactions at a concert was an exhilarating and sometimes disturbing feeling, one which occurred when I heard other groups – Sun Ra and His Arkestra, Art Blakey and the Jazz Messengers – where lengthy pieces with elements of energy music or sound continuums occurred. As a performer of free jazz I have had the same experiences of immersion and loss of normal perception. This occurs particularly in my work with Evorcity – a group I have been active in as a multi-instrumentalist since 1993. These experiences are suggestive of a shamanic link. In my solo work in free jazz I have touched on this link, most explicitly in the tracks *The Austerities* and *The Shaman* from my album *Amen Corner*.⁵⁰ Some aspects of the portfolio reflect this continuing interest in the state of mind and body at the point of creating music, most obviously in *Shamanic Incantation No. 4*.

⁴⁹ Narby, Op. cit. Hancock, Op. cit.

⁵⁰ Dave Hackbridge Johnson, *Amen Corner*, Tableaux Records, 2013.

The immersion in sound that occurs when improvising creates a state of consciousness where intuition allows an entry into a state of flux where object specificity gives way to the interplay of the collective. This is my Taylor/Ra inspired starting point for improvised based compositions and constitutes the immediate experience that according to F.H. Bradley is the basis of all knowledge. Here we find the trance-like state of the improviser in immediate experience, what Bradley calls the 'general condition before distinctions and relations have been developed'.⁵¹ It could be argued that Taylor's groups remain in this pre-distinctive and pre-relational world; this would be true of my own work with the free jazz group Evorcity. The composed aspect of the compositions presented in my portfolio could be said to represent the discovery of distinctive elements and their possibilities for relation: canons, rhythmic gestures, chorales, melodies – examples of which are heard (and discussed later) throughout my work. Important for me though was that the shadow of the immediate experience should remain over the whole; a constant reminder of its origins in intuitive and/or trance states. Its energy and flux and sense of being 'inside the sounds' is not eroded by subsequent working. One might say that composing is a form of reflective exploring or mining of intuitive material; this was certainly a feeling I had when making specific decisions as to the ordering and mixing of elements isolated from the pleroma of sounds. This is where, although moving into the realm of 'outside the sounds' (a more objective listening approach) I do not thereby seek to vacate 'the inside' and my remembered sensations of being there.

Taylor also pioneered the use of metre-less rhythm in jazz and this decision maximised the complexity of rhythmic interplay between the different instruments in his bands.⁵² This rhythmic approach can also be heard in those Sun Ra compositions containing freely-

⁵¹ F.H. Bradley, *Appearance and Reality: A Metaphysical Essay*, London, George Allen and Unwin, 1897, p.459.

⁵² Hear, for example, Cecil Taylor Unit, *Conquistador* (1966), Blue Note and *Unit Structures*, (1966), Blue Note.

improvised sections; the many versions of *Shadow World* are good examples.⁵³ All of the Klingon and Lovecraft music was created without barlines or click tracks; it was essential for me to have the freedom to allow rhythms to bleed into one another, perhaps rather like the colour fields in Mark Rothko's paintings. Rhythm and texture often go hand in hand in this colour bleeding. To a certain extent this ameliorates the aggressive and harsh nature of many of the sounds and rhythmic profiles chosen. A balance is struck between 'hot' events operating in a 'cool' environment of texture and rhythm in constant flux. The relationship between 'hot' and 'cold' is variable according to the requirements of the music. I have used the terms 'hot' and 'cold' in a not dissimilar way to their use in jazz where hotness relates to a state of heightened activity. Events can increase in hotness with the application of increased energy. The relative population of musical events happening at varying rates of speed and density can be likened metaphorically to the theories of structural thermodynamics as postulated in Ludwig Boltzmann's theories.⁵⁴ Boltzmann formulated what is now known as the Boltzmann distribution by which he was able to determine the increase of activity of molecules in a system to which heat is applied. I shall make occasional metaphorical references to Boltzmann in the details of some of the pieces where I think it helps to elucidate the behaviour of material and structure. I will argue that it is from here that the music takes its momentum and character, rather than from an analysis according to themes and their related harmonies. Broad structures can be discerned by looking at the system characteristics of an entire piece. Staying with the thermodynamic analogy, it can be said that the order or disorder of molecules (musical units) increases when heated, where heat is the transfer of energy due to the application of work, symbolised by increases in speed or number of events in the system related to

⁵³ See the truly wild version live from West Berlin on <http://youtu.be/qtHmqbnuZQs> (last accessed 5.iii.2014).

⁵⁴ See Peter Atkins, *Four Laws That Drive The Universe*, Oxford, Oxford University Press, 2007, pp.12-16, for a helpful and not overly technical essay on Boltzmann's theories.

time.⁵⁵ As a general point on this matter, when work is done, entropy (put simply as a measure of disorder or complexity) is lower. I have used this analogously in some of my music particularly in those pieces which start with sparse musical events which then increase in frequency and speed; a reversal of entropy normal tendency for systems to run down energetically. A good example of this is heard in the way the tabla parts behave in the Klingon Battle Song in *Qo'nos chal VeS*. There is a gradual flooding of the texture as the energy, here represented by speed and density, increases; a low entropy state. Other pieces have a more static surface where the energy input is lower; a representation of a high entropy state where energy has run down. The Swan Priestesses Music from the opera is an example of this.

I have used this unusual metaphor derived from science as an aid to structuring my music. The 'visualisation' of Boltzmann's theories helped me to have an internal picture of the music I was in the process of creating. There is no attempt to turn Boltzmann's very complex equations into some kind of musical map. I have drawn further metaphorical inspiration from science. The main concerns of my music, texture, pattern, performance through improvisation, density, timbre, metre-less rhythm, are concerned with qualities rather than quantities. In a musical syntax short on musical objects like motifs or harmonic systems, the processes of transformation of these parameters became more important. Producing music of this nature has suggested ways of interrogating it less in terms of quantifiable objects but more in terms of a web or network of relationships. This is analogous to ideas from New Paradigm Science as expounded in such books as *Uncommon Wisdom* by Fritjof Capra.⁵⁶ The author, a particle physicist by profession, explores new concepts of perception derived from his study of how the atomic model of matter broke down in the wake of quantum mechanics in the 1920s. The relationship between

⁵⁵ Ibid. p.32 – 'heating stimulates their [the atoms'] disorderly motion.'

⁵⁶ Ibid.

processes became more important at the quantum level than the former model of discrete objects. I make metaphorical use of Capra's ideas. There are no quantum equations to be found in my methodology but there is a concentration on processes rather than objects in my music. Sound worlds portray an aural image of an interconnected system which chimes with the holistic systems approach to modern physics. Thinking about the music produced in this way has led to insights in terms of analysis which are not invalidated by their lack of adherence to objects. The Swan Priestesses Music in the opera *Qo'nos chal VeS* is a case in point; its complex texture is a canonic structure that contains itself and yet hides within its own system. Its parts cannot be heard separately from the whole. This music will be examined in this light later.

3.2. World Instruments and the 'objet trouvé'

My initial proposal for my PhD emphasised a desire to work with world instruments. I did not wish to add to the already burgeoning list of beautiful works by classical (usually Western) composers who wrote music influenced by gamelan, raga, etc. The works of Claude Debussy, Leopold Godowsky, Colin McPhee and Lou Harrison, to name just a few, have covered this ground with a brilliance that hardly leaves room for anything other than pale imitations of their fine work. My intention was rather to use world instruments as a sound source in themselves and attempt to distance cultural context. It will be seen to what extent this was achieved in relation to the various instruments employed. Working with expert practitioners of various world instruments revealed to me the difficulty of cultural distance. An appropriation of, for example, guzheng playing styles, resulted in the production of pieces very much in the orbit of the composers listed above, only not as good. Cultural association is a combination of both the sound world of the instruments and the style of music that has evolved in conjunction. Taken together these represent a

tradition that goes back in some cases thousands of years. I wished to filter out as much of the stylistic content as possible; but how to do this without appearing to trample ‘imperialistically’ on the legacy of ancient styles? I found an answer in the idea of the *objet trouvé*. This term originated in early twentieth century art and can be particularly seen in Picasso’s assemblages of found objects or Duchamp’s ‘ready-mades’. Picasso’s *Bottle of Vieux Marc, Glass, Guitar and Newspaper*⁵⁷ (1913) shows a number of objects, some found and some created, assembled into a collage to create a still life. Duchamp’s *Fountain* (1917)⁵⁸ consists of a porcelain urinal signed ‘R. Mutt 1917’. The essential point of these types of works is the juxtaposition of materials. Their original context is put at some distance, in the case of the Duchamp simply by calling it something else. The concept of the still life remains in Picasso yet by including the actual objects rather than painting them he creates a sort of visual pun. Other Picasso works such as *Tête de taureau* (1942) are in the manner of the Duchampesque ready-made; it’s a wall-mounted bicycle seat which suddenly resembles a bull’s head:

Fig. 2. Picasso, *Tête de taureau*⁵⁹



⁵⁷ At the Tate Britain, London and viewable on <http://www.tate.org.uk/art/artworks/picasso-bottle-of-vieux-marc-glass-guitar-and-newspaper-t00414> (last accessed 9.ii.2014).

⁵⁸ Original lost but photographed by Alfred Stieglitz. See <https://www.google.co.uk/search?q=fountain+photo+by+stieglitz> (last accessed 9.ii.2014).

⁵⁹ <http://a4rizm.tumblr.com/post/24496075155/coolcyclecrew-pablo-picasso-tete-de-taureau> (last accessed 4.iii.2014)

As Matthew Gale has written, these works challenge ‘the relationship between reality, representation and illusion.’⁶⁰ This recalls the nature of objects and their qualities interrogated by Husserl and followed up by Harman in his analysis of Lovecraft. In the Picasso work, the qualities of an actual bicycle are confused with the qualities of an artist’s rendition of a bull’s head. The object is re-framed as art by means of a visual pun. Picasso’s input is in the re-framing. Re-framing of objects to make sounds requires more direct human agency yet the idea of re-framing an object’s use remains strong. Almost anything can be made to utter sounds, regardless of whether sound-production is part of their normal function. Unusual functions might include producing sound from a non-instrument or producing ‘accidental’ or untutored sounds on an actual instrument. I include both these types of sound production in my work. In this way, bicycle seats and urinals can become musical instruments too.

Following these examples of *objet trouvé* in the visual arts I found inspiration in examples of the concept operating in relation to musical instruments as ‘found’ rather than studied. Don Van Vliet (otherwise known as Captain Beefheart) is listed as playing ‘first time musette’ on the album *Mirror Man* (1971).⁶¹ Ornette Coleman took up the violin in a singularly untutored way in the 1960s. His avoidance of formal tuition can be most readily heard on the album *Virgin Beauty* (1988).⁶² An even more startling use of instruments as *objets trouvés* can be heard on the album *Strange Strings* (1966) by Sun Ra and his Astro Infinity Arkestra.⁶³ John F. Szwed relates the circumstances leading to this recording session: ‘Sun Ra had assembled a number of stringed instruments – ukuleles, koto, mandolin, a ‘Chinese lute’ – and passed them out to the reed and horn players. He thought

⁶⁰ Matthew Gale, *Objet trouvé*, in *Grove Art Online*, 2009, Oxford University Press.

http://www.moma.org/collection/details.php?theme_id=10135 (last accessed 9.ii.2014).

⁶¹ Captain Beefheart and His Magic Band, *Mirror Man*, Buddha Records (1971). Van Vliet is actually playing an oboe.

⁶² Ornette Coleman and Prime Time, *Virgin Beauty*, Portrait Records (1988).

⁶³ Sun-Ra and his Astro Infinity Arkestra, *Strange Strings*, (1966), El Saturn 502.

that strings could touch people in a special way, different from other instruments; and though the Arkestra didn't know how to play them, that was the point: a study in ignorance, he called it.⁶⁴ The sound of the instruments is further withdrawn by the addition of distortion and intermittent reverb. In the ultimate show of found object mischief, Sun Ra noticed that the door to the recording studio had very noisy hinges. This mundane portal was immediately featured in a bonus track called *Door Squeak*.

Another great jazz band composer, Charles Mingus, often subverted the high-level training of his musicians by getting them to avoid licks and patterns that they would normally play automatically. He urged his musicians to renew themselves by avoiding the repetition of stylistic traits. A good example of this is the album *Pithecanthropus Erectus* (1956) where in addition to creating a free and challenging structure, Mingus also asks his musicians to create onomatopoeic effects.⁶⁵ All the material for the album was achieved by rote learning rather than notation and there is a large amount of collective improvising. Jackie McLean's alto saxophone and J.R. Monterose's tenor saxophone work is key to an appreciation of how 'noise' becomes an integral part of musical structure; their overblowing, honking and note bending become unshackled from the background harmony. This foregrounding of noise elements becomes the prominent feature of the music and seems even oblivious to the chord sequences behind it. Although Mingus doesn't in a strict sense assume that the saxophone is an *objet trouvé* in the hands of his players, he is certainly coaxing them out of the comfort zone of lick and pattern playing. His admonition to his players; 'stop playing licks and get into yourself'⁶⁶ speaks volumes for his desire to approach music from an almost primal psychological standpoint. His search for a non-premeditated archetypal form of expression is almost Jungian in concept.

⁶⁴ John F. Szwed, *Space is the Place: The Life and Times of Sun Ra*, Edinburgh, Mojo Books, 2000, pp.237-8.

⁶⁵ Charles Mingus, *Pithecanthropus Erectus*, (1956), Atlantic Records.

⁶⁶ Spoken by an unnamed Mingus alumnus and cited by Nat Hentoff in his liner notes to *Pithecanthropus Erectus*, Op. cit.

Sun Ra's key alto and tenor men, Marshall Allen and John Gilmore were employing similar tactics at around the same time. In a sense these players, with the explicit encouragement of their leaders, were treating at least part of their instrumental practice as an aspect of *objet trouvé*. There is a sense of performers trying to forget their learnt processes and access their instruments as if for the first time. There are consequently acts of avoidance and discovery. This practice has informed my own improvising methods. The above are all examples of *objets trouvés* operating musically, in other words, by using musical instruments as a *tabula rasa* for new forms of expression. Just as with the visual artists, musicians like Sun Ra distanced themselves from the context of the instruments and indeed sometimes tools are chosen on which no link between them and their normal cultural purpose can be achieved due to competence issues. Sun Ra takes no 'imperialistic' stance in his appropriation of instruments outside the normal jazz tradition and outside the competency of his highly skilled musicians. The instruments become what the players make of them, but in light of a new approach where certain aspects of their playing are 'forgotten' and noise elements are used to create a new platform for expression. It is very much in this spirit that I wanted to explore world instruments and indeed any instrument I was to use for composing.

The found objects that I have used in my work are either instruments used in a 'study in ignorance' or household and other objects. I have also used instruments on which I have received training and yet extended instrumental techniques are often employed in their blending with the *objet trouvé* instruments. An early experiment in the interplay between an instrument and found objects can be seen in a YouTube video called *Two Men and a Viola* in which Paul Rogers and I create a composite instrument consisting of viola, mbira, lampshade and radiator. In short everything within range of the performers becomes part of the instrument. This 'omniphone' is agitated by means of fingers, drum sticks and a

hand-held battery fan.⁶⁷ In this spirit, Ra-esque 'ignorance' is visited upon the sona, erhu, yangqin, tabla, Korean gayageum, clavichord and oud. A number of Western instruments are utilised in unconventional ways: clarinets, recorders, trumpet, E flat horn, tuba, violins, viola, piano and drums. A musical box is used as a 'ready made', yet its very well-known theme is subjected to a musical 'cloaking device'.⁶⁸ My reasons for approaching instruments in this way relate to my desire to find a Weird Realist syntax. Instruments can be recognised by their sounds and by idiomatic writing for them. How does the listener become disturbed when the sound of an instrument begins to morph, either by using strange playing techniques or by electronically manipulating them? If I could affect a failure of description this would be a Lovecraftian outcome. A weird realist music should inhabit that same shifting world of objects and qualities that is so unsettling for readers of Lovecraft. A paraphrase of Lovecraft might be, 'it was only by analogy they called it a clarinet at all'.⁶⁹ The uses of these sound sources and their manipulations will be explained in the descriptions of each piece in my portfolio of compositions.

In summary, my use of found objects forms a spectrum from the musical use of non-musical objects to the unusual yet 'musical' use of normal instruments. A *trouvé* aspect is implied in the use of surprise tunings and broken instruments. The finding of defunct pianos and clavichords was seen as an opportunity. The untunable piano used in the *Ghost Piano Book* uttered its valedictory microtones as if its release of pent-up sonority was a final exhalation of breath. The use of the tuning hammer in real-time improvisation in *Shamanic Incantation No.5* was a way to access the notes between the notes – and clearly is a technique for which the piano was not designed.⁷⁰ The CD *Shamanic Ritual Service* contains further Ghost Piano explorations in combination with recitations of a poem by

⁶⁷ *Two Men and a Viola* <http://youtu.be/ZlVvt0KwPdM> (last accessed 13.ii.2014)

⁶⁸ The cloaked theme is the famous oboe melody from Tchaikovsky, *Swan Lake*, Act 2, scene 1.

⁶⁹ Lovecraft, Op. cit.

⁷⁰ Despite vigorous crankings I surprisingly managed to avoid breaking a string.

Georg Trakl, together with a Baroque suite for out-of-tune harpsichord and another shamanic piece entitled *Therianthrope*, where harp like sounds are conjured from a harpsichord by running fingers across the strings inside the instrument either side of the bridges.⁷¹ *Shamanic Ritual Service* on the eponymous CD contains many *objets trouvés* of all types. The *Incantation* consists of household objects (mainly wine bottles) together with vocals and mbira. The *Procession* and *Recession* use a combination of tuned wine goblets and saucepan lids, both subjected to some pitch and speed manipulation to simulate bells and gongs. This was my 'kitchen gamelan'.⁷² *Hymn of Light* captures the decaying sounds of goblets, lids and violin harmonics, which, deprived of their formants, create a halo of bright, hovering colours. The use of *objets trouvés* became for me a discovery of a new sound world of strange, shifting weirdness. It complemented my intentions to destabilise pitch, harmony and rhythm in my music.

My use of world instruments alters their cultural contexts. The sound explorations owe nothing to traditional forms of Chinese, African or Indian music. There may be ghosts of contexts in the use of a *jugalbandi* duet of tabla in the *Klingon Battle Song* (see below for a description of that movement) or even the bardic use of the yangqin in the *Prologue*, *Lament* and *Epilogue* of the opera which hint at an epic, rhetorical syntax. These references remain at a remove in that traditional syntax and techniques of playing associated with the instruments are absent. There is no attempt at pastiche or any shooting at the impossible goal of an 'authentic' use of these instruments. My guides have been musicians like Sun Ra with his magpie-like secreting of objects that catch his ear and feed volatile improvisations. I will address the various different contexts the instruments assume in their related pieces.

⁷¹ A technique that due to the thinness and tautness of the strings, caused my fingers to bleed; thereby constituting another kind of shamanic austerity. A therianthrope is a figure often found in depictions and descriptions of shamanic visions. It is a composite creature that combines elements of human and animal forms. See Lewis Williams, *Op cit.* fig.43, pp.174-175.

⁷² Some out-takes also employed washing machine noises and strummed wire cooling rack.

3.3. Use of Electronics

I took the decision to use improvising in conjunction with electronic manipulation to create compositions. The electronics component consists of the freeware Audacity into which all the material is loaded. Quantizing, grids and click tracks were all turned off. I made use of pitch and rhythm shift, tempo shift and tempo/pitch sliding scale. These techniques allowed me to operate on a completely empty acoustic space with no pre-existing parameters such as metre, tonality, harmony, etc. – an unprimed canvas if you will. This was necessary in order to maximise the platform for sound sculpting in a weird realist manner. The main factors driving structure are no longer theme, tonality, harmony and metre but density, pitch trajectory, melodies of a distinctly ‘arboreal’ nature and the creation of a distinct sound world through the use and manipulation of an unusual collection of instruments. The use of electronics has allowed me to focus on the use of sound sculpture rather than themes and their development. The choice and manipulation of texture is also important; the use of electronics gave me many choices when building up sound worlds for each piece. In the text based works there is a narrative provided by the words which further suggests structural procedures.

The principle of creative choice regarding the possibilities offered by electronics was important. The vast proliferation of programmes and techniques in the sphere of electronics is tempting. I limited myself to a small choice of manipulations. I wanted to focus mainly on the sound of acoustic instruments and used fairly simple manipulations to create a distinct sound world. This is in keeping with my adherence to the Lovecraftian principle of analogy as typified by the passage from *The Colour Out of Space* quoted on p.11. One example will suffice: the erhu is the only instrument used in the *Spaceship Funeral* movement in the opera. All the sounds heard in the movement were generated

from one sustained note played and pre-recorded by me.⁷³ From this basic sample a whole array of sounds was created at different pitches and speeds. Many layers of such differences make the varied textures of a 'consort of erhus' that are heard in the movement. I made no attempt to radically alter the sound wave of the original recording. Distortions and degradations of the sound due to pitch and speed changes were not smoothed out. The effect is to create an analogy to the erhu since enough of its character remains to suggest its involvement; the movement retains its 'stringy' quality throughout. This example is but one that illustrates a general principle; that the electronics should never take over the sounds of the instruments totally. I endeavoured to keep just enough of the original quality of the instrument to allow the listener to make a link to the sound origins, however tenuously.

For me, to open the Pandora's box of cutting-edge electronica would have been the equivalent of making music to go with Zartran and his triple neonoid fabric.⁷⁴ In any case the use of more sophisticated equipment would not automatically improve the quality of outcome. The vast availability of synthesised techniques demands their restriction if what Jean Baudrillard calls 'structural obesity' is to be avoided.⁷⁵ Baudrillard describes a superfluity characteristic of many aspects of post-war culture: information systems, mass media, over-eating, etc. There is a strong suggestion in Baudrillard's writing that a 'society' (and we might easily include a creative work as part of 'society') depends for its success partly on what it can reveal with limited means – a specific 'scene' in which certain things can be suggested. This scene might call upon specific techniques of revelation (staging, music, dance, allusion, symbolism, etc.) in order to make the challenge or duel possible with the listener or looker. The idea of a scene operating with specific techniques implies the limiting factors conducive to effective creative and expressive work; the scene creates

⁷³ Anyone who has tried to play the erhu will realise that even playing one note is quite challenging.

⁷⁴ Harman, Op. cit.

⁷⁵ Jean Baudrillard, *Revenge of the Crystal*, 1990, London, Pluto Press, p. 165.

certain restrictions that codify for the receiver what is being presented. A diffuse fecundity is to be avoided if the essential aspect of illusion is to be maintained. The opposite of this 'scene' is Baudrillard's concept of the obscene. Obscenity exposes all aspects of things and its bias is 'ultimately to destroy all their illusory and playful overtones'.⁷⁶ Lovecraft too, does not so much present a fiction of things as 'too much' – precisely the opposite – his narrators and by extension his readers find not enough for full descriptions of the hideous entities that plague humankind. This is why a weird realism in music must also reveal through hints, suggestions and even failures to depict the hidden, which by being hidden, become horror. The whole panoply of new electronic techniques could be employed yet this would risk the kind of obscenity Baudrillard cautions against. This is Baudrillard's world of Stereo-Porno – his attack on quadraphonics and other hi-fi gimmicks.⁷⁷ I have extended Baudrillard's caution to my own practice; although textures are sometimes complex in my work, they are often achieved through a limited use of sounds and/or techniques of manipulation. Relationships between different parts are often canonic and therefore have some unity of construction, and often only a few instruments and voices are present even if they are multiplied many times through multi-tracking. These deliberately limiting factors help to focus the illusory and playful aspects of the work and help to define the Baudrillardian 'scene' where a weird realist appearance of things can occur. A deliberately primitive editing process has also been introduced in all the works to create distortion and jolts in the music as an attempt to suggest imperfect communication. This aspect of the use or misuse of electronics is discussed in the music concerned.

Finally some words about notation. Audacity allows for complex textures to be created without the need for notated parts for performers. It visually tracks the shapes of musical events but offers no exact record of notes and rhythms. The music can be followed in real

⁷⁶ Baudrillard, *Ibid.* p.28.

⁷⁷ *Ibid.* p.146-152. The essay also attacks pornography itself as a primary example of the totally revealed, and thereby degraded.

time using Audacity as a kind of score. Enormous amounts of trial and error occurred in the composing stage once the improvised passages had been loaded into the programme. The improvisations were not random; I always had a clear idea what sound I was after. The piecing together of the music from long strands and their segmentation was a pleasurable experience as things could be rejected or accepted (rather like composing at the piano). This practice was the same as when accepting or rejecting the various implications that are presented to a composer when faced with material of any sort. The complex and layered results of these methods resisted adequate notation by traditional means. It was not clear what would be revealed, if anything by traditional notation that might not be more adequately represented by Audacity graphics.

For example, one 'thread' of material might be heard in eleven different speeds and pitches, and some of the pitches and speeds may be subjected to slow change during the course of the thread. Notation would seem to serve two purposes: firstly it allows for the recreation of the work by performers. Since all my work in the portfolio is fixed media, this purpose is not required. The recording, not a score leading to other interpretations, is the end product. The second purpose would be to see how *a posteriori* notation might elucidate aspects of the compositional process. The difficulty here lies in the transcribing of complex improvised material. There exist no extensive transcriptions of any of the free-jazz music from my contextual framework with particular reference to the contrapuntal aspects of group work. For example it would only be possible to provide a rough schematic of what is going on in Sun Ra's *Shadow World* (see footnote 31). Transcribing my music would occasion similar problems regarding detail. Of course all notation is a schematic of some sort since it is an abstract representation of aspects of a system, but scores may vary in the amount of detail they can include. I have used schematics or screen shots from Audacity where I think it is useful to show a process at work, but they concentrate on only certain aspects of the work. They shouldn't be taken as a score in the sense of aiding

recreation. I have also used conventional notation to illustrate aspects of musical influence, e.g. in relation to John Coltrane and Bismillah Khan.

Musical material, for me, always has within it an inherent momentum as if encoded within its incipit. In literature, Coleridge understood this principle very well: 'Thus, whatever the length of the work might be, still it was a determinate length; of the subjects announced, each would have its own appointed place.'⁷⁸

Responses to my own material follow this idea and sometimes deliberately circumvent it. The somewhat frenzied worlds of fascistic Klingon activities and Lovecraftian terror are portrayed by, on the one hand, recognising the momentum of material but on the other, frequently compressing it or allowing it to chase versions of itself in different pitches or speeds. This creates a psychological disjuncture between expectation and fulfilment; a dot may give the impression of starting a long walk, but in fact it gets looped or mimicked, or even ends in a slow death of high entropy as in several of the Lovecraft pieces. When I allow the material to stretch out, it leads to the opposite psychological effect, for example the two movements featuring the swan priestesses in the opera are allowed to play out their melodic implications over a bed of softly undulating music boxes. The music evokes a calm and peaceful mood as a result. This is in stark contrast with the baroque lines of the narrators prologue and epilogue, which although self-important sounding and rhetorical remain brusque and compressed in their musical treatment. These contrasts are really about texture and rhythm and how they combine to produce this or that psychological effect. I propose to say more about these techniques when I come to analyse some of the pieces in more detail below.

I cannot leave the subject of electronics without a further reference to Sun Ra. He was one of the earliest musicians to experiment with electronic instruments and recording

⁷⁸ Samuel Taylor Coleridge, *Poems and Prose*, Harmondsworth, Penguin, 1957, p.130.

techniques. His use of distortion and reverb has already been mentioned in conjunction with the album *Strange Strings*. Adherents of the idea of technical progress might raise eyebrows at some of the strange and 'primitive' instruments that Sun Ra used as early as the 1940s. His first recording session in late 1948 or early 1949 features him on piano and solovox, a kind of early electric organ made by the Hammond Corporation.⁷⁹ That these instruments are now difficult to find and have been 'superseded' does not invalidate their use at that time, or at any other. Sun Ra's combining of electric keyboards with standard jazz instruments created a sound world that is hugely influential on my work and can be readily heard in my desire to combine instruments and electronics that allows room for both in the compositional mix. To obliterate the instruments themselves was not my aim; rather it was to render them recognisable, even if only by a sort of Lovecraftian analogy. As will be seen there is a quite explicit homage to Sun Ra in the battle scene in the opera, which has some features of an Arkestra style free-jazz jam session. Here a Baudrillardian obscenity briefly holds sway.⁸⁰ Thus the obscenity of war finds its most suited technical form.

My own voice has been enhanced and in many cases distorted by the same electronic effects as those used for the instruments. This was in order to provide unusual vocal sounds to work in tandem with the synthetic language. The strange words of Klingon seemed to demand a suitable vocal response based on non-standard techniques. The electronic effects are used in conjunction with a multi-faceted vocal style. The individual vocal influences on this style will be examined below.

It was by no means certain that the methodology chosen for producing the music submitted with this thesis would produce cogent results. That the results did produce cogent results to me, provided an insight as to the potential for the use of intuitively

⁷⁹ Hear this session on Sun Ra, *Sound Sun Pleasure*, Evidence 22014. Various recordings 1953-1960.

⁸⁰ Again Sun Ra's *Shadow World* is a good example of such a free-for-all. See footnote 31.

produced raw materials as the basis for compositions. Previous composers have recorded improvisations before, Charles Tournemire, Gunnar Johansen and Giacinto Scelci come to mind, and their improvisations were used as the bases of subsequent transcriptions.⁸¹ My method was rather different; the creation of structures from a large bank of improvisations where the objective was not to provide transcriptions for re-creative acts but to create fixed media works where the very nature of individual performance is captured as part of the sound world. The immersion in the act of creation through improvisation has an afterlife as a fixed composition. This brings the work closer to the aesthetic of free-jazz, hence the emphasis on this genre in the contextual framework.

⁸¹ For example see, Charles Tournemire, *Five Improvisations for Organ, Reconstructed by Maurice Duruflé*, Masters Music Publications, Boca Raton, 1995.

4. COMPOSITIONAL ASPECTS OF SELECTED WORKS

Here follow explanations of the thinking and processes behind the creation of tracks from the CDs *The Thing of the Idols*, *The Ghost-Piano Book* and *Shamanic Ritual Service*.

4.1. Azathoth Dreams (CD 1: track one) taken from the album *The Thing of the Idols: Tone Poems after Lovecraft*

This short tone poem is inspired by the following passage from *The Haunter of the Dark*, a 1935 short story by Lovecraft:

‘the ancient legends of Ultimate Chaos, at whose center sprawls the blind idiot god Azathoth, Lord of All Things, encircled by his flopping horde of mindless and amorphous dancers, and lulled by the thin monotonous piping of a demonic flute held in nameless paws.’⁸²

I constructed a weird realist piece based on a response to ‘flopping’, ‘mindless’ and ‘amorphous’ in the above extract. I decided against a more obvious realisation based on drums and flutes. Instead I searched for a way to present some kind of radically distorted instrument that nevertheless retained some content of its source. The peculiar piano-like sound was achieved by a rather complex process. I took segments of improvisations using recorders, sona, guitar and zither and fed them into an audio recognition software called AudioScore Ultimate Demo. This programme has MIDI built into it so I was expecting some kind of attempt to replicate the sounds of the original instruments. However what occurred was far more interesting; all the sounds, regardless of source, were turned into a lo-fi piano sound complete with background static. This created the impression that a piano was being listened to through a faulty receiver; a way of deceiving the senses of the listener in a weird realist manner. Indefinable and usually incomprehensible alien

⁸² H.P. Lovecraft, *The Haunter of the Dark*, in *Necronomicon*, Op. cit. p.621.

receivership is a particularly Lovecraftian theme.⁸³ The sonic primitivism of the results relates to this weird realist receivership idea in Lovecraft. The faulty connectivity between entities appealed to me and finds expression in the use of degraded sounds and their presentation in the context of static and other electronic interferences. I saw the potential of this odd lo-fi piano sound and collected several fragments; the programme only had memory for 1 minute bursts. I took each one-minute sample and then produced 5 longer strands of music using the compositional methods developed with Audacity. I combined these 5 strands to produce a mindless texture ‘which blasphemes and bubbles at the center of all infinity’.⁸⁴ The piano sound is relentlessly manipulated to dismal effect; many of the notes start to morph into baleful screeching sounds as the digital information deteriorates. This is an attempt to suggest the timbral shifting inherent in many of Lovecraft’s descriptions of music. Towards two minutes into the piece dense clouds of glissandi rise up through the texture and this is followed by a feeble attempt to create a melody, what might be called a melody by analogy; it has a shape, sustained notes and flowing ‘lyrical’ rhythm. However it is subjected to constant pitch bending at a local level and over entire stretches. The music falls into high entropy towards the end; the initial energy of the music (energy here meaning the frequency and speed of events) dissipates as the last fragments of melody are heard over a sinister rumbling in the bass. This is my attempt to realise Lovecraft ‘infra-bass’ mentioned in Lovecraft’s *The Dunwich Horror* (1928).⁸⁵

There is a distinct resonance with the sound world of Sun Ra’s electric keyboard playing but with the combination of different layers I was able to obtain an even more complex

⁸³ Perhaps the most well-known example occurs in *The Whisperer in Darkness*, where alien voices of an indescribable buzzing nature are imperfectly captured on a phonograph. See *Necronomicon*, Op. cit. p.311-314.

⁸⁴ H. P. Lovecraft, *The Dream-Quest of Unknown Kadath*, in *Omnibus 1, At The Mountains of Madness*, London, Harper Collins, p. 308, 1993. Thus Lovecraft locates the abode of Azathoth.

⁸⁵ H.P. Lovecraft, *The Dunwich Horror*, in *Necronomicon*, Op. cit. p.296.

result.⁸⁶ Additionally the Sun Ra performance contains large amounts of speaker or microphone distortion; a good example of how his lo-fi methods have influenced my own procedures and music. *Azathoth Dreams* evokes the blasphemous world of the idiot god and does so through the distinctly unreliable and shifting medium of lo-fi electronics. It provides a partial sonic suggestion of Lovecraft's nightmare vision.

4.2. Shamanic Incantation No.5 (CD 1: track 2) taken from the album *The Ghost Piano Book*

For some time an ancient piano had been sitting in a practice room in a South London school. The piano, made by Sewell and Sewell, sported ornate inlaid casing and candelabra holders. After several attempts to tune the instrument the tuner announced that due to the many cracks in the pin block the piano was now 'completely untunable'. The piano was scheduled for scrap by the school authorities. Tonally the piano was still in good shape; quite mellow, full of sonority and without the worn hammer sound of the honky-tonk instrument. I sensed an opportunity and so arrived early on the morning of the piano's last day, armed with a tuning hammer. I spent some time examining the possibilities of tuning the 2 or 3 strings of the middle and upper registers to different notes, producing dyads or triads. These were deliberately tuned to microtonal intervals. This was done intuitively by ear without any particular system. A feeling for interval quality and overtone was the key to arriving at the required pitches. In *Shamanic Incantation No.5* some of this tuning process can be heard in real time since I recorded the whole process of further detuning. This occurred after several days of shamanic preparation involving fasting and other

⁸⁶ Hear for example Sun Ra The Cosmic Explorer Part 3 from *Nuits de la Fondation Maeght Vol. 1*, Shandar, 1970. <https://youtu.be/MKYtJ3QpVKg> (last accessed 20.vi.2015)

austerities. Sadly, my plan to put candles into the candelabras was scotched by a health and safety intervention.

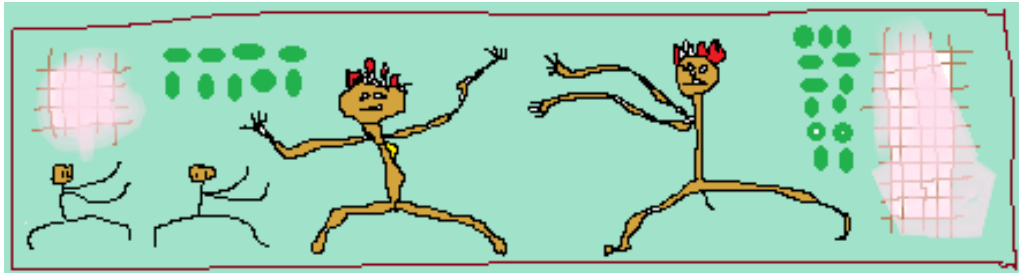
Fig. 3. Sewell and Sewell piano (c.1900) being played by the author.



The piece consists of three layers of different real time tuning sessions. The cranking of the hammer and distressing of the pin block is audible. The resulting glissandi roll over each other as the new sound world is explored. Certain pitches and pitch groups were arrived at which offered the possibility of repetition. Certain pitches emerge from the texture as if trying to assert stability in the sliding landscape. These pitches were arrived at intuitively during the detuning process which was in effect an improvisation session. They seemed to resonate most strongly in the state of heightened senses occasioned by the trance preparation. I envisaged the music as forming shapes akin to the entoptic trance visions of shamanic experience. These shapes took the form of grids, dots and ladders that were seen entoptically (i.e. from within the eye itself) as a result of the shamanic austerities. The music is therefore an attempt to paint an aural picture based on this experience. The slow glissandi that feature in the music are analogous to gyrating swirls and whorls of dark colour that I saw entoptically, whilst the bell-like chimes and ostinato express the brighter coloured spots and grids. My own visual recreations of these shapes appear in the CD

booklet from which the track is taken; they are related, as mentioned above, to San rock art. Below is one of the drawings I made for the CD cover.

Fig. 4. Drawing with entoptic elements (by the author)



It should be pointed out there is no direct correlation between details of any mental picture and the resulting music; they are after all different mediums. The relationship is impressionistic.

From time to time the strings of the piano were agitated by a timpani stick whilst cranking of the tuning hammer continued.

There was little electronic manipulation since the pitch bending was done manually as part of the composition; I retained this 'purity' of approach without too much intervention.

However in the last two minutes I did fan out the pitches of some of the material in both directions (i.e. lower and higher). The piano sound begins to fray at the edges, particularly as the pitch is electronically raised. Here the piano, which has already been destabilised by the tuning process, is further removed from adequate description by this fraying process.

The idea of a Boltzmann inspired texture, where entropy can be related to work is heard here. The chimes and ostinato are ordered aspects of an otherwise nebulous texture; they are elements that anchor the listener amid what would otherwise be a texture redolent of musical seasickness. A dissipated high energy state is given a semblance of order by the

ordered bell chimes. Both these aspects are important in this musical analogy of shamanic principles; the ideas of a discomfiting journey coupled with some kind of enlightening outcome. The chimes are beacons of soft light that help to navigate through the murky trance world.

The transpersonal experience of entering a trance state to produce raw material for *Shamanic Incantation No.5* was disturbing. Despite starvation and lack of sleep I was able to function and respond to the sounds that I produced from the Ghost-Piano. At the time I felt a heightened sensual awareness particularly in the way sounds seemed to resonate. This has implications for the way we respond to sound in an altered state of consciousness. How does the act of creativity itself relate to such altered states? One might compare this entering of another state to the experiences of other artists; one thinks of Schoenberg's 'white heat of inspiration' when composing *Ewartung*, or the alcohol-induced action painting of Jackson Pollock. My shamanic journey wasn't an experiment however and remains for me a subjective experience that produced a creative output. My intention was not to compare results from different states of consciousness scientifically but this is an area of research that could be followed up. The creative output of people undergoing trance states, either through austerity measures or through the taking of LSD was pioneered by Stanislav Grof in a therapeutic context. The output was mainly visual in the form of paintings.⁸⁷ Musical outputs could be attempted under these conditions. It was certainly far too dangerous for me to experiment on myself in this way but results could be achieved safely with the collaboration of musicians and medical doctors. My experience gave me an insight into new ways of producing musical material that could be further explored. The raw material produced under the altered state of consciousness was of course then manipulated under 'normal' circumstances. This is analogous to the

⁸⁷ See, Stanislav Grof, *LSD Psychotherapy*, Multidisciplinary Association for Psychedelic Studies, Kelowna, 2001. This and other books by Grof contain many drawings and paintings done by patients under LSD treatments.

reintegration process of such experiences into everyday reality also described by Grof.⁸⁸ A combination of shamanic improvisation and post-improvisatory decisions is an example of what R.D. Laing calls the 'contrapuntal weaving of the different experiential modes'.⁸⁹ I should emphasise however that I was not using shamanic techniques as part of a scientific enquiry but as a way to attempt access to a different type of experience. As with all the music in the portfolio the emphasis has been on creating material using the intuitive process of improvisation. This in itself is a different kind of experience to composing since it happens in real time. The production of material whilst in a trance state added a further dimension to the experience. Laing attacks the view that transpersonal experiences beyond 'normal' 'are simply "pathological" zones of hallucination, phantasmagorical mirages, delusions'. He goes on to say 'this state of affairs represents an almost unbelievable devastation of our experience'.⁹⁰ My intention was to explore these 'abnormal' types of experience from within, in real time. A further insight was gained in the way that music could be created from a defunct instrument. A virtue was made of the piano's decrepitude. I followed up this idea by using a broken clavichord for the recitatives in *Qo'nos chal VeS*. This separating of the instrument from its normal or 'healthy' use links my practice to the qualities that shift from their objects in weird realist fiction. Here was a telling musical analogy to the way in which weird realism works. It can also be noted that the music was created in an abnormal state out of an instrument also in an abnormal state; a weird realist interactive experience between performer and instrument.

⁸⁸ See, Fritjof Capra, *Uncommon Wisdom*, Rider, London, 1988 , p.290

⁸⁹ R.D. Laing, *The Politics of Experience*, Penguin, Harmondsworth, 1967, p.23

⁹⁰ Ibid. p.23

4.3. Grodek No.4 (CD 1: track 3) taken from the album Shamanic Ritual Service

There are three modes of delivery in this piece, one vocal and two pianistic. The Sewell and Sewell 'ghost piano' at its optimum detuning after *Shamanic Incantation No.5* is multi-tracked with two very distinctive types of material; stride jazz piano and a hyper-expressionist improvisatory style motivated by text. The poem by Georg Trakl is delivered in *Sprechstimme* as the third layer. Sharp-eared jazzers will recognise that I am playing the Gershwin tune *Liza* (1929) as the jazz element. This frenzied optimistic music acts in complete opposition to the atonal carpet of febrile sounds that are sparked off by the text of Trakl's nightmare vision of post-battle injury and death. The jazz fades in and out as if a radio is being imperfectly tuned; this is suggested by the many fades and abrupt edits that break and jolt the flow of the music; all these are intended to evoke the fragile nature of receivership in a war zone. We have already seen the theme of imperfect receivership in *Azathoth Dreams*. Here I continue this idea in a more 'human' context, albeit with humans behaving inhumanely towards each other in violent conflict. The idea of imperfect receivership reaches its apogee with the opera, *Qo'nos chal VeS*, which stimulates ideas of receivership and the difficulty of perception and relationship within the weird realist aesthetic. The jazz music in *Grodek No.4* is severely treated with electronic manipulation so as to distort pitch and rhythm.⁹¹ The principle of opposed material is here given a fresh impetus, yet rather than presenting contrasted material sequentially, it is presented simultaneously. The psychological effects are claustrophobia, agitation and even the feeling that the listener is trapped in the musical material which presses in from all sides. The attempt to musically represent these feelings is less important than the desire to show them as happening in real time; this hints at the aesthetic of Arnold Schoenberg in pieces such as *Erwartung* (1909) where the disintegration of the protagonist of his monodrama occurs as the music itself unfolds in all its psychic drama. This is the view of Schoenberg

⁹¹ An untreated version of *Liza* is heard on my CD *The Ghost Piano Book*, track 23.

put forward by Theodor Adorno. As Daniel Albright puts it: 'Adorno wants music so intent on palpitating the instantaneities of its passing that it is completely unconscious of the wholes that it might comprise in space'.⁹² The instantaneities of simultaneous jazz, ghost piano and text are an example of this kind of palpitation. Trakl's disintegration,⁹³ so vividly shown in his poem, is also played out in my music; a music where material is compressed to breaking point. In this context the manic jazz is a savage disjunct; a bitter ironic commentary on the dying soldiers, a shattered hope of the optimism they will never know.

Here is the text for the poem:

Grodek

Am Abend tönen die herbstlichen Wälder
 Von tödlichen Waffen, die goldnen Ebenen
 Und blauen Seen, darüber die Sonne
 Düster hinrollt; umfängt die Nacht
 Sterbende Krieger, die wilde Klage
 Ihrer zerbrochenen Münder.
 Doch stille sammelt im Weidengrund
 Rotes Gewölk, darin ein zürnender Gott wohnt,
 Das vergoßne Blut sich, mondne Kühle;
 Alle Straßen münden in schwarze Verwesung.
 Unter goldnem Gezweig der Nacht und Sternen
 Es schwankt der Schwester Schatten durch den schweigenden Hain,
 Zu grüßen die Geister der Helden, die blutenden Häupter;
 Und leise tönen im Rohr die dunkeln Flöten des Herbstes.

⁹² Daniel Albright, *Untwisting the Serpent*, Chicago, University of Chicago Press, 2000, p.20.

⁹³ His suicide followed only days after writing the poem.

O stolzere Trauer! Ihr ehernen Altäre,
 Die heiÙe Flamme des Geistes nährt heute ein gewaltiger Schmerz,
 Die ungeborenen Enkel.

(In the evening the autumnal forests resound with the noise of deadly weapons, the golden plains and the blue lakes over which the sinister sun rolls onward; night embraces dying warriors, the wild lament of their shattered mouths. But silently, in the willow-grown hollow there gathers a red cloud in which a wrathful god lives – the shed blood, moonlike coolness; all roads end in black decay. Beneath the golden branches of night and stars my sister’s shadow wavers through the silent wood to greet the spirits of the heroes, the bleeding heads; and in the reeds the dark flutes of autumn softly sound. O prouder mourning! You brazen altars, today the hot flame of the spirit is fed by a tremendous pain: the unborn grandchildren.)⁹⁴

The poem, with its savage images of violence and the sense that a wrathful god watches over the slaughter reminded me of Lovecraft’s world of inhuman terror. The violent impact of the poem also inspired my evocation of the strange oracles, deities and violence that characterise the Klingon world. The harnessing of images of the natural world in a brutal context - a powerful aspect of Trakl’s poem, was a technique I was to employ in the writing of the libretto for my opera.

There is a combination of cultural references working in *Grodek No.4*: stride piano, a style of singing derived from *sprechgesang*, and the distressing of the music by a suggestion of primitive radio tunings. All these aspects of the music are combined to express the horror of the poet’s experience. The piano sound which is used for both the jazz and the

⁹⁴ Leonard Forster, ed. and trans., *The Penguin Book of German Verse*, Harmondsworth, Penguin, 1957, p.433

expressionistic accompaniment to the *sprechgesang* is distanced from prior associations by the radically manipulated tuning and tempo. In addition the vocal part is manipulated in the same way. This distorts the cultural references analogous to a musical expression of the weird realist concept. The combination of all these elements is an aural overload that impacts on the ability of the individual elements to remain wholly attached to their original cultural contexts.

5. QO'NOS CHAL VES: A KLINGON OPERA

5.1. Introduction

Qo'nos chal VeS is an opera in one act with 18 numbers. The title means Green Heavens of Qo'nos, Qo'nos being the home planet of the Klingons, an alien life form from the TV series *Star Trek*. The cast is as follows:

Narrator

Klingon Singers and Musicians

Klingon Generals

Oracle in the Mountains of Obfuscation

Swan Priestesses

Klingon Soldiers

Qaak Soldiers

A Klingon Mother

Klingon Mourners

The opera has a very simple plot involving a brief and violent war between the Klingons and the Qaaks. In order to wage war the Klingons go through the motions of seeking religious justification. In battle the Qaaks seem to be victorious only to fall foul of a virus. Klingon funeral rites conclude the opera. The key figure is the narrator who presents the opera as if it were a propaganda exercise.

In creating a sound world for Klingon music one is up against similar problems that are faced when trying to realise Lovecraft's ungraspable world. We might never be able to fix

what another species, real or imagined, will create as an art work or even that an art work exists for another species. Inevitably, although the opera is presented as a Klingon artefact (in an almost fake-anthropological sense) it has of course been composed by a human pretending to be a Klingon. However weird and wonderful a sound world emerges, it does so with inevitable references to human music. With a weird realist approach I hope that these are presented in such a way as to at least suggest music of non-human agency. As with the Lovecraft music, the opera can only be an approximation of non-human music; a world of fantasy and illusion is the springboard for the creative work and the attempting construction of an alien art form is a play with such illusions. Klingon musicologists – both human and Klingon (!) – may enjoy debating such liberties I have taken.

Early in 2013 I read an article in the online Gramophone magazine written by composer James McCarthy. The following passage caught my attention:

‘Imagine that there is a playwright alive today who is as great as Shakespeare. They have Shakespeare’s grasp of language, of drama, fantasy and of emotional truth. They have everything, in short, that a playwright needs to change the world. But they write their plays in Klingon. Is this playwright unnecessarily limiting their potential audience?’⁹⁵

The context of the passage relates to ideas of accessibility and difficulty in the arts and what audiences of certain works might be expected to perceive depending on the complexity or obscurity of their language. My own gut reaction on reading the article was to immediately commence writing an opera in Klingon. I shall return to McCarthy’s article

⁹⁵ James McCarthy, *A Response to ‘Getting It Right’: The Contemporary Composer and the Orchestra*, <http://www.gramophone.co.uk/blog/the-gramophone-blog/composers-%E2%80%93-consider-your-audience> (accessed 7.ii.2013)

in my concluding remarks since my response, couched in terms that largely are at odds with the author, was informed by the very act of composing a 'difficult' work.

5.2. The Libretto: Themes and Application of Vocal Techniques

i. Language

Klingon exists as a synthetic language with about 20-30 speakers.⁹⁶ I have made many of my own additions to the language, inventing words where there is no equivalent in the limited Klingon vocabulary.⁹⁷ This effectively means the creation of a new Klingon dialect. Words missing from the limited resources of Klingon lexicons were created by the simple expediency of mirror writing. This produces very entertaining and expressive sounds.

From the libretto (see below) it is readily seen that *Qo'nos chal VeS* is a number opera as in the Baroque tradition. The Baroque opera with its set forms suited both my desire to create a series of tableaux of Klingon life and also to create a work removed from realism. The ritual compartmentalisation of action in the opera follows Baroque methods. I was also attracted by what Daniel Albright says about hieroglyphic forms in music, where a musical event can be made to 'speak' a concept or attitude.⁹⁸ This is not so far from the Baroque idea of the single affect. In a similar way the aural hieroglyph for Klingon pride is the opening iamb of the opera. Its reoccurrence constantly reminds listeners of the Klingon's forceful nature. In Albright's phrase it is 'as if an oval bounding-line were drawn around it.'⁹⁹ Further Baroque influences relate to the creation of discrete sound worlds for certain characters and functions. The narrator has a distinctive sound world for the

⁹⁶ See Arika Okrent, *In the Land of Invented Languages*, New York, Spiegel & Grau, 2010, p. 273. Cited in http://en.wikipedia.org/wiki/Klingon_language (last accessed 20.iv.2014)

⁹⁷ I used the website www.MyKlingon.org for some of the words.

⁹⁸ Albright suggests examples of music behaving in this way in Mozart's *The Magic Flute* (1791) and Liszt's *Années de pèlerinage* (1858). See Albright, Op. cit. pp.37-48.

⁹⁹ Albright, Op. cit. p.43.

recitatives just as one would expect in Baroque opera. Certain instrumental timbres are character-specific, most notably the Swan Priestesses and the Qaaks. This chimes with the use of obligato instruments for arias in Baroque operas and oratorios. In my concluding paragraphs I will say more about the Baroque and its philosophical implications for the work as a whole.

In the opera there are no real characters in the sense of individuals with psychological motives that can be probed; rather the opera is a series of tableaux that seem to fit the purpose of propaganda. Ritual observance and group action dominate, although there is one solo lament after the *War with the Qaaks* which hints at the possibility of individual feeling. Rather than a coherent plot, the opera seeks to present tableaux of Klingon life. The early tableaux lead up to a *War with the Qaaks* and after this there is a series of laments and a double epilogue. The focus of the story is ritual behaviour firstly towards oracles and deities and later to the dead. After a personal lament by an unnamed Klingon mother, the opera ends with a second appearance of the swan priestesses whose material provides a sombre background to the emotions of the bereaved. In such a way the extreme violence, sacredly sanctioned, is also given its proper treatment within the same quasi-religious confines. It is clear, however, that the Klingons are paying no more than lip service to more ancient forms of sacred appeasement; their disdainful behaviour to the oracle is a case in point. The swan priestesses have their own sound world which is far removed from secular Klingon utterance and hints that its forms of expression may be archaic and its former meaning hollow.

Certain links may be felt towards works of propaganda produced for the opera stage during the Napoleonic era; some of the works of Spontini, Grétry and Gossec fulfilled this need for public demonstrations of public support, however forced.¹⁰⁰ The mass singing undertaken

¹⁰⁰ A good example is Spontini's *Fernand Cortez* (1st version 1809) – much promoted by Napoleon.

by Klingons and Qaaks alike is redolent of what Benedict Anderson calls *unisonality*, a way in which adherence to nationhood is affirmed.¹⁰¹ This collective aspect of the Klingon opera takes its cue from Anderson's concept. Emphasising this to the extreme, it will be noted that even when a solo protagonist is suggested by the libretto, the voice part often divides into several parts, rather like Michael Tippett's psychedelic messenger Astron in *The Ice Break* (1976). This further 'dis-individuates' the characters; they take on the guise of composites or mouthpieces of collective behaviour. Often a character takes on the sound of a choir with a combination of homophonic textures in the manner of Anderson's *unisonality*, and more contrapuntal textures. There is no attempt to delineate individual characters by personality, leitmotif or themes.

The symbolism of the natural Klingon world, together with that of swords, blood, armour and goblets seems archaic; remembering Lovecraft's admonishment of such things, I kept techno-weapons and gadgets out of it.¹⁰² Rather, the words seek to find a balance between the epic poetry of the age of heroes, such as *Beowulf*, and the symbolic world of early modern poets such as Ezra Pound. Whilst making no claims as poetry, I sought to provide a succinct form of linguistic expression suited to the declamatory style of singing I had in mind. Incidentally, all the parts are sung by me and therefore have either a male or a falsetto quality to them. This should not indicate gender preferences for any of the parts; in a dance or mime production actors of any sex can be used. There is a suggestion of androgyny here; a further nod to the example of Tippett, whose character Astron in *The Ice Break* is sung by a mezzo-soprano and a high tenor. Where the libretto calls for choral singing I have generally signalled this by the use of organum over as much as 12 parts.

¹⁰¹ Benedict Anderson, *Imagined Communities*, London, Verso, 1983, p.145 – cited in K.K. Lajosi, *Opera and Nineteenth Century Nation Building: the (Re)sounding Voice of Nationalism*, 2008, University of Amsterdam Digital Academic Repository <http://dare.uva.nl/record/279934> (last accessed 2.iv.2014)

¹⁰² Lovecraft, Op. cit. (see footnotes 6 and 7)

I have partly used the language as an expressive tool but have also followed Stravinsky in using the language merely for the opportunity to enjoy its sounds. Stravinsky's remarks about the third movement of his *Symphony of Psalms* (1930) are pertinent here: 'In setting the words of this final hymn I cared only for the sounds of the syllables and I have indulged to the limit my besetting pleasure of regulating prosody in my own way.'¹⁰³ However, unlike Stravinsky, I have not, in the main, proceeded by similarity. The vocal writing is very free; the prosody was constructed from improvisations which were then elaborated to create more cogent structures, yet much of the volatile process of improvisation has been retained. Ultimately there was a tension between free improvisation and post-improvisatory structural decisions.

In the swan priestess' music, no words are used and the vocalise has a cooler, more controlled mood achieved by composing material on a note by note basis (i.e. with maximum structural ordering). The swan melodies were created from one or two sampled falsetto notes which were then altered to different pitches. This was to produce a different psychological effect by creating a serene and more 'objective' sound world in contrast to the explosive utterances of Klingons and Qaaks. The Klingon and Qaak languages are thrown into relief by this effect and it allows for differing modes of vocal characterisation to be heard.

Having written the libretto I then began the business of learning to acquire the pronunciation skills needed to sing the parts. This is when the studies of different types of language were brought to bear. A wide range of guttural and sibilant noises was employed to create extreme plosive dynamics to the words. The idea of Leos Janacek's melodic curves encouraged me to develop rhythmic cells. The research that he made into the songs of Moravia led him to experiment with melodic curves. Indeed Janacek went rather further

¹⁰³ Robert Craft, *Conversations with Igor Stravinsky*, London, Faber and Faber, 1958, p.17.

than human language, notating the melodic curves of birds, streams, and the sea.¹⁰⁴ His curves of the natural world suggest a possible approach to a non-human world. Certain rhythmic signals in sung Klingon (heard right from the start of my opera) show some affinity to Janacek's approach. The iamb is a major rhythmic component in these signals; it fitted the words well and when aggressively accented added to the stentorian and declamatory style.¹⁰⁵ In addition the curves of the natural world are realised in the Klingon nature imagery of the libretto and the plasticity of the rhythmic landscape.

Melisma is used in great quantity, drawing on the example of the Qawwali singers so characteristic of the Sufis.¹⁰⁶ There is a link between the collective action of the Qawwali 'party' and a certain trance ecstasy in Klingon ritual (and for that matter, shamanic trance experience). *The Clangers* and *Silbo* whistling language inform the Wind Oracle movement. The bizarre example of Klunk from *Dick Dastardly and Muttley and Their Flying Machines* is often present; sometimes the nonsense scat becomes an exhilarating end in itself, Klunk filtered through Klingon declamatory practice.¹⁰⁷ The whole creates an atmosphere of generally aggressive utterance in keeping with the Klingon's warlike nature. The vocal parts evince the shamanic snake-like disdain¹⁰⁸ for most of the opera and yet lyricism is also present in a somewhat stagey way in the Shakespeare setting and with more intimate feeling in the various laments that end the opera. The vocal parts therefore

¹⁰⁴ See Bohumír Štědroň, *Leos Janacek: Letters and Reminiscences*, (trans. G. Thomsen), Prague, Artia, 1955, p.13.

¹⁰⁵ Hear the *Prologue* and *Epilogue* for many examples of this rhythm. It also pervades much of the recitative writing.

¹⁰⁶ Hear, The Sabri Brothers, *Tajdar-E-Haram*, <http://youtu.be/T6vsAAUPUvA> (last accessed 10.v.2012)

¹⁰⁷ For a brief example of the virtuosic Klunk (voiced by Don Messick) in action see <http://youtu.be/Ucyng65R1sQ> (last accessed 10.ii.2014)- an extract from *Dick Dastardly and Muttley in Their Flying Machines*. The gag follows the usual formula: Klunk riffs in his highly volatile manner while Dick and Muttley raise their eyebrows in incomprehension. Zilly (also voiced by Messick) is the only member of Vulture Squadron who can understand Klunk and as such is arguably a shamanic interpreter.

¹⁰⁸ See Narby, Op. cit. pp.6-7: 'These enormous snakes are there, my eyes are closed and I see a spectacular world of brilliant lights, and in the middle of these hazy thoughts, the snakes start talking to me without to me without words. They explain that I am just a human being. I feel my mind crack, and in the fissures, I see the bottomless arrogance of my presuppositions.'

attempt to access the extremes of vocal expression. This usefully illustrates a phrase by Robin Mackay relating to the fiction of Lovecraft and Thomas Ligotti: 'doing away with all cultivated distance and calm objectivity'.¹⁰⁹

ii. An Imaginary Klingonology

Certain qualities can be discerned in the music and libretto that hint at a possible Klingon 'anthropology'. Collective behaviour is the main forum for public expression. The honour code with its implication of sanctioned or sacred violence provides the outlet for aggressive and xenophobic traits. Funeral rites take ritualistic and collective form, although a lament of individualised feeling is also glimpsed. The emphasis on different modes of lament and funeral rites hint at a sympathy with Quentin Meillassoux's 'essential mourning', that relationship with the spectre so hard to achieve in societies for whom only hollow observance, or horrific degradation, remains of former religious certainties.¹¹⁰ Girard gives several examples from Greek mythology of impurities impinging upon the proper performance of rites. In Euripides' *Heracles*, the hero suffers from momentary insanity as he is preparing a sacrifice and kills his family instead. His failure to observe proper ritual observance leads to a degradation of the sacrificial act. The fact that this degradation occurs after his attempt to atone for his murder of the usurper Lycus, emphasises the part violence and ritual mourning plays in the loosening of the ties of ritual behaviour.¹¹¹ His attempts to do the right thing by his own customs are hijacked by madness at the very moment he seeks to activate correct practice. This conflict between failed ritual observance and violence is suggested in my opera.

¹⁰⁹ Mackay, *Collapse, Volume IV*, Op. cit. p.15.

¹¹⁰ Ibid. p.18. Also in the same volume, Quentin Meillassoux, *Spectral Dilemma*, p.261-275.

¹¹¹ See Girard, Op. cit. p.39-42.

As the Klingon forces gather for their war with the Qaaks, many may feel links with ancient Sparta; the use of drums and reed instruments for marshalling troops is inspired by what Thucydides tells us of Spartan practice.¹¹² The importance of obtaining sacred sanction for violent action is emphasised, although the opera strongly suggests that only lip service is paid to oracles and servitors of religion. This suggests a decay of older forms, a prerequisite for the spectre dilemma as adumbrated by Meillassoux.¹¹³ The final music of the opera, *Swan Priestesses Epilogue*, expresses a lamenting tone for a traumatised society but also suggests an objective indifference to events, as if their song will drift on for eternity even when the last worshippers are long gone. This creates a societal gap between Klingon metaphysics and everyday reality, a gap symbolised by the totally different sound world adopted for the swan priestesses.

iii. Text of the Libretto

I Prologue

[Narrator]

My Klingon works are little known.	wlj tlhIngan vum 'oH mach Sovta'
Some say they are academic,	'op jatih caH 'oH cimedacHa
some class them as entertainment.	'op ja' chaH tmemniatretneH
You will never reach my hidden poetics,	SoH DichDaq revHen hcaer wlj neddiH sciteop
for I have employed a cloaking device	vaD jiH ghal deyolpmeH gnikaoli ecived
borrowed from the Romulans	nglpta' vo' RomulansH
(Normally I should prefer to drink	(yllamron jiH dluHs referp Daq tihutih

¹¹² Paul Cartledge, *The Spartans, An Epic History*, London, Channel Four Books, 2002, pp.187-189. Cartledge cites Thucydides V.70 where the use of many aulos players is mentioned for the purpose of marshalling troops. See also my series of instrumental pieces *Spartan War Manoeuvres Nos. 1-19* for various instrumental ensembles in which massed oboes and cor anglais are featured.

¹¹³ Mackay, Op. cit. p.18. The totality of decay is suggested by Mackay's phrase '*divine character of inexistence*'.

blood-soda from a Romulan's skull,
but since our shaky concordat of 2268
we are getting on famously).

Little known, I say,
unless you have seen the green sunrise on Q'onos,
felt the rapier winter winds in First City avenues,
gazed at the endless sea with eyes of a hawk,
wandered, soul-pierced, through the Honour Halls at dusk.

Only then will you know them.

'lw ados vo' RomulansHi nach Hom
ach ecnis maj ytaert vo' cha' SaD 'ej javmaH chorgh
maH 'oH rur hcae latlh QaQ)

mach Sovta' jiH jatih
sselnu SoH ghaj leghpu' SuD esirnuS Daq Q'onos
tlef reipar retniw sdnw Daq wa' Dich veng seuneva
dezag Daq sseldne biQ'a tihej minDu vo' kwah
Derednaw qa' decreip vegg Ruonoh sllaH Daq ksud

neH vaj DichDaq SoH Sov chaH.

2 Recit 1

[Narrator]

Here are scenes of Klingon life.
First you will listen to an example
of Klingon culture.

You may be aware only of
its English translation.
The original Klingon poem is a comic classic
and you may experience humour.

naDav 'oH 'op senecs vo' tllhgan yln
soH DlchDaq 'lj Daq na elpmaxe
Vo' tllhgan erutluc

soH yam taH erawa neH vo'
oH hsilgne noitalsnart
eht lanigiro tllhgan 'oH cimoc cissalc
'ej SoH yam ecneirepxe ruomuH.

3 Shall I compare thee to a summer's day?

[Klingon singers and musicians]

Shall I compare thee to a summer's day?
Thou art more lovely and more temperate.
Rough winds do shake the darling buds of May,
And summer's lease hath all too short a date.

Sometime too hot the eye of heaven shines,
And often is his gold complexion dimmed;

qaDelmeH bof tuj pehn vlochuHQuo.
SoH ich 'ej belmicH laau, oH betarbmec puhS.
j arvahgh tpuq dHobogh Sang SuS ro.
'ej ratlhata HlmeH bouf tuji leuStrohH luvhuS.

rut tuhjtOH boeyeHviS chal min Dun qu .
rut DotlhDaj SuD wohv noixelpmec, Huvhu.

And every fair from fair sometime declines,
By chance, or nature's changing course, untrimmed;

'ej reH Hoqh evoh ssaub emitemoS, net tu.
u He choHmoh, sahn gnignaHc jocq quvHa.

But thy eternal summer shall not fade,
Nor lose possession of that fair thou ow'st,
Nor shall death brag thou wand'rest in his shade,
When in eternal lines to Time thou grow'st.

ach not lanreteH juubbogh bovij tuuj,
'ej not ghom niossesp hogchvetlh iH daghajbogh
'ej kbhwj Daq blehng nhot miy Heugh nuj,
bovmehy lanreteH HvuiS, tuojwih niHajbogh.

So long as men can breathe, or eyes can see,
So long lives this, and this gives life to thee.

tluhlaH ehj legh, whej ellumethaerb nhuv,
vhahj yintaH bhomvam, 'ej tuyonmoH quuv.

4 Recit 2

[Narrator]

Klingon leaders consult
the wind oracle
in the Mountains of Obfuscation.
Shall battle be engaged
with the abysmal Qaak?
Tradition dictates the consultation
but generals' minds are always made up

tlhIngan sredael tlnoc
eht Sus eclaro
Daq eht HuDmey vo' noitacsufbo
DichDaq may' taH degagne
Tihej eht lamsyba Qaak?
noitidart setatcid eht noitatlnoc
'ach slarenag sdrim 'oH syawla chemno Hta'Dung

5 The Wind Oracle

(The oracle starts to utter many incoherent sounds)

[Klingon Statesmen]

As usual the oracle seeks to impress
with empty virtuosity.

sa lausu eht elcaro skees Daq sserpmi
Tihej ytpme ytisoutriv.

Cease those demented birdsongs
and make your pronouncement!

mev Dochvammey detnemed sgnosdrib
'ej chenmoH llj tnemecnuonorp!

(The oracle pronounces)

[Klingon Statesmen]

Your inane pipings prevent us from war;
 shall we lend ear to that
 Which tramples on honour?

Ilj enani sgnipip tneverp maH vo'veS;
 DichDaq maH dnel qogh Daq vetih
 Nuq selpmart Daq ruonoH?

Your fluting through the clouds;
 shall we bend the knee
 to such talk of surrender?

Ilj gnitulf vegh eht sduolc;
 Dich Daq maH SiH eht eenk
 Daq Hcus klat vo' rednerrus?

6 *Recit 3**[Narrator]*

By the light of the two moons,
 Corvix and Praxis,
 by the lapping of the water
 of the Lake of Regrets,
 the Swan Priestesses glide and cry.
 Generals seek their blessings
 in war and in peace.
 Each ripple is apparently an affirmation.

Sum eht wov vo' eht cha' maSmey,
 Calox 'ej Praxis,
 Sum eht gnippal vo' eht biQ
 vo' eht ekal vo' sterger,
 eht naws sessetseirp edilg 'ej SaQ.
 Slareneg nej chaj sgnisselb
 Daq veS 'ej roj.
 hcae elppie o'H yltnerappa na niotamriffa.

7 *Swan Priestesses Song**(wordless chorus)***8** *Recit 4**[Narrator]*

Let the blood's freeze,
 let the heart's alarm
 bring forth in short order the Klingon war cry,
 interstellar war
 and a victory song for the Qaak

Chaw' eht sdoorb ezeerf
 chaw' eht straeh mrala
 gem vo' Daq trohs redro eht tlhngan ves SaQ
 ralletsretni ves
 'ej a yrotciv bom vo' eht Qaak.

9 Klingon Battle Song*[Klingon Soldiers]*

Aeeeeee!

Heros of blood,

heros of death,

ancient skulls sing,

ageless swords ring.

Aeeeeee!

Aeeeeee!

soreH vo' 'lw

soreH vo' Hegh

tneicA nach Hom bom

sselegA sDrows gNir

Aeeeeee!

10 War with the Qaaks*(Instrumental)***11 Qaak Victory Song***(Sung in untranslatable Qaak language; singers accompanied by Skullophone)***12 Recit 5***[Narrator]*

Despite their claim to victory

the Qaak host succumbs;

a virus shreds the skin

from their bones.

Etipsed chaj mialc Daq yrotciv

eht Qaak magghom sbmuccus

aH suriv sderhs eht Dir

Vo' chaj HomDu'

13 Death of the Qaaks**14 Recit 6***[Narrator]*

A lone lament rises up

from the dry beds of oceans

the ashes of moons.

And the dead are gathered;

aH enol tremal sesir Dung

vo' eht yrd sdeb vo' snaeco

'ej eht sehsa vo' maSmey

'ej eht Heghpu' 'oH boSta'

and

ghosts in their spaceships,
ready for their final voyage.

stsohg Daq chaj spihsecapa
Ydaer vaD chaj lanif hcrval.

15 *Lament*

[A Klingon mother]

At last the Sword of Kahless
has cleaved the soul from your body.
In Sto'Vo'Kor you are arrayed
or battle and feasting;
the wine flows from the victor's goblet forever
In perpetual armour you raise the axe
and vanquish even clouds and meteors.

Daq tsal 'efih vo' Kahless
ghajtaH devaelc qa' vo' Ilj porgh.
Daq Sto'Vo'Kor SoH 'oH deyarra
vaD may' 'ej gnitsaef;
Hia swolf vo' srotciv telbog vaD reveH
Daq lauteprep ruomra SoH esiar exaH
'ej Hsiuqnav 'ach sduolc 'ej sroetem

So this is honour:
that I should receive your broken bones,
your torn body that passed from me,
your last look as the blade fell?

vaj vam 'oH ruonoH
vetih jiH dluohs Hev Ilj ghorta' HomDu'
Ilj nrot porgh vetih juSta' vo' jiH
Llj tsal legh sa edalb pumta'?

Where is my endless feast,
my armour against the hollow heart,
the axe to cut through grief?
Here is my feast of tears.

nuqDaq 'oH wlj sseldne 'uQ'a'
wlj ruomra Daq wolloH tiq
Exa Daq pe' vegh feirg?
naDev 'oH wlj 'uQ'a' vo' sraet.

16 *Spaceship Funeral*

[Klingon Mourners]

Farewell to warriors,
laureates in death,
launched into eternal orbit,
sentinels of the twin moons.

lleweraF Daq sroirraw,
setaerval Daq Hegh,
deChnual Daq lanrete tibro,
sLanitnes vo' eht niwt maSmey.

Corvix and Praxis revolve

Corvix 'ej Praxis evlour

in honour guards of orbs.
Farewell to warriors,
enshrined in the Wide Halls.

Farewell to warriors,
enshrined in the Wide Halls.

Daq ruonoH draug vo' sbrs
lleweraF Daq sroirraw
Denirhsne Daq eht ediw sllaH

lleweraF Daq sroirraw
Denirhsne Daq eht ediw sllaH

17 *Epilogue*

[Narrator]

You will have enjoyed this Klingon artefact.
Klingon ritual and Klingon conflict.
Those who failed to enjoy
can easily be erased
and the ashes of their scorched cities raked.

You hold us as creatures quick to war,
yet we mercifully cloak more hidden horrors;
the Qaak but one of the countless frantic hordes
mindlessly dancing on the fringe of space.

Ponder your own puny wars;
each one you say will be the last,
yet always a nameless one lurks within.

And now I leave you to the dreams of green sunrise,
rapier winds and endless seas,
your souls pierced by the cry of the skies
As twin moons fall into night.

SoH DichDaq ghaj deyojne vam tHlghan tcatetra.
TlHghan leutir 'ej tcilfnoc.
chaH 'iv deliaf Daq yojne
laH ylisae taH desare
'ej eht sehse vo' chaj dehcrocs vengmey dekar.

soH 'uch maH sa serutaerc kciuq Daq veS,
tey maH ylluficrem laolc latlh neddih srorroh;
eht Qaak 'ach vo' eht sseltnuoc citnarf sedroH
Ylsseldnim gnicnad Daq eht egnirf vo' ecaps.

rednop llj ghaj ynup veSgH;
hcae wa' SoH jatlh Dich Daq eht tsal,
Tey syawla eht sseleman wa' skrul nihtiw.

'ej DaH jiH mej SoH eht smaerd vo' SuD esirrus, the
eht reipar sdinw 'ej sseldne saes,
llj qa'pu' decreip Sum eht SaQ vo' eht snaws
Sa niwt maSmey pum Daq ram.

18 *Swan's Epilogue*

(wordless chorus)

5.3. Summary of Methods and Materials

Below is a brief summary of some of the methods and materials used to make the music. These are similar to those used in the previous examples from the Lovecraft and shamanic music.

a. Exploration of world instruments as improvising tools

Many world instruments were used in the opera. Most were 'studies in ignorance' after the manner of Sun Ra. I also used instruments on which I have some competence but these are often distorted sonically by extended playing methods. All the instruments were subjected to varying degrees of electronic manipulation. As will be seen certain world instruments are linked to certain characters and functions within the opera. My intention when starting the opera was to play all the instrumental parts and sing all the vocal parts. This was partly because I had developed a number of techniques peculiar to my own instrumental and vocal styles but also because I couldn't find anyone able to realise the sounds that I wanted. This relates to my desire to attempt to negate cultural conditioning since, I felt that this might lead back to a world of pastiche. I couldn't really expect erhu virtuosi to abandon all their training and embark upon what amounted to an 'assault' (although not in my opinion) on their traditions of playing. Mystified expressions alone were enough to deter me from any such collaboration.

b. Collage

The music is put together with different files containing samples of many instruments. The files are the building blocks for composing. My main approach was to create long strands of music which could then be manipulated electronically. Sometimes the strands are broken down into smaller units for the purposes of repetition where required. Often strands were multi-tracked but allowed to come adrift by subtle displacements. Often

strands form canonic textures. In some of the vocal parts I created a primitive type of reverb by multi-tracking with small rhythmic displacement. This evokes the lo-fi sound world of such sci-fi classics as the film *Forbidden Planet* (1956). A collage of rather disparate material is created for the *War with the Qaaks* movement.

c. Aesthetics of free-jazz

Cecil Taylor's music has already been mentioned above. My improvising style based on Taylor's playing has informed the material of the opera. This aspect of jazz instrumental style is very important to me and hints at another reason why I chose this method of writing music; I wished it to be a reflection of my own instrumental styles and therefore not dependant on recreation by others. I am particularly interested in the group work of Taylor and Sun Ra where many lines of improvisation are heard concurrently. This collective aspect of free-jazz can be heard in the desire to create complex textures in some parts of the opera. As well as unmetred rhythm, there is considerable use of John Coltrane's 'sheets of sound' technique.¹¹⁴ This is most noticeable in the use I make of the sona and bass clarinet. 'Sheets of sound' was a phrase relating to Coltrane first used by Ira Gitler in the liner notes to the album *Soultrane* (Prestige 1958). It refers to the long streams of notes played by Coltrane in concert and on record starting about this time. Although in the late 1950s Coltrane was playing in groups that hadn't abandoned chord structures, his florid and energetic style seemed to demand a pared down attention to chords; partly because of his way of playing 'outside' the changes but partly so as to keep textures clear when the saxophonist played in this style. This can be heard most clearly on his solo during a Carnegie Hall performance as a member of Thelonious Monk's Quartet.¹¹⁵ After the head

¹¹⁴For good examples of sheets of sound hear any of the later Impulse records, such as *Live at Birdland* (1964), *A Love Supreme*(1965) and *Ascension* (1965)

¹¹⁵ *Thelonious Monk Quartet with John Coltrane at Carnegie Hall*, Blue Note, 1957 (not released until 2005). The version of *Epistrophy* under discussion can be heard at https://youtu.be/K_h1geOaLVY (last accessed 15.iv.2015)

of Monk's composition *Epistrophy*, Coltrane announces his solo with a few fanfare-like repetitions before gradually unfurling long phrases in rapid notes. As was typical in this group's practice at the time, Monk comps sparsely and even drops out for many bars at a time. This has the effect of unleashing the saxophonist into a chordless environment. There is a sense that although the chord structure is continuing 'unheard', its implication becomes more tenuous the longer Monk remains absent from the texture. It was this harmonically unsupported aspect of sheets of sound that attracted me in addition to the textural richness of a rapidly changing mellifluous line of sound. Below is part of Coltrane's solo that shows both the rapid patterning and the harmonic freedom allowed by Monk's sitting out:

Fig. 5 *Epistrophy*, from *Thelonious Monk Quartet with John Coltrane at Carnegie Hall*,
Saxophone solo only, bars 22 to 29. (Transcribed by the author.)

from bar 22 of Coltranes solo

♩ = 156

Tenor Saxophone
(concert pitch)

legato

22

24

26

28

That Coltrane was aware of the implications of a chordless backing for this texture is revealed in later recordings such as *Interstellar Space*.¹¹⁶ Here the only musicians are Coltrane and the drummer Rashid Ali. This duo brought to full fruition those sections in earlier recordings of his larger groups where the pianist and bass player would drop out. In the track *Mars* from the album, it can be heard how far the concept of sheets of sound has travelled since 1957. Although there are recognisable harmonies implied by scale and arpeggio figures they are so elided and irregular that no regular set of changes can be discerned. Additionally Coltrane plays longer lines that join up the more fragmented sheets seen in Fig. 5. The increased use of harmonics and extended techniques such as growling and screaming, all undertaken at breakneck speed, add to the texture. The rest of the

¹¹⁶ John Coltrane, *Interstellar Space*, Impulse, 1967 (released 1974). *Mars* from the album can be heard at <https://youtu.be/7MRo-sRmEUY> (last accessed 15.iv.2015)

musical space is filled with the polyphonic drumming style of Rashid Ali, who built on the example of Coltrane's previous drummer, Elvin Jones.

Many of Coltrane's later recordings show influences of Indian music; the use of modes derived from ragas, associated drones and passages of *senza misura* followed by metred sections. It is quite possible that the duels between melody instruments and tabla that occur frequently in Indian music gave Coltrane the idea to use this format in recordings like *Interstellar Space*. By the late 1950s Coltrane was listening to Indian music and he collected the recordings of Ravi Shankar, the sitar player who was most associated with the introduction of Indian music to the West. He sought to emulate the double reed sound of the Shehnai in his use of the soprano saxophone. The drone, raga and use of the soprano saxophone can be heard on *India* from *Live at the Village Vanguard*.¹¹⁷ The piece contains no harmony and indeed the pianist, McCoy Tyner, is silent for most of the time apart from adding occasionally to the drone of bass player Jimmy Garrison by playing bare fifths. Coltrane may well have heard the work of Bismillah Khan, perhaps the leading shehnai player of the time. Particularly interesting are the audible uses of rapid passagework in the work of both Coltrane and Khan. Below is a transcription of part of *Raag Shudh Kalyan*.¹¹⁸ The passage begins 25 minutes into the music.

¹¹⁷ John Coltrane, *Live at the Village Vanguard*, Impulse, 1962.

¹¹⁸ The whole piece can be heard at <https://youtu.be/ercRPiMLOW> (last accessed 10.3.2015)

Fig. 6. Bismillah Khan, *Raag Shudh Kalyan*. (Transcribed by the author.)

Senza misura
Db drone throughout

Shehnai

f very fast
sempre legato

2

3

4

5

ppp

6

f

7

8

all notes glissando

$\text{♩} = 120$

tabla picks up beat
during this bar

This cadenza like passage occurs between appearances of a refrain like theme seen in the last 3 measures. It is performed in one breath by means of circular breathing. Seen through the lens of Coltrane's work these circular breathing passages could well be termed sheets of sound.

There are many instances of this textural style of wind playing in my work. The instrument most used for sheets of sound is the sona. This is most noticeable in the *Klingon Battle Song*, beginning after the tabla section (2'25''). Three long sona phrases are overlaid at different pitches. The effect is canonic but not one that relies on an underlying harmonic pattern; the harmonies that emerge are resultant. The harmony is coloured however by the intervals chosen for the canon. The first sona starts on Ab, the second on D below and the third on G below. This creates the dissonant intervals diminished 5th and minor 9th in relation to the first sona. I felt this suitable for a warlike sense of coming communal violence. Rather like the slow alap section of an Indian raga, the music begins in a stately mood:

Fig. 7. Klingon Battle Song, first sona part starting at 2'25''.

Senza misura (rhythms approximate)

Sona

ff notes subject to pitch bending

The lack of a drone emphasises a desire to keep the sona 'rootless' in harmonic terms; this is a departure from normal practice in Indian music and for most of Coltrane's output apart

from the duels with drummers Jones and Ali. The sheets of sound texture begins to emerge at 2'48'' as rapid ornaments start to embellish the longer note values. These ornaments gradually get longer and eventually take over from long notes as the dominant rhythmic texture. At 3'45'' the sheets become a texture in their own right no longer always tied to long notes. This effect is multiplied in all three sona parts resulting in a texture that is increasingly complex as the sheets become longer. Below is the first sona part at 3'45'':

Fig. 8. Klingon Battle Song, first sona part starting at 3'45''.



By taking the initial aural influence of the textures created by Coltrane and Khan, insights followed in seeing how the style might be taken in a different direction, firstly by removing the drone and then by making use of emerging harmonies resulting from a canonic device. This denied the sheets of sound their root but allowed for a harmony resulting from the juxtaposition of lines. The harmony has a particular flavour derived from the microtonal intervals that occur in the wayward lines themselves and in the discordant intervals chosen for each of the lines' incipit. I also noted the difference in breathing techniques between Coltrane and Khan; the former does not use circular breathing but the latter does. Although not able to circular breath, I was able to create the impression of a similar continual spooling of notes as a result of the canonic writing; as the sona parts reveal longer melismatic phrases, their constant chasing of each other creates a resultant flow of fast notes that gives an impression of breathlessness. This was an attempt to bridge the

different ways of breathing shown by Coltrane and Khan and arose out of my study of their work and how it could bear fruit in the context of my own work. The mounting exhilaration of this texture is reminiscent of the chase chorus; that part of a jazz tune where horn players spar with each other in 8, 4 or even 2 bar alternations. One of my favourite examples occurs in the title track of *Blowin' in from Chicago* where two tenor saxophone players, Clifford Jordan and John Gilmore trade bars in this way.¹¹⁹ My 'chase chorus' enacts a temporal telescoping of this trading as all three sonas are playing at once and the chasing is not confined to discreet 4 bar sections. It was my intention to use this technique to create a heightening of intensity, just as it does in jazz tunes.

By way of an appendix to the above, the emergence of sheets of sounds from ornaments of long notes resonates with ornamental practice in baroque music. This is a factor in the way that the vocal parts in *Shall I Compare Thee* develop; ornaments begin to run riot in a way not dissimilar to the behaviour of the sona parts in *Klingon Battle Song*. Despite the apparent eclectic influences of modern jazz, Indian music and baroque ornamentation, the sheets of sound technique seeks a cogent language in its own right by the control exhibited in post-improvisational choices: the use of canon, use of a limited tone palette and choice of interval for resultant harmony. Further cogency is supplied by the style of improvisation itself, based on my own playing of the sona rather than any attempt to directly copy Coltrane or Khan.

d. Use of extended vocal techniques

The vocal parts of the opera utilise techniques from a variety of sources, both from within established vocal traditions and from areas of popular culture. I have developed a few new techniques of my own. It should be borne in mind that the different styles do not particularly relate to their use in their original context. For example, the fact that I have

¹¹⁹ Hear Cliff Jordan and John Gilmore, *Blowin' in from Chicago*, Blue Note, (1957).

been inspired by Qawwali singers should not fool the listener into thinking that a mystical union with Allah is suggested. At least that was not my intention; the wide reference to different ways of singing is more in the spirit of Sun Ra's appropriation of objects to create a personal mythology, or in this case, a Klingon one, made up by me. The following is a list of vocal influences with brief reasons for their use. Some influences are more on the surface than others.

- Classical singing: this receives a parodic treatment in the Shakespeare setting in the opera. This style is used to present a formal example of Klingon art.
- The vocal styles and techniques of shamanic practitioners are used most appropriately in *Shamanic Ritual Service*.
- Chanting of indigenous Americans (hear: *Shamanic Ritual Service: Incantation*)
- The melismatic style of Qawwali singers (e.g. Ustad Fatah Ali Khan, the Sabri Brothers). The melismatic style of singing evokes an epic quality that I aspired to in the opera.
- The fire chant of Kerala – an ancient form of singing whose meaning has been lost but whose analysis has posited its apparent closeness to bird song. Also Vedic singing from the same part of India.¹²⁰ These styles, like Qawwali singing, are virtuosic and melismatic.
- Klunk – a character from Hanna-Barbera Productions *Dastardly and Muttley and Their Flying Machines (aka Stop the Pigeon)*. Klunk is like a shaman who has to be interpreted.
- *The Clangers* BBC TV childrens series. Their whistling language is suggested in the Wind Oracle music in the opera.

¹²⁰ See the documentary, Altar of Fire, http://youtu.be/2mYu_Ckh_K8 (last accessed 17.ii.2014). See also Episode 1 of Michael Wood's BBC series *The Story of India* and its associated website, http://www.pbs.org/thestoryofindia/ask/answers_2.html, (last accessed 17.ii.2014), where some discussion of Keralan birdsong chant can be found.

- Silbo – the whistling language of Gomero. This is also evoked in the Wind Oracle of the opera.
- Janacek’s melodic curves of language. Here was a clue as how to characterise the Klingon language with signature rhythms.

These different vocal styles will be alluded to in more detail in the course of analysing each section.

5.4. A Soundtrack Opera With or Without Staging

I took the decision to realise all my music on a soundtrack thus creating a fixed media work. The problematics of pre-recorded music are essayed by Stockhausen in relation to his *Trans* (1971). Since he weighs most insightfully the pros and cons of pre-recording techniques it is worth quoting the passage in full:

‘It would be possible to give a performance of *Trans* sometime in which there are absolutely no musicians behind the strings and the music is just played back on tape. And what then? Would people notice? In perhaps ten or twenty years people will suddenly wake up and say can we have the orchestra playing back on tape too? Or: do the musicians really send out vibrations at the moment they play that are absolutely vital to music? I firmly believe so! What we have called music up to now was just an excerpt from the music and never the whole music! It was just the acoustic waves. But we know very well that when we hear a musician play ‘live’, if he or she is inspired, then there is always something extra (usually not very much, unfortunately).’¹²¹

¹²¹ Michael Kurtz, (trans. R. Toop), *Stockhausen: A Biography*, 1992, London, Faber and Faber, p.191.

Stockhausen raises many issues here in relation to the way sound is perceived, the role of performers and the different effects on the listener of vibrations from live as opposed to pre-recorded music. It is even possible that Stockhausen doesn't mean vibrations in an acoustic sense but more in the sense of emotional or interpretative connectivity. The presence of performers is a denial of fixity; a triumph of free musical will. Pre-recorded music will surely sound the 'same' every time. However I believe this is only true in an abstract sense. Pre-recorded music still has the power to be 'heard' differently according to who is listening and when. Works of music travel through time and psyche and their potential for changeability becomes dependent on the receiver and their circumstances. In this way a pre-recorded piece also negates the possibility of fixity and still has the ability to be reformed each time it is heard.

I also decided that after my many experiments with collage techniques and improvising that these precluded the use of a score. Without a score there can of course be no live recreation of the opera – it simply has to be mounted as a 'soundtrack' based work. As a realisation of Stockhausen's prophecy the whole orchestra (and all the singers) have ended up as a pre-recorded entity. Going to an even further extreme, I have done away with all musicians and singers even at the recording stage; having instead relied entirely on my own skill (or 'ignorance') as a performer. I do not rule out the possibility that the soundtrack could accompany a film or staging of the work which might involve miming actors, dancers etc. Further implications of staging are considered below in relation to my reading of Baudrillard since they rightly belong to the concluding sections where I considered further implications of the opera after the completion of the soundtrack.

5.5. Broad outline of composing techniques

There is no written score that can be interpreted by other musicians. Audacity produces a 'score' but this consists of waveforms that are graphic representations of actual sounds and not instructions for how to create those sounds as would be the case in a traditional score. These waveforms are manipulated in a number of ways and this constitutes the second by second process of composing. In Audacity the waveforms change shape to reflect the manipulated parameters (length, speed, trajectory, timbre, etc.). Audacity, being similar to a multi-track recording device, allows for complexity without the need for notation or the resources of other musicians to create the music. The changes in parameters made possible in Audacity affect timbral shifts, in turn allowing for radical changes in texture. Other threads may be added or subtracted as if orchestrating. Long threads are combined with shorter segments that can be repeated to create the behaviour of ostinati. In general, organic evolution was favoured over structures based on repetition. This evolution is not driven by thematic motifs in the manner of Brahmsian developing variation. Instead, the organic growth is inherent in the way the improvised material proliferates, often with transformed versions of material occurring simultaneously. As mentioned above, shorter segments of the improvised strands are sometimes extracted and used as gestures. This provides a balance between flowing lines and more pointed interjections. This continual development of improvised material is favoured rather in the manner of free-jazz, or as demonstrated by certain classical composers such as Matthijs Vermeulen, Havergal Brian, Edmund Rubbra and Vagn Holmboe.¹²² Vermeulen has been particularly important; he made little use of the principles of repetition and duality dependent on tonal or thematic

¹²² Excepting Rubbra, these composers are studied together with Allan Pettersson, Fartein Valen and Kaikhosru Sorabji in Paul Rapoport, *Opus Est: Six Composers From Northern Europe*, London, Kahn and Averill, 1978.

schemes. He regarded these as unable 'to answer to the desires, conscious or unconscious, of our inner being'.¹²³

This mention of the conscious and the unconscious recalls Husserl's understanding of the phenomenological perception of things, whether real or unreal, and also hints at a Jungian acceptance of the unconscious as a motivating force for behaviour and creativity.

Vermeulen developed a polymelodic style where lines coexist in a freely dissonant way. He sought to eliminate gravitational forces of tonality and fixed metric schemes so as to achieve 'the sensation of freedom in time and space'.¹²⁴ Composers such as Vermeulen have always been important models in my previous work and remain so even in works which depart radically from his sound world. It is my belief that despite the many ways a piece of music can be analysed, it is its sound world that remains the overriding characteristic. It may be argued that this is a vague and evasive statement yet it is precisely that part of the music that so defies analysis; it's what music consists of and therefore is not so easily translatable to formulae. In analysis many layers of syntactical and semantic meaning can be discerned but they are less about notes or chords or other nuts and bolts, but more about energy, momentum, trajectory in space, long-range change or stasis, timbral morphology and rhythmic plasticity. As mentioned above I find Boltzmann's thermodynamic theories useful in analysing how this work structures the music at the macro and micro level.

I find a composing method informed by these ideas can also illustrate the words of Ignaz Friedman in relation to piano playing, but equally true of composing: 'Rhythm is the life of

¹²³ Matthijs Vermeulen, *Beschouwingen bij mijn zesde symfonie*, in *De Groene Amsterdammer*, vol. 99 no. 49, 5.xii.1959, p.11. Cited in Rapoport, Op. cit. p.31.

¹²⁴ *Ibid.* p.9. Cited in Rapoport, Op. cit. p.32.

music, and colour is its flesh and blood'.¹²⁵ As I understand it, Friedman sees both these aspects of music as being most often in a state of flux.

Another important performer who has influenced my composing (and singing) is Reynaldo Hahn. In his book of essays on the vocal art, there is a remarkable passage where he compares the art of singing to that of the glassworkers of Murano. After describing the moulding of the heated glass, Hahn goes on to say: 'Not only does he give the molten glass a form, he also gives it colour, reaching into the boiling, bubbling vats to draw out pigments of various hues. He applies those delicately chosen nuances to the shape he has prepared to receive them.'¹²⁶ Here Hahn uses a beautiful analogy to describe the relationship between form and timbre in singing. I relied entirely on my own singing for the vocal parts of the opera and the expressive use of form and vocal colour were paramount in 'moulding' the music. Hahn is essentially describing how fluids become solid and yet retain a memory of the original molten substance in the final form; Murano glass is particularly notable for this with its flowing lines and subtle interpolation of colour. See Fig.9:

¹²⁵ See Hyperion Knight, liner notes for *Ignaz Friedman*, EMI Classics, 456 785–2.

¹²⁶ Reynaldo Hahn, *On Singers and Singing*, (translated: Simoneau, 1990) London, Christopher Helm, 1957, p. 44.

Fig. 9. Glass vase, Murano. No date. Author's collection.



This fluidity of approach to form, rhythm and timbre links Hahn and Friedman. Both musicians (they were composers as well as performers) have informed my composing methods. Such performers have also been important in the sense that all my composing for the portfolio has arisen from performance. In this way performing and composing become one and share characteristics inherent in a study of both disciplines.

5.6. Summary of Compositional Elements

a. Harmony - it admits all tonal and microtonal intervals. No harmonic schemes are used. There is no attempt to organise vertical and horizontal elements using a harmonic system. A relationship exists between melodic lines and harmonic textures that are often differentiated by rhythm and timbre as suggested by the Friedman quotation above. The found pitches of the world instruments and their pitch manipulations dictate

harmonic flavour. Most of the pitch manipulations result in microtonal intervals. This was done by trial and error without a system. Microtonal dissonance is therefore prominent. There are some harmonic ghosts here and there: some triadic choral writing for the Qaaks and for the Swan Priestesses, some parallel harmony in *The Wind Oracle* and even a move to the dominant in the first section of *Spaceship Funeral*. These are harmonic gestures rather than a desire to mimic harmonic function. These harmonic elements are also pinned to characterisation: the rhythmic unison chorale of the Klingon generals, the triadic implications of the final utterance of the Swan Priestesses, the ritualistic blocks in the funeral music; these are ways of evoking group action and harmony gives opportunity to characterise those groups. Harmony is often hard to pin down because of the relentless pitch sliding of many of the parts. Thereby a fleeting world of weird harmony is explored where instability rules. The instability is caused by parts sliding together and apart from each other so that intervals don't remain constant. This is achieved throughout the opera by utilising the sliding pitch/tempo plug in within Audacity. It was a way of achieving electronically some of the shifting textures I created by hand in *Shamanic Incantation No.5*. Some homophonic textures are multiplied to create piles of harmony: this technique is heard in the chorale-like music in the second half of both the *Prologue* and *Epilogue*. Such a 'pile-up' occurs in Mikhail Nosyrev's *Symphony No.3* (1978) where a short homophonic section is multiplied harmonically by adding vertical elements until it moves ominously like a black cloud across the composition. There is no published score of Nosyrev's symphony and my analysis of it is aural, but has nevertheless suggested a way of working with massed harmonies in the way I do in the parts of the opera mentioned above.¹²⁷ An aural comparison between Nosyrev and my own work makes this clear.

¹²⁷ Hear Mikhail Nosyrev, *Symphonies 3 and 4*, Olympia (recorded 1999). The pile-up starts at 20'40". The *Symphony No.4* also contains several pile-up sections, indeed it becomes a key element in this symphony as if the ur-pile-up of *Symphony No.3* had triggered a stylistic development.

b. Melody is freely conceived as a response to the words and the pre-composed instrumental tracks. Melodic rhythms are derived from language. Non-repeating melody is formed to create 'epic' intonation with Bach, Wagner and Delius as models as opposed to the 'lyric' model typified by Schubert. The quality of epic as I use it is suggested by organic extensions of melody in continuous development rather than the discrete balanced phrases of a lyric style. The way in which Bach's melodies proliferate in expansive and sometimes unusual ways has been influential to me. The long phrases of *Quia fecit mihi magna* from J.S. Bach's *Magnificat* (1733) always fascinated me as a young singer. The arioso of Baroque French opera is also an influence; there is unpredictability in the line. Although achieving different results, Richard Wagner and Frederick Delius seem to match Bach in the unravelling of this kind of self-developing melody. Works such as *Quia fecit* and examples by Wagner (*Prelude to Parsifal*, 1882) and Delius (*Sea Drift*, 1904) seem to break the boundaries of what Miroslav Holub calls the dimension of the present moment.¹²⁸ Holub suggests that by examining the results of experimental psychology, together with work done by literary theorists Frederick Turner and Ernst Pöppel, the present moment can be defined at roughly three seconds for the purposes of subjective pattern forming.¹²⁹ A metronome test can be devised that shows that candidates undergoing the test perceive non-existent accents on one of the metronome beats provided they are not more than three seconds apart. Turner and Pöppel discovered that poetry in many different languages follows the three-second rule for line lengths. The same principle has been applied to music; the musical motifs of much of Mozart's music conform to the three-second boundary. It is suggested that even long lines of poetry (for example hexameters) can be broken into segments that do not trespass the three-second mark. While this theory may have a lot of examples, many can be found that break the rule. Much free

¹²⁸ Miroslav Holub, *The Dimension of the Present Moment and Other Essays*, London, Faber and Faber, 1990, p. 3-4.

¹²⁹ Frederick Turner and Ernst Pöppel, *The Neural Lyre: Poetic Meter, the Brain, and Time*, in *Poetry*, August 1983, p.277-309.

verse does without mid-line caesuras. The outriding feet of Gerard Manley Hopkins' poems push beyond the limit and indeed constitute part of his startling rhythmic originality. Much of Bach's music does this also; it would be hard to segment the *Prelude in D* from *The Well-Tempered Klavier Book 1* (1722), for example. The opening phrase of Wagner's *Parsifal* pushes way beyond Turner/Pöppel in its very first phrase. Delius' chains of hypnotic altered chords seem to encourage an arboreal magnitude of phrasing. Such 'present moment'-breaking melodies can be found in my work in the 'sheets of sound' strands of instrumental music, the melismatic style adopted by the opera's narrator and the continuous overlapping melody of the Swan Priestesses.

c. Rhythm is mainly taken from the initial instrumental improvisation. It is largely unmetred except when specific pulses are desired. The plasticity of free-jazz rhythm is the typical starting point with particular reference to those works of Sun Ra and Cecil Taylor previously cited. An interesting relationship between improvised music and its subsequent moulding can be seen in the parameter of rhythm; much of the improvised starting points of the music rely on free rhythm, yet this fluidity is given a different slant when previously individual parts are combined. When used contrapuntally, for example, the sona parts of *Klingon Battle Song*, the fluidity of rhythm is magnified, yet combining certain parts in rhythmic albeit in unmetred unison has the opposite effect, as if the music could now be perceived as having bars; the very jagged freely conceived rhythms of the Klingon generals' choral is an example of this. This provided an insight as to how rhythm might be perceived in relation to degrees of contrapuntal relationship.

d. Texture varies from single track to multi-track sound events. The most important aspect of texture is that its sound constituents change in time and pitch 'space'. Some parts of the opera concentrate on a dialogue or trio of sound events (vocal and guzheng for the narrator's *Prologue* and *Epilogue*, with a lower part added to the

recitatives to make a trio. Other numbers of the opera are highly dense in texture: the Swan Priestess music and the *War with the Qaaks* particularly. It should be noted that there is often a changing relationship between density and activity. Heightened activity relates to the lower entropy levels of Boltzmann's thermodynamic model. It follows that textures can either be sparse or dense or contain either high or low entropy. Highly dense passages need not mean that they are active; the 11-part musical box canon conspired to achieve high entropy despite its highly dense texture. This is due to the canonically fixed nature of the material, the peaceful sound world and the floating vocals that seem impervious to inputs of 'work'. I have already mentioned how harmonic texture is piled up vertically. There are some organum-like textures in some of the vocal writing. The Qaaks sing in wheezy triads, the Wind Oracle and the Klingon general's response is couched in organum style.

f. Timbre is reliant on the use of many instruments from different traditions but with an accent on world music instruments. The morphology of these instruments through electronic manipulation has already been mentioned. I make use of timbral decay caused by over-stretching of the time or pitch parameters; *Spaceship Funeral* is a case in point but all the movements of the opera use this technique. It is an effective way of achieving many new sounds from a single source.

5.7. Stylistic Aspects in the Movements of the Opera

(Numbers in brackets after subtitles refer to track numbers on the *Qo'nos chal VeS* CD.

Bracketed numbers in the text refer to minutes and seconds of the track being discussed.)

As a study of the libretto reveals, *Qo'nos chal VeS* is a number opera; the Baroque structure was utilised as being the best in which to show a series of tableaux of Klingon life. The Baroque aspects of the recitative sections will be discussed below. The final section of this paper will address deeper aspects of 'appearance' that are implied by the type of staging envisaged for the music. Even without staging, the structure of the opera remains clear in a non-visual context as the single affect technique often applies to each movement of the work and therefore each demands specific sound worlds, usually determined by the choice of instruments and texture.

Prologue: (Track 1)

The instrument that dominates the narrator's *Prologue* (and his *Epilogue*) is the yangqin (a Chinese dulcimer struck with hammers). Its morphology allows for an extension of sounds from those produced under normative conditions. There are discernible gestures throughout with a two-note motif dominant; a motif that is shared between the yangqin and the narrator. These dactyls are like signposts that occur throughout the opera and relate to a rhythmic response to Klingon speech patterns. There are also some sound clouds of harmonics achieved by striking the strings of the yangqin beyond the bridges of the instrument; a sound that will appear later, much reduced in speed in pitch, at which point it sounds like heavy drops of some substance in a large cavernous container (3'48"). The *sul ponticello* effect starts the opera abruptly *in medias res*. In the duet nature of the music (despite the splitting of the vocal line) there is an allusion to the image of a bardic singer and harpist indicative of a Celtic tradition. This seemed appropriate to the purpose

of narrating the opera. This was suggested by the affinity between the strings of the yangqin and those of a harp, although there are no material references to either Celtic harp or Chinese yangqin music as traditionally perceived, rather there is a cultural reference to the function of the instrument. The vocal line is organic, flamboyant, melismatic and even aggressive in tone as befits the propagandist nature of the work. It is hoped that this super-confidence is relayed on a psychological level as threat. A chorale-type texture of slower moving chords will be detected (1'30''). It comes several times with each reiteration in a thicker textured doubling of microtones; a type of Nosyrevian 'pile-up'. The vocal part is increasingly expressive with much use of Klunk-style melisma and falsetto passages. In this way a balance between volatile, high entropic elements and static, homophonic elements is achieved. This is suitable for the narrator's declamatory style; his pronouncements are anchored by frieze-like blocks of yangqin sounds. The last appearance of the chorale occurs at 4'13'' and the voice returns to a more stately form of expression. Captured harmonics of yangqin notes are looped to provide a coda. The vocal part drops to a basso profundo pitch where it rests. I gained insight into the extent to which sound morphology could yield widely differentiated timbres from one instrument; the sustain achieved from the captured harmonics being the sound most removed from the nature of the yangqin as traditionally played.

Fig. 10. Yangqin (photo by the author)**Recitatives: (tracks 2,4,6,8,12,14)**

All the recitatives are for voice and broken clavichord. The distressed clavichord is used as a sort of Klingon cembalo while a slowed down and pitch-lowered version of the vocal part is used like a basso continuo cello. It is ghosting the recitative vocalist. It was important for me to keep a discrete sound world for the recitatives to act as a structural reference point during the opera. Their sound is quickly established as ‘the’ sound world for taking the story forward according to the conventions of the baroque number opera or oratorio. In this sense can they be considered as making an allusion to ‘Handelian’ practice in terms of how the music functions if not in its actual sound. It might be objected to, that Handelian practice has been adopted in a work that seeks to avoid obvious cultural contexts. I will show in my conclusions how the use of such a baroque device relates less to immediate musical concerns but more to the level of play and fantasy I required. Additionally the use

of the instruments as participants in recitative is functional and doesn't attempt to create a pastiche of Handel at any point. Each recitative, while it occupies a restricted sound world, reflects the building tension in the story as the battle with the Qaaks becomes inevitable. It was important for me to nevertheless retain the closed sound world of the recitatives as a way of showing the other sonically different movements in relief. The pitch and speed adjustment resulted in some unusual vocal effects in addition to those employed by the singer. For example in the basso part, sibilants are drawn out into cascades of minute sounds as they submit to pitch bending. This remains a striking feature of the basso continuo, perhaps analogous to an exaggerated attack of the bow upon a cello string and the resulting cloud of rosin. This effect is noticeable in all the recitatives and suggests a parody of a Baroque cello. The way the vocal and 'cello' parts are related yet different, links to my desire to structure music through a network of transformations. This was influenced by Capra's writing on New Paradigm science (see above, p.31). The transformation works on several levels; pitch, speed and timbre. Their simultaneous appearance in the recitatives is analogous to the sort of network of connections that Capra sees as informing the physical world rather than the world as described through the quantitative labelling of objects. In this sense the vocal and 'cello' lines form a rather long and diffusely constructed 'object' that on its own would seem aimless. Its success as an integrated structure lies in the relationship between its two versions and the background of the distressed clavichord. The music produced is an example of how thinking about a process outside of music has nevertheless informed a new approach to composing.

The clavichord had structural problems which were turned to advantage; it was actually in a dreadful state of disrepair. Some of the keys were stuck and difficult to press down. When depressed they make the whole instrument resonate with a loud, wooden percussive attack. Other keys when depressed produced several tones due to catching between plectrums. Some lower keys struck strings that were so loose that it was possible

to affect vibrato and pitch bending by moving the key on its bed, this exaggeration of the *Bebung* technique proved fruitful. After some experimentation I was able to ascertain which keys would produce which effect. This allowed me to compose music analogous to the techniques of sound production used in John Cage's *Sonatas and Interludes for prepared piano* (1946-48). However, I did nothing to change the sound of the clavichord, so it was 'found' rather than 'prepared'; I accepted its parlous state as an opportunity to find sounds forbidden on a fully functioning instrument. The wooden clacking sounds that punctuate all the recitatives act as a drum-like marker. Their aim is to add a static ritual atmosphere to the music. The allusion is to the loom shuttle sounds that came to Stockhausen in a dream and which he subsequently included in his orchestral work *Trans*.¹³⁰ In addition to these key based techniques I used my fingers to pluck strings inside the instrument casing, like a harp. This allowed me to provide a sonic link with the Chinese dulcimer used in several of the other movements.

There is a noticeable agitation in those recitatives that portend the coming of violent conflict. Here the material is 'heated up'; by which I mean the musical material increases in density and speed, as if molecules of a gas were being heated up and reaching higher plateaux of energy. This is a metaphor derived from the statistical thermodynamic model of Boltzmann. The psychological intent here is one of increased agitation and threat. Several layers of distressed clavichord are built up to add to this effect. The recitative preceding the start of the war is the most disturbing. The loom shuttle effect occurs frequently and the clavichord is 'piled up' in the manner of Nosyrev.

¹³⁰ 'Each time a Norn-like time-stroke rings out, with the whizzing noise of a weaving loom.' - Kurtz, Op. cit. p.190.

Fig. 11. Clavichord used for the recitatives. Note uneven and stuck keys that allowed for percussive interjection. (Photo by the author)



The vocal work in the recitatives, as with much of the opera, resonated with my desire to create a work whose emotive power could be channelled through an appeal to the acrobatics of improvised and highly melismatic singing. This quasi-Baroque character of vocal display became the main mode of utterance for the Klingons. The effect of display is somewhat magnified in that what in the Baroque period served as a platform for solo virtuosi becomes in the Klingon world a virtuosity in which the work even of nominally solo characters is vocally split in the ‘dis-individuation’ process already explained. The ‘basso’ aspect of basso continuo becomes, during the Baroque period, a lynchpin in the emergence of functional harmony and homophonic textures. My ‘basso’ serves a slightly different function since the harmony consists of banks of distressed clavichords of very dubious harmonic stability. The ‘basso’ in my recitatives is about a balancing sonority and rhythmic foil to the higher pitched and faster moving vocal parts above. That the ‘basso’ is in strict canon with the voice may not be obviously discernible, but it provided a way of at least minimising the use of material. It is quite possible that the success of the recitatives is based on the close interrelation between vocal and ‘basso’ parts. This could be a

subliminal connection. In this way the two strands that encase the clavichord perform an analogous function to the vocal and bass parts of a Baroque recitative.

Shall I Compare Thee (track 3)

Two voices in canon sing Shakespeare's *Sonnet No.18* (in Klingon). The voices are a major third apart and separated by about 1 second. Strummed chords on the oud accompany them; their harmonies hint at the key of E flat and this pitch centre is for a while confirmed by the singers who enter on E flat and G respectively. The tonality was a harmony *trouvé* and triggered the vocal responses. The dense oud texture is actually an overlay of five oud tracks which are arranged as follows: two tracks exhibit solo tendencies after about one minute whilst the other three play a steady strumming of chords. The strummed chords rise in pitch by a minor third, a further minor third, a major third and finally drop to a minor third below the original pitch. This is to create a rising pan-tonal shape with a fall off at the end. This mirrors the rising ardour of the vocal parts which even seem to mimic a Peter Pears type of expressive mannerism.¹³¹ The first move away from E flat can be detected at 1'37". Klingon vocalisations of wild glissandi and guttural utterances take over from the lyric tenor opening and a climax is reached from 3' to 3'23" where a hocketing of falsetto notes is heard. The original incipits of E flat and G return at this point, giving a feeling of recapitulation, although the oud tries to disrupt this. The singers respond with a Qawwali-like melisma (3'37"). The coda is indicated by soft strumming on the oud on a low-pitched chord repeated three times; this becomes clear at 4'12". Apart from a Pears parody (incidentally Pears is one of my favourite singers) there is also an allusion to another musician. Couperin's *Troisième leçon de ténèbres* (1714) (as sung by Alfred Deller and

¹³¹ The oud could be played by a Klingonised Julian Bream.

Wilfred Brown)¹³² has always been another great favourite of mine and the Shakespeare setting came out with that piece in mind. The canonic writing with chordal accompaniment is a homage to this Baroque style; it seemed to suit well the idea of a formal Klingon art music, and it is thus presented as such with no real plot relevance. The vocal impersonation was a playful addition arising out of the compositional process, yet the overlaying of high tenor parts as in Couperin's work avoids pastiche due to parodic vocal ornaments and the microtonally tuned oud. The reference of the music is to the functional use of arias in baroque opera – the chosen medium of the opera – rather than specific neo-baroque techniques.

The Wind Oracle (track 5)

The wind oracle is in three parts. The first part consists of 5 whistlers who perform the same music but at different times and pitches. The influence for the expressive use of whistling is the Silbo Gomero whistling language of the island of La Gomera.¹³³ Silbo Gomero is whistled in the hills and valleys of La Gomera in the Canary Islands; the vertiginous landscape lends itself well to the amplification of whistled messages across large distances. The language, which is 'spoken' by up to 22,000 people, is used for public pronouncements of weddings, funerals and other collective events. I felt it was suited to the idea of a public pronouncement – the purpose of the Wind Oracle's existence. Listeners familiar with the children's TV series, *The Clangers*, will pick up a further reference. This charming programme of knitted aliens could not provide a more startling contrast to the warlike Klingons, albeit at the level of allusion. The effect of the oracle's opening section is like a complex virtuoso flourish and it irritates the Klingons who have

¹³² Hear *Historical Anthology: Tallis and Couperin*, Vanguard Classics 2525.

¹³³ See *Whistled Language of the Island of La Gomera* on you tube <http://youtu.be/PgEmSb0cKBg> (last accessed 28.8.2012).

come for a specific oracular pronouncement; hence their angry interjections. These interjections (beginning at 41'') consist of three voices singing identical material but slightly out of sync so as to create a cavernous sonority, as if the voices are echoing in the Mountains of Obfuscation mentioned in the libretto. This was my lo-fi answer to the problem of creating reverb. Towards the end of this flourish some very low whistles appear which herald the end of the first section. The second section (2'22'') by contrast to the first only has two main textures; the whistlers now perform a pronouncement in mass homophony and with a jagged metre, whilst gestures of distorted Chinese yangqin underpin them. Section three (3'51'') follows, with the Klingon generals' response. They imitate the rhythmic gestures of the oracle again using mass homophony and jagged metre. The close harmony – with slightly off-key added sixth chords – may remind some listeners of the Andrews Sisters. This is an intended allusion and was an outcome of the desire to show the unisonality¹³⁴ of the military response. A memory of Andrews Sisters recordings dating from the Second World War may have been a subconscious trigger for this reference.¹³⁵ The yangqin gestures accompany the Klingons with similar material as used for the oracle. The intention here is to evoke by means of parody the Klingons' disdain for their own cultural practice; they are impatient to get the answer they want out of the oracle. The result is a paying of lip-service to an outmoded cult. The dead form of the oracular pronouncement is parodied in the Klingon generals' mocking of the homophonic chorale.

In terms of cultural contexts the use of an imitation of Silbo whistling has a close relationship to its model in that whistling is used for communication in the Mountains of

¹³⁴ Anderson, Op. cit.

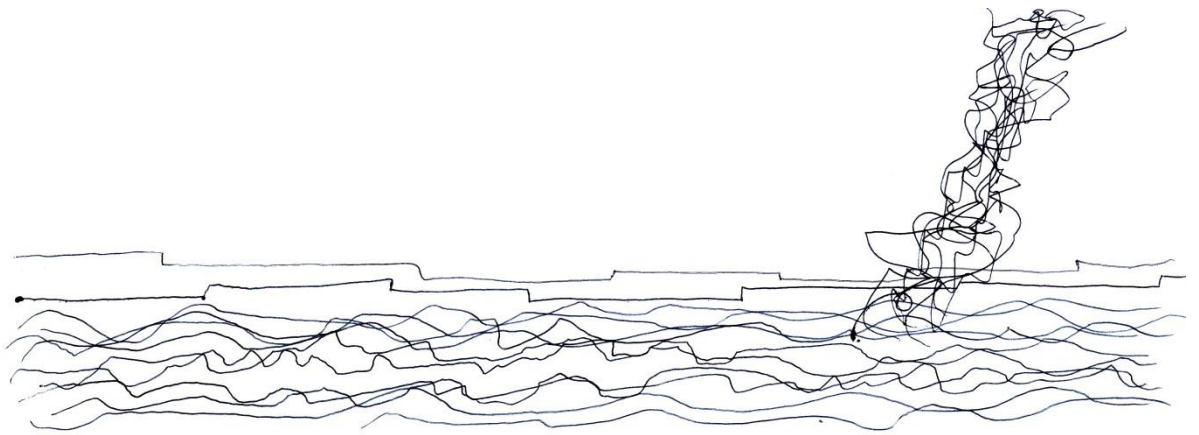
¹³⁵ For example *Boogie Woogie Bugle Boy of Company B* in the film *Buck Privates*, 1941. (<https://youtu.be/qafnJ6mRbgk> (last accessed 24.iv.2015))

Obfuscation just as in the mountains of La Gomera. Unlike the simple signals of Silbo the use of a fantasy whistling language in *The Wind Oracle* is more densely contrapuntal as if underlying the obfuscation of the locale. The lack of communication between the Wind Oracle and the Klingon generals underlines this 'failed' version of Silbo. Functionality of whistling in mountains is here undermined by both its contrapuntal complexity and the Klingon generals' pre-determined decisions. Here is another example of Lovecraftian Weird Realist receivership; it is as if the Wind Oracle and the generals inhabit a disconnected world where communication as exchange has failed.

Swan Priestesses' Song (track 7)

I had a mental picture for this music. I imagined swans (or at least birds with some swan-like features) floating serenely on the surface of a lake whose liquid contents might behave like water but which also has the characteristics of molten matter, yellow and orange in colour like the surface of the sun. I hoped the music would translate from some aspects of a further mental image, this time more abstract, that in rough, schematic, graphic form looks like this:

Fig. 12. Graphic realisation of mental image for Swan Priestesses Song.



To express these mental pictures by way of a musical ekphrasis two main timbral textures are built up; one instrumental and one vocal. The instrumental texture consists of 11 tracks made up of a musical box played in many different tempi and pitches. Careful listening will discover the much-distorted origins of the musical box music – the first phrase of the famous oboe melody in Act 2, scene 1 of Tchaikovsky's *Swan Lake*. The musical box was an unusual *objet trouvé* chosen because when purchased it was found that the bells were very out of tune; a pitch opportunity not to be missed. It is an example of a 'musical' *objet trouvé* put to unusual use. Sliding pitch/tempo scale is used to further destabilise pitch and tempo elements. This Audacity software plug-in allows for pitch glissandi and tempo accelerations to operate in tandem. The slower tracks reveal an intentional decay in the bell sounds as they are stretched. A series of fortuitously unusual timbres is the result, particularly towards the end as the decaying sounds begin to rise up in the texture in a slow glissando. At certain points of the piece a groups of three tracks plays fast canonic renderings of the musical box material. The first of these occurs at 45'' and can be seen in the graphic image above. These are very condensed versions of the Tchaikovsky theme that emerge like solar flares from the surrounding material; Boltzmannesque low entropy events. These flare events were a response to the mental image of the swans in molten fire.

The vocal texture is built up of single note, falsetto samples which are layered over 3 tracks to create a single melodic line. This tune rides over the bed of bell-like sounds. Some of the pitches take their cue from prominent bell noises in the instrumental track. Unusually the pitches were altered by tempered intervals rather than the micro-intervals that dominate much of the opera. However, they combine with the constantly unstable bell pitches to eerie effect. The opening vocal melody is as follows:

Fig. 13. Swan Priestesses Song vocal part from start to 1'33".

Falsetto

Note values approximate

2

first 'solar flare' starts here

3

4

second 'solar flare' starts here

5

At 1'33" there is a still centre to the music where very low bells and voices create a soft and murky pool of notes. Faster bells (still the *Swan Lake* melody but sped up many times, and layered) begin to rise up through the gloom (2'32"). These form the basis of the coda.

The music makes allusion to the electronic jazz as typified by the 1970s groups of Miles Davis and Sun Ra's Solar Arkestra. The synthesiser drenched music of Ra's *Door to the Cosmos*¹³⁶ or Davis' *Bitches Brew*¹³⁷ are distantly referenced. The swan priestesses' melody line makes reference to the long lines Davis was capable of making on his trumpet over a sea of pulsing electronic sounds. The combination of 11 layers of the Tchaikovsky musical box evokes the electronic wash of *Door to the Cosmos*. Ra's electric piano combines with several weaving lines played by electric guitars to create a trance-like state; a bed of sound on which instrumental solos and vocals float. The soft timbre and flowing texture of the

¹³⁶ Hear Sun Ra and His Intergalactic Science Solar Myth Arkestra, *Door of the Cosmos* from the album, *Strange Beauty*, (1979).

¹³⁷ Hear Miles Davis, *Bitches Brew*, CBS 66236, (1969).

musical boxes with the melody drifting over it are intent on evoking a mode of psychological 'coolness' – in the terms of Boltzmann, an energy system with small moments of agitation provided by the 'solar flares'. This sound world inhabits a different psychological level than that revealed when the Klingons themselves are uttering. It is distant, impassive, objective, self-absorbed. It lacks the rebarbative nature of Klingon challenges. For Klingons it might even be a forgotten world, as instrumentally dead as the oracle. Its obsessive canonic structure over so many parts is the opposite of the highly volatile improvisatory forms of Klingon expression.

The use of clearly pitched material and that which becomes ever more unstable allowed insights into how the latter acts as a kind of faulty reflection of the former. A 'memory' of clear pitches might be said to be retained within their decayed versions. This would appear to hold the music in the calm stable atmosphere required by the libretto despite the apparent degrading of pitches. The language chosen for the swans is a closed world of sound and had to be clearly demarcated from the music chosen to characterise other actors in the drama. The challenge was to make these varying dramatic and emotional demands of the libretto explicit in the music itself. A careful choice of material specific to characterisation and atmosphere was key to responding to this challenge.

Klingon Battle Song (track 9)

The derivation of this movement can be found in Spartan history. It was customary for Spartan phalanxes to be directed by musicians, usually drums and reed instruments. The aulos is mentioned as the main reed instrument used for this purpose.¹³⁸ Certain rhythms and melodies would act as codes for the soldiers who could be directed according to the situation on the battlefield. I have borrowed this idea for the Klingon forces as they enter

¹³⁸ Cartledge, Op.cit. pp.187-189.

the field. The harsh sound of the sona, the Chinese rural oboe, seemed a suitable Spartan-like instrument to use.¹³⁹ The movement begins with a kind of warm up for 3 sets of tabla. They are playing the same material at different times and pitches. The abrupt hits at the start are widely spaced. Gradually the intervening spaces are filled up until a metreless continuum of percussive frenzy results. There are two stylistic allusions here to drum masters: the tabla father and son team of Alla Rakha and Zakir Hussain and the jazz drummer Elvin Jones. Their polyphonic approach to drumming where sonority and rhythm are both used to create interweaving patterns was very important in my work as a jazz drummer. As I have no expertise as a hand drummer, I played the tabla in this section with soft timpani sticks; this allowed me to use the full array of stick-based rudiments. Elvin Jones often created complex sonorities using timpani sticks¹⁴⁰ so in a sense I have combined his approach with that of the tabla masters to form a *Jugalbandi*, the Hindustani term for a duet.¹⁴¹ However I make no use of Indian tala patterns; the playing is derived from my own experience as a jazz drummer.

The sona is an instrument that I have used a lot in my recent music; three of them enter at 2'25' as the tabla material is repeated. Its plaintive and harsh tone provides opportunities for extreme expression. Its unstable pitch allows for microtonal inflections. As mentioned above, in my own sona playing I have been most influenced by the soprano saxophone playing of John Coltrane¹⁴² and the shehnai playing of Bismillah Kahn.¹⁴³ It will be discerned that there are three sonas playing in canon, each one coming in at a lower pitch, this has also been discussed above as it relates principally to the use of sheets of sound. I try to

¹³⁹ The sona is very much an outdoor instrument in China. The opening scene of *The Butterfly Lovers* (1994, Golden Harvest Movies) shows an out-door band of sonas and percussionists marching as they play. http://youtu.be/e44i_6-6ZYI (last accessed 2.vi.2014).

¹⁴⁰ See <http://www.youtube.com/watch?v=69X9Qs-78GE&list=RDVTvhcbrUaSI&feature=share> (last accessed 4.vii.2013) for an example of Jones' textured work with timpani sticks in a group context with the Wynton Marsalis Quartet.

¹⁴¹ See <http://youtu.be/8xXEaH0NnNI> (last accessed 17.iii.2014) for a Hussain and Rakha *Jugalbandi*.

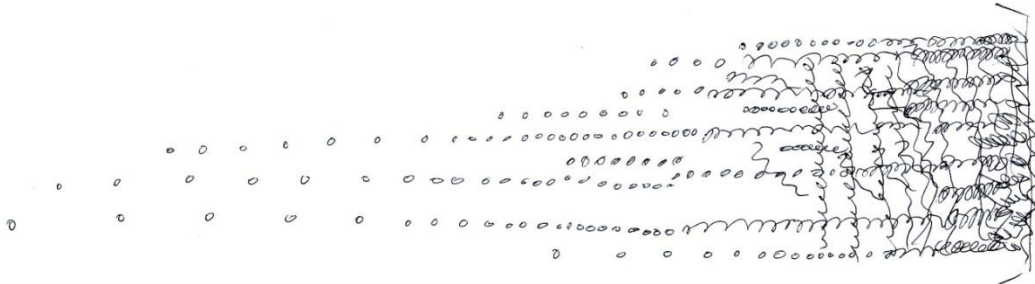
¹⁴² Hear Coltrane's *My Favourite Things*, Atlantic, SD1361.

¹⁴³ See <http://youtu.be/hveeMDC6Dro> (last accessed 8.vii.2012) for Bismillah Khan's playing of *Raag Malkauns*.

reimagine the terrifying war music of the Spartans as described by Paul Cartledge; the phalanxes surging forward with aulos players and drummers behind them. The final section (5'12'') combines the drums and sona music with an outbreak of massed singing as the Klingons utter their war cry. They follow this with a strophic song (5'23'') with polyrhythmic pulses behind it in an attempt to aurally represent the movement of phalanxes in different orientations around the battlefield. As can be readily heard, the Klingon warriors gather pace towards the end of the section. At 7'56'' the strophic song ends and another chilling war cry rings out. The vocal parts make use of organum-like harmonies; this has already been seen in the vocal music given to the Klingon generals and is another instance of a desire to evoke Anderson's unisonality concept.

In view of the above remarks on the Swan Priestesses Music it should be noted that the structure of the Klingon Battle Song appeared as an internal picture. The music is partly an ekphrastic response to this. Behind the picture and subsequent music is a metaphorical application of Boltzmann. Below is a realisation of the mental picture:

Fig. 14. Graphic realisation of Boltzmann inspired mental image for the opening tabla section of Klingon Battle Song.



The widely spaced tabla strokes can be seen at the start; analogous to the ‘predictable’ positions of molecules in a system at rest. As work is applied – here taken to mean the application of accelerations in the rhythms and their multi layering – this ‘predictability’ becomes obscured.¹⁴⁴ The molecules are now occupying many more energy levels, as happens in the heating process in engines. What can be heard as distinct events at the start of the section has become disordered by the end. It is a disorder that will reach its zenith at the moment the three sonas enter. The drawing shows the gradual filling of space and this is reflected in the way the music fills the soundscape. The music also shows a tendency to move away from individually discernible lines to a composite texture that begins to take on a less linear structure. This too is seen in the drawing where the linear is obscured by a verticality of texture. Symbolically this reveals the move from the individual to the communal; a prerequisite for the action of large bodies of warriors in battle and, as mentioned above, is Anderson’s unisonality process in action. The final unison tutti drum strike is the culmination of this process.

Both mental pictures for the swan priestess and Klingon warrior music were static whereas their aural translation is in motion as an audible narrative. In this sense a mental picture is like the ‘frozen music’ of architecture in Goethe’s memorable phrase, whereas music can

¹⁴⁴ See Atkins, Op. cit. p.66-67 for a more technical description of the shift from predictability to disorder as more energy levels enter a system.

liquefy such an image.¹⁴⁵ Daniel Albright might call this mental image a hieroglyph; a representation of an idea that can be realised in other media. It can be seen as a static gesture or rhetorical device that ‘stands’ for a certain type of behaviour or emotion. The timeless picture stimulates the temporal, narrative enactment.¹⁴⁶

War with the Qaaks (track 10)

Here is the point of low entropy (maximum energy) in the opera. More sound sources are used than in any other part of the opera and there are many more tracks. They are also freely laid over each other in a frenzy of activity; there is no canonic underpinning of material as in the recitatives or the Swan Priestesses music. A chaotic collage of sounds from various sources creates a Sun Ra-style free jam. The elements include sona ‘sheets of sound’, rapid interjections of bass clarinet, a saucepan consort, and a piano and drum duet played backwards. The texture begins to settle on a fearsome distorted bass clarinet near the end which acts as an ostinato. It is hoped that a psychological terror is evoked by this noise; as if something overwhelming (a Qaak secret weapon?) has entered the battleground, something perhaps indescribable in a Lovecraftian sense. This begins to emerge at 3’50’’. This ostinato dominates the closing section, as if its more ordered form overrides the chaos of battle. This lowering of entropy seeks to evoke the restoration of order through victory in the eyes of the Qaaks. There is a short coda of insectoid chirpings made by sonas and saucepans hoisted to very high pitches. The battle field is cleared away, ready for the Qaaks’ display of triumph; the ostinato prepares the listener for this with its mopping up operation of other musical material, leaving only the chirping noises. The highly complex nature of the music evokes the chaos of war. Sun Ra’s performance of

¹⁴⁵ Johann Peter Eckermann, *Conversations with Goethe in the Last Years of His Life*, Boston, Hilliard and Gray, 1839 p.282.

¹⁴⁶ Daniel Albright, Op. cit. p.27.

Shadow World has already been mentioned; it is a typical free composition by the band. This type of chaos was the aural influence on the war music. The visceral intensity of free jazz Sun Ra compositions in live performance reminded me of the need for just such an organised chaos for the expressive power I was seeking.

Qaak Victory Song (track 11)

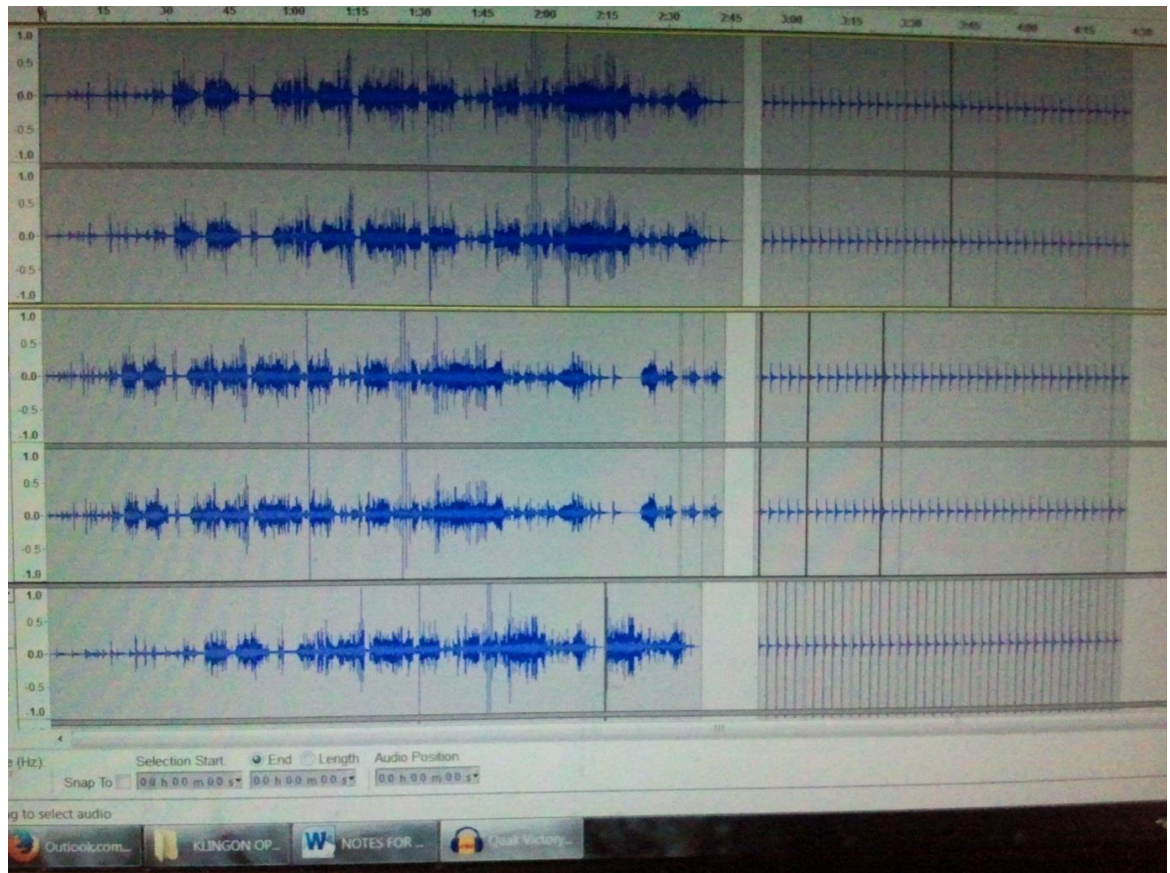
The instrumentation consists of layered gayageums (Korean zithers) plus voices. The song is in two sections beginning with the three gayageums playing the same material but in three different version involving pitch slides. All three are centrally placed in the mix to give the impression that only one instrument is played; a staging might include a Qaak virtuoso on the 'skullophone' who comes forward to accompany the Qaak generals. It is envisaged that the skullophone is the Qaaks own *objet trouvé*; an instrument made of tuned skulls struck with hammers; a lurid form of recycling.¹⁴⁷ The texture starts sparsely but fills up with a manic rattling with occasional sharp accents achieved by snapping the bridges of the strings against the sound box of the instrument. The rattling sonority was obtained by using drumsticks to strike the strings. This afforded the utilisation of many jazz drumming rudiments. The listener feels the gradual flooding of musical space as the entropy of the music decreases. The skullophone is underpinned by a litany of slurping sounds and hissing sounds certainly influenced by the sound of the Ice Warriors of *Doctor Who*.¹⁴⁸ Additional tape hiss was added to increase the surface distortion of the music. After much flamboyant playing from the skullophonist, the Qaak generals begin to sing (2'45''). I sought a different way of singing so as to differentiate the Qaaks from the

¹⁴⁷ Weird realists may be reminded of China Miéville's skulltopus, a composite monster with octopus and skull characteristics. See China Miéville, *M.R. James and Quantum Vampire in Collapse Volume IV*, Op. cit., p.105-128

¹⁴⁸ See a chilling reminder of the Ice Warriors way of speaking in *Doctor Who, The Ice Warriors*, 1967, BBC, extract from episode 4 http://youtu.be/3vR_vvV4d6o (last accessed 23.viii.2013)

Klingons. This was achieved by producing sounds almost entirely from inhalations rather than exhalations of breath. There are five voices divided into two groups. Three generals sing inhaled notes harmonising in major triads, like an alien version of a Hawaiian steel guitar. There are many overtones in the croaky notes (a result of the distortion caused by inhaled singing) that other intervals are suggested as well as triads. The ominous hissing and slurping continues to be a part of the texture. The audible distortion comes from the nature of the broken vocal sounds rather than any overloading of the recording. The remaining two generals sing very low inhaled notes as a kind of basso continuo. The skullophone changes role from the virtuosity of the start to a marking of slow pulses as if emphasising a ritualised, even triumphalist feeling. There is a clear entropic change during the piece from the low entropy of the skullophone flourish to the more ordered pulses and mass singing, another example of how an analogy to Boltzmann allowed me to create a narrative change in texture from the heated up frenzy of the gayageum playing and the more stable sound of the singing. This can be seen visually in Fig. 15 below. The mass singing is again redolent of Anderson's unisonality concept. The gayageum is removed from its context in traditional Korean music; the extended instrumental techniques are an example of treating the instrument as an *objet trouvé* and as with the use of the sona, yangqin and other instruments there are no references to East Asian pentatonic modes.

Fig. 15. Skullophone part (3 gayageums) played by the Qaaks.



The music seeks to evoke a response of repulsion in the listener. This was a challenge since the sound world of the Klingons is likewise conceived. How to make an ever more alien sound world for the Qaaks exercised the imagination to an extreme; an alienage further removed. The sound world is differentiated from that of the Klingons by radical vocal techniques. The Qaak language is deliberately left 'untranslatable'. The slurping noises and the lo-fi tape hiss further contribute to the hidden nature of Qaak utterance and recall the quality of imperfect receivership noticeable in *Azathoth Dreams* from the Lovecraft tone poem cycle. The setting up of polyrhythmic pulses is intended to have the effect of creating a feeling of approaching threat. It is hoped that the listeners (and the remaining Klingons) feel this effect through the music.

Death of the Qaaks (track 13)

All of the Qaak Victory Song is compressed and multi-tracked into a 54 second burst of massive entropic energy. They don't go lightly. The *deus ex machina* – in this case the sudden intervention of a virus deadly to the Qaaks, will resonate with theatrical practice of the Baroque period, for example, Molière's *Tartuffe* (1664) or Lully's opera *Atys* (1676). A quite obvious allusion is made to the death of the Martians in H.G. Wells' *The War of the Worlds* (1895-97) who are wiped out by a microbial infection after having overcome all human resistance.

Lament (track 15)

A single character, a Klingon mother, laments the death of a warrior son. The character splits into two voices (1'14'') in the manner of the narrator. Later, other voices join (2'30''). There is a canonic relationship between them that suggests the Shakespeare setting near the start of the opera. Many long tragic phrases end with a tailing off descending glissando. The yangqin provides an increasingly dense instrumental accompaniment with many slow moving note clusters. Stentorian virtuosity is largely absent as the vocal part keeps on held notes, many at falsetto pitch. A climax occurs at 3'28''. The music attempts to create a space for private mourning and meditation on victimhood. There are many victims in the opera; the whole opera may be seen as sacred violence gone mad as two armies clash regardless of the inscrutable oracles and goddesses. Xenophobic violence has broken out resulting in the death of all the Qaaks and many of the Klingons. Those who remain are also victims and the opera presents the private and public forms of their suffering.

Spaceship Funeral (track 16)

Here is the public face of mourning for the Klingon warriors who are launched into space. The droning of engines is represented by a consort of erhus, the Chinese two-stringed instrument, created by sampling one note and then pitch shifting across the gamut. At extreme ranges the sound 'granulates' providing a rough surface texture. There are some expressive harmonies that seem on the verge of triadic and there is even a tonic to dominant movement near the start (46') which gave a feeling of ritual to the music as if participants in the rite changed from one archetypal gesture to another. Sound clouds of low entropy events also appear, the first one at 1'07". There are many dramatic pauses between utterances so as to emphasise the solemn mood. Low droning voices float over the erhu consort, although they also respond to the sound clouds with more Klunk-type material. The rising glissandi are rather obvious references to spaceships taking off with their ghostly crew. At 1'45" there is a harmonic pedal based on the descending figure F, E flat, B, heard in the vocal parts in octave unison. This harmony is also heard in the erhu consort. It creates a moment of stability in a harmonic universe that is usually resolutely microtonal. Following Albright, this might be a hieroglyph of grief. Another such moment occurs at 2'25" where a very unstable but just discernible E major chord is heard. These harmonic hieroglyphs emphasise the ritualistic nature of the ceremony. The coda (beginning at 3'10") consists of one last revving-up of the spaceship engines; the warriors are sent skyward to the green heavens.

The effect of these funeral offices is hardly comforting; the music suggests exhaustion and a fatalistic despair. No attempt is made to provide a cathartic release from the sufferings of war; a mood affirmed by the following Epilogue where the narrator seems to have undergone little change, remaining somewhat impassive to the horrors just witnessed.

The use of the erhu is unusual. It was very difficult to play so I did not attempt any flamboyant displays as with some of the other world instruments. There are no attempts to create a pastiche of the beautiful Chinese melodies associated with the instrument. I was still able to make a virtue out of an extreme version of Ra-esque 'ignorance' by retaining the string sound of the erhu by means of a single sample. The way in which the sound distorted with the aid of electronic manipulation allowed me to access sonorities divorced from the normal context of music for the instrument. The erhu provided a source for timbral morphology.

Epilogue (track 17)

The *Epilogue* is based on very similar material to the *Prologue* with the voice and yangqin providing the sound world. The yangqin material follows the same course as in the *Prologue*, but some textures are made denser by the Nosyrev pile-up method – there is a very big one at 4'15". The vocal part was created by ghosting the original singing part of the *Prologue* by playing it through headphones as I recorded the new vocal track. This ensures a close but not exact match with the *Prologue*. The purpose here is to provide a mirror of the *Prologue*. The same disdainful ironic tone pervades the libretto as it did at the start of the opera; in other words the violent conflicts and victim production of Klingon society have not led to any insight or made a real difference to that society. If anything the singing shows an almost hysterical affirmation of Klingon superiority. The Klingon world remains trapped in a cycle of martial values apparently exonerated via silent assent by supernatural forces which have become hollow memories. The final images are ones of desolation. This is once more a reflection on the disconnected sensory world of Lovecraft and the lonely forbidding landscapes of stories like *At the Mountains of Madness*.

Swan Epilogue (track 18)

The Swan Epilogue provides a wordless finale to the opera. It differs from the earlier Swan Priestess music in that the small episodes of low entropy caused by fast and dense agglomerations of the Tchaikovsky melody are absent. The psychological effect of this is to focus the listener onto a more placid sound world unruffled by such flamboyant gestures. The texture consists of the 11-part canon of musical boxes and vocals as before. The vocals differ in that instead of notes overlapped to produce one line, this technique occurs over three voices in canon. Each voice starts on a note so that if played simultaneously a triad would be sounded. Since all three parts overlap these triads are bled into each other, with other harmonies resulting at the moments of rhythmic drift caused by the staggered entry of the parts. This maximises the sense of drift and buoyancy first heard in the earlier swan priestess movement. High entropy is the overriding character of the music; an ordered process of vocal parts that sound as if they are slowly chasing their tails over the lush bed of bell sounds. Eventually the notes of the vocal part are stretched out near the end so as to make the calming influence of the triads appear more in focus. The bell sounds also begin to lose energy; each of the 11 parts performing a *ritardando* at different speeds and with pitches constantly decaying (often falling). The idea of a world drifting into sleep is evoked. So the final tableau closes in a dream-like world of triadic memories, seemingly indifferent to the events that have unfolded.

The use of the Tchaikovsky melody through the medium of an out of tune music box in both Swan Priestess sections of the opera gave insight into the possibilities of 'cloaking' pre-existing music.¹⁴⁹ The combining of the melody in 11 parts gave a resultant texture in

¹⁴⁹ Incidentally, in many Star Trek episodes a cloaking device was used by the Klingons to hide their spaceships when about to engage in battle. See the libretto, *Prologue*, where the cloaking device is

which not one listener has yet been able to discern the source material when listening to it without prior knowledge of that source. This failure on the part of listeners might cast the music into the category of failed aural pun; the use of Swan Lake is lost on the listener if not readily perceived. However I would prefer to categorise it as a *tromp l'oreille*, a type of aural illusion. This term has been used in relation to electro-acoustic music by Peter Batchelor where it is used to explore different varieties of spatial distribution of sound using loudspeakers.¹⁵⁰ However, I am using the term to describe a presentation of pre-existing music in such a way that it becomes 'cloaked' within versions of itself. This was a discovery; my initial scepticism was overcome as the Tchaikovsky theme began to morph into a composite texture of great complexity and eventually came to 'deceive the ear' of anyone coming into contact with it. Curiously some listeners have reported *only* being able to hear the Tchaikovsky theme when it was pointed out to them; the theme suddenly assumes dominance in the overall sound picture. This may be an aural example of those 3D stereograms whose hidden images suddenly snap into focus when looking behind the surface texture. I would like to try this technique again and see how different types of pre-existing music react to the processes I used in the Swan Priestesses Music.

used metaphorically. I say incidentally, but rather this is an example of a detail in the original sci-fi series leading to musical possibilities.

¹⁵⁰ Peter Batchelor, *Really Hearing the Thing: An Investigation of the Creative Possibilities of Tromp L'Oreille and the Fabrication of Aural Landscapes*, EMS: Electroacoustic Music Studies Network, De Montfort, Leicester, 2007 (http://www.ems-network.org/IMG/pdf_BatchelorEMS07.pdf last accessed 22.iii.2015)

5.8. Who is a Klingon Opera For?

James McCarthy's contention as stated in his *Gramophone* essay¹⁵¹ was that the desire for intelligibility or accessibility should determine the success of a musical work. In his view this would mitigate against the use of Klingon as a language for a theatre piece. But is an opera in Klingon any more difficult to understand than an opera in Italian viewed by non-Italian speakers? With translated libretti or surtitles are the difficulties surmounted? I believe that all languages, made-up or otherwise, contain within them the possibilities for unique forms of expression. The very sounds themselves can illicit responses at an emotional level. Languages influence culture and ways of thinking. This is the position adumbrated in the Sapir-Whorf hypothesis of 'linguistic relativity'. Jared Diamond puts the case for this hypothesis strongly in his argument for the preservation of minority languages:

'languages are the most complex product of the human mind, each differing in its sounds, structure, and pattern of thought. But a language itself isn't the only thing lost when a language goes extinct. Literature, culture, and much knowledge are encoded in languages: lose the language, and you lose much of the literature, culture, and knowledge.'¹⁵²

Of course Klingon has been invented as a spin-off from a popular TV show. Yet I believe that even an invented culture can access new means of expression. Such a culture may of course contain layers and messages relating to human behaviour as more or less hidden strata of meaning. In this way the initial medium of a popular cultural artefact can be expanded to include sundry accretions of later visitors to that artefact. All works of art have an afterlife that is not easy to predict and accretions of meaning and reception

¹⁵¹ McCarthy, Op. cit.

¹⁵² Jared Diamond, *The World Until Yesterday*, London, Penguin, 2012, p. 405.

through time play a part in this. Works are not fixed museum pieces, since their reception has a narrative that can be examined. Even being deposited in a museum is part of this story.

Accessibility seems somewhat hard to pin down as a concept. Does it imply that the artist should write something that everybody can understand? Or just 50% of the people? Or 20%? Pick a number! There are clearly some artworks that appeal to groups of people on the basis of stylistic affinity, fashion and peer group bonding. But predicting accessibility seems a fruitless and presumptive exercise. Limiting 'difficulty' contains similar connotations of presumption. I do not believe we can ever know in advance what people will 'like' or 'want'. Attempts at this kind of guessing game can lead to communication, but communication of a certain kind; one of exchange rather than true engagement.

Baudrillard puts this rather better:

'But I've had a prejudice against the very word 'communication'. It's always seemed to me to be precisely something like an exchange, a dialogue, a system....I don't know....of contacts, and all the linguistic and metalinguistic functions therein implied. If that is communication, I don't want to know about it. By definition, communication simply brings about a relationship between things already in existence. It doesn't make things appear. And what is more, it tries to establish an equilibrium – the message and all that. Yet it seems to me that there is a more exciting way of making things appear: not exactly communication, but something more of the order of challenge. I'm not sure that this would involve an aesthetic of communication strictly speaking.'¹⁵³

Qo'nos chal VeS might constitute the kind of challenge and duel that Baudrillard posits. It has 'appeared' in the Baudrillardian sense of a challenge – a creative work that invites

¹⁵³ Jean Baudrillard, Op. cit. p. 24.

response, not one that provides the comfort of mutually intelligible and pre-existing terms. The 'message' as such is hardly trumpeted as a means of communication or exchange, rather the subtexts relating to violence, propaganda, sacred appeasement, etc., can be teased out, challenged, affirmed, ridiculed, according to the responses of each individual who comes across the work. In a sense the idea of a communication with others becomes impossible; I can never know truly what anyone else thinks or likes.

At this point Lucien Lévy-Bruhl becomes allied to the argument. Last met having his ethnocentric knuckles rapped by Girard, Lévy-Bruhl is now pertinent. The contrast between 'Primitive' and 'Western' mentalities as laid out by Lévy-Bruhl, contains within it a strong suggestion of progression from one to the other; this being the cause of the academic outcry that occurred at the time of the publication of works such as *How Natives Think* (1910) and *Primitive Mentalities* (1922). However, Lévy-Bruhl continued to think of these ideas despite the furore surrounding them. His rehabilitation began with the understanding of the concept of cognitive relativity, an idea that proposes that perception is not subject to a set of universal constants but varies according to environmental and ideological factors.¹⁵⁴ This goes some way to meeting Girard's plea that cultures be examined in themselves, not in relation to notions of sociological 'progress'. Diamond's *The World Until Yesterday*, with its strong environmental reasons for showing why societies are so different, would seem to be a fruitful outcome of this aspect of Lévy-Bruhl's work.

The writing of Guy Deutscher has revealed cognitive relativity in the perception of colour and in so doing has rehabilitated a much-maligned book by Gladstone on the Homeric world. Gladstone took phrases such as Homer's 'wine-looking sea' literally, much to the barely concealed ridicule of his reviewers. Modern scientific testing has shown that there

¹⁵⁴ Lévy-Bruhl's rehabilitation is in no small thanks to the essay by C. Scott Littleton that introduces the 1985 reprint of *How Natives Think*. See Lucien Lévy-Bruhl, *How Natives Think*, Princeton University Press, 1985, esp. p. vi-x.

are indeed widely different shades that constitute the colour blue, for example, according to different cultures and environments.¹⁵⁵ Deutscher explores the visual perception of Russians as they describe two shades of blue (one dark and one light) not as shades of the same colour but as separate colours with specific names: *siniy* and *goluboy*.¹⁵⁶ I would argue that cognitive relativity has implications for aesthetic concerns and for reception theory and I am adapting its use from that of the large group to that of the individual. If cognition within a large group can be unshackled from ideas of a hierarchy between compared groups or ideas of universal concepts of perception, then so can that of the individual. If this is accepted, claims of knowing what others might or in future perceive become much harder to establish. As Harold Pinter succinctly put it: 'Anyone is entitled to see the show. The dramatic progression and the implications implicit in it will either find a home in some part of their nut or not.'¹⁵⁷ In this spirit, rather than an attempt at communication, my work becomes more of an offering to be accepted or rejected, a kind of creative libation for a pseudo-sacred place populated by whistling oracles, eldritch monsters and flickering televisions. Who can say whether such precincts of the gods will be inhabited or not in years to come? That is another narrative.

¹⁵⁵ Guy Deutscher, *Through the Language Glass*, London, Heinemann, 2010, pp.31-40.

¹⁵⁶ Deutscher, Op. cit. p.224.

¹⁵⁷ Harold Pinter, *On the Birthday Party I*, in *Various Voices: Prose, Poetry, Politics 1948-1998*, London, Faber and Faber, 1998, p.10

6. SOME CONCLUSIONS: BAROQUE ILLUSIONS AND APPEARANCES

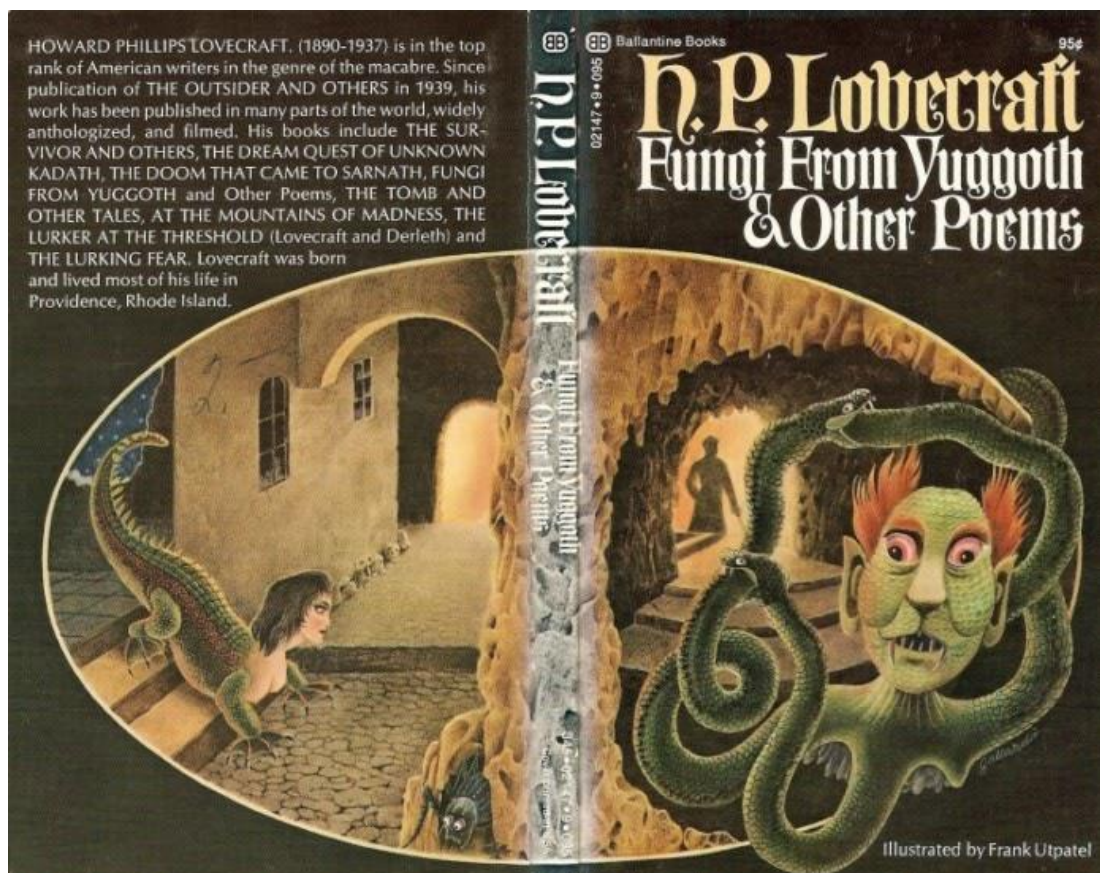
It should be clear by now that my work in weird realist music is not concerned with seeking for objective truth or ‘reality’. What can these terms mean in a Lovecraftian world of senses that contradict themselves or the Klingon world where half-ignored rituals are played out in an atmosphere of simmering violence? The play of illusion so important to certain types of theatre becomes more important in this type of work than agitprop messages, or realism, or a promiscuity of mere representation. The hidden nature of Lovecraft’s monsters and Klingon sacred practices would be negated by their total revelation and the intended causation of psychological unease and terror would be lost. There is a deliberate withholding of information; the Lovecraft music channelled through decaying pianos or disfigured sona ‘floppings’ – the Klingons seen through a broken mirror held up to tableaux of forgotten rites to the accompaniment of blasphemous instruments – a shamanic sound world where glissando pianos try to comprehend the sensual distort of the austerity induced trance. The scene of operation (most obviously in *Qo’nos chal VeS*) is theatrical, playful, the illusory theatre of the Baroque; Baudrillard once more: ‘Baroque theatre is still a sort of representational extravagance, scenic illusion is total.’¹⁵⁸ In this way the single affect and relatively static forms of the number opera most suited my desire for this kind of scenic illusion. Rather than seeking a Stereo-Porno representation of ‘everything’, my music ‘remains a *mise-en-scène*, a strategy of appearances, and not of the real – illusion preserves all its power without surrendering its secret.’¹⁵⁹ By my understanding of what Baudrillard means, I show how the use of Baroque forms and theatrical devices of appearance are not in truth examples of neo-classicism (or neo-baroque) but are forms suited to a weird realist music. The forms also showed a way to

¹⁵⁸ Baudrillard, Op. cit. p.191.

¹⁵⁹ Baudrillard, Op. cit. p.191.

tame the wildness of the free-jazz inspired improvisatory aesthetic so important to the inception of the original material for composing. An understanding of Baudrillard's 'extravagance' has implications for stagings of the opera, which although conceived initially as a radio opera could be brought into the arena of a live performance with actors, dancers and the wonders and illusions of theatrical machinery. These aspects of live performance can be now addressed since they require a re-examining of Weird Realism in a visual context. A survey of visual representations relating to Lovecraft's work reveals examples for which both Lovecraft and Baudrillard evince stricture. Book covers of Lovecraft stories and novels are examples of total revelation that Baudrillard is against. A rather laughable Stereo-Porno graphic style bedevils the cover art for many editions of Lovecraft's work. Just one example will suffice:

Fig. 16. Book cover: H.P. Lovecraft, Fungi From Yuggoth and Other Poems.



Despite its own value as a genre of illustration such work cannot fulfil the tenets of Weird Realism since the language of Lovecraft and its sensory shifting is entirely absent in the lurid and complete renderings. There is an inadequate translation of Lovecraft's technique. A similar mode of expression is shown in film adaptations of Lovecraft.¹⁶⁰ Many such films fall all too soon into the comedic as ever more elaborate make-up is used to render the monster ever more 'real'. Such a visual style would be unsuitable for *Quonos chal VeS* given its location within a Weird Realist aesthetic. A staging of the opera would require a disordering of the visual by suggestion, distortion; anything to withdraw the direct representation also eschewed by Lovecraft. Lighting and projection could play a part in ways that have been explored in the productions of William Kentridge.¹⁶¹ In his productions the normally static scenery is alive with projected images that offer both commentary on and distortion of ideas and characters in the operas. A prerequisite of a Weird Realist production would be the exclusion of direct representation of the Qaaks; their skullophone could be hinted at by the projection of deformed skulls yet they themselves should be suggested by shadow or lighting allusions. In this way the staging can chime with the music in their dual role of partial revelation. Papier-mâché swans should be avoided¹⁶²; something more suggestive of movement upon water might reveal swan-like forms of greater mystery as befits priestesses of a moribund cult. The singing roles (which are solely on the CD soundtrack) would help to undermine the conventional staging of opera since they cannot be directly associated with a group of actors who might mime the

¹⁶⁰ For example, *Dagon*, directed by Stuart Gordon, 2001, <https://youtu.be/YETHZNclfts> (last accessed 20th December 2015). Such films have a tendency to spoof; *Re-Animator* (1985) also directed by Gordon has become a cult of the genre. The visual focus for most of the monsters in these films would appear to be ichthyological.

¹⁶¹ Examples of Kentridge's use of lighting and animated backdrops include Mozart's *The Magic Flute* (Le Théâtre Royal de la Monnaie, Brussels 2005, <https://youtu.be/hKzcbEb7l4> - last accessed 21.xii.2015) and Shostakovich's *The Nose* (Metropolitan Opera, New York, 2010, https://youtu.be/nD_oW9pb3O8 - last accessed 21.xii.2015)

¹⁶² Such swans are not always avoided in productions of Wagner's *Lohengrin* and *Parsifal*. For example, Wagner, *Parsifal*, directed by Wolfgang Wagner, Bayreuth, 1981, <https://youtu.be/uc-XETaxnN0> (last accessed 12.xii.2015).

roles on stage. A disconnect between utterance and movement could give profit in the disorientating aspects of the staging. A recent internet phenomenon presents another option; the animated mouths of still photographs that appear to recite poetry.¹⁶³ This strange effect could be mimicked by projections of faces; this might eliminate the need for actors or might suggest a splitting of each role into a face projection and a mimed part working in tandem. The Weird Realist separation of qualities suggested by this mode of staging could prove not only fruitful but would resonate with the ideas of Husserl filtered through Lovecraft. The most violent part of the opera, the battle scene, should be careful to avoid a totally revealed carnage. Two possibilities present themselves: a light and projection play involving indirect revelation of violence in order to avoid a Stereo-Porno bloodbath; or a blacked out stage that suggests that the violence is enacted offstage in the manner of Greek tragedy. The demise of the Qaaks should similarly avoid a comic book realism of monsters in putrescent death throes; again their death might be suggested by lighting or might occur off stage. These are just some ramifications of thinking about the opera as a staged work and they grow out of the challenge of responding to Lovecraft in a different way to the reader of his work. To realise the opera on stage requires attention to Lovecraftian aesthetics; the horrific violence and failed connection between characters and ideas in *Qo'nos chal VeS* demand such an approach.

Many disciplines as diverse as horror fiction, shamanism, television, weird realism, free-jazz, world music, the Baroque, anthropology, etc., have contributed to my work. These disciplines, which are indeed my passions, are brought together to produce music which has a clear methodology and a resulting style. No one system could really describe neatly how these ideas coalesce; that they do, or not, will be the judgement of individuals according to their cognitive world. Schenkerian reductionists will despair. My analyses

¹⁶³ Perhaps inevitably Lovecraft has been subjected to this new technique, for example, H.P. Lovecraft 'reading' his own *To the Old Pagan Religion*, <https://youtu.be/ujiwLODacBM> (last accessed 4.iv.2015).

based on momentum, energy, texture, entropy and timbre and their interrelation show some of the workings of my style. Music to me has always been more complex than standard models of thematic or harmonic analysis allow, even in those works where such ideas are easy to follow. Many studies, be they of scientific or artistic subjects, like to proceed from a difficult to a simple model. This has enormous value in many ways as society discovers more about the strange workings of the world. Yet however neatly the biology of a tree, for example, can be described, it has always the appearance of something volatile, disordered, striving and animated. Despite our efforts to encapsulate the world in certainty and order, the second law of thermodynamics will always tell us that wherever work is done, entropy decreases. It is the law of order and disorder.

If I were to hazard a final defence of my work it would be based on my desire to express appearances, especially those that fall outside a mechanised and reductive world view; the appearances revealed to the shaman, the space beyond space where Lovecraft's entities roam, where Klingons make peace with oracles and swans; this world might smack of escapism or delusion, it might even bespeak of a philosophy in an 'asylum of strange solutions'¹⁶⁴ but Jung, Huxley, Narby, Lovecraft and others bid us take it seriously.

¹⁶⁴ Graham Harman, *On the Horror of Phenomenology: Lovecraft and Husserl*, in *Collapse: Volume IV*, Op. cit. p.333.

7. REFLECTIONS

Reflecting on the music that I composed for the thesis has revealed the extent which experience has played in the work. This puts the material generated from the experience of improvisation, i.e. my practice as a musician, at the forefront of the compositional method. The retention of all parameters of a performance means that they are included in the fabric of the works themselves. The 'immediate experience'¹⁶⁵ is the content of the sound world. The desire to retain this initial sound and performance element led to a limited approach to post-improvisational design. This was partly deliberate for the reasons derived from Lovecraft and Baudrillard¹⁶⁶ but perhaps also on reflection a tendency to wish for retention of the self as encoded in the improvisations. A solipsistic approach such as this could suggest an evolving of a private language, one that relies so much on the performer that others are excluded. That the music resists recreation by others provides another limitation, one which is ameliorated by its existing as a CD and by a desire to embed the performance aspect into the compositions. The solipsistic limitation was further helped by the decision to use text for much of the music. This allowed the private syntax of improvising ('self') to interact with character and situation ('other'), this despite the fact that the characters and situations also derive from myself. It is the projection onto the 'other' that gives the work a wider appeal than its methodology might suggest.

The lack of quantifiable and meaningful results minable from examination of the music could be used to attack it and I have reflected on how the music seems to succeed without themes, motifs, harmonic schemes, etc. I still think that a quantity based analysis has its own weaknesses especially if used in works that don't have easy targets to count. The

¹⁶⁵ F.H. Bradley, Op. cit. p.459.

¹⁶⁶ In Lovecraft, the lack of appeal to fake-technology and in Baudrillard, the desire to resist the pornocratic revelation. See above.

music has ways in which processes or gestures act as quasi-objects however; they might 'feel' like a motif or a formula but in reality their through-improvised or through-composed embedding disallows for fixed rates of discernible evolution. For example, the stentorian vocal gestures are never the same but they feel part of the same family. They don't pattern regularly in expected ways that allow fixity but work by resemblance. Chorales lurch in ways that hint at a less stable object than one might expect. I think these referential allusions are quite successful and also chime with the weird realist aesthetic; the way in which Lovecraft's objects become quasi-objects is analogous. The irregularity of these classes of object in my work succeeds because of memory, both for the performer 'inside the music' and the listener 'outside the music'. This involves a recognition within consciousness but a further recognition in the Heraclitian view that you can never step into the same river twice,¹⁶⁷ or, following Bergson, we cannot see an object in the same way twice because our consciousness has moved on and the memory of the object colours its re-acquaintance.¹⁶⁸ My music tries to negotiate the threat of the amorphous by an appeal to familial resemblance of sounds; gestures, discrete sound worlds, textures; all linked by the improvisational syntax.

I am particularly interested in philosophical implications deriving from the intuition and its role in improvising. Bergson argued that intuition allows us to engage reality in a state of flux and thought that the intellect imposed impersonal elements that cover over 'the delicate fugitive impressions of our individual consciousnesses.'¹⁶⁹ This suggests a relation between intuitive workings and the trance-like state mentioned in conjunction with my own work as an improviser, perceptions arising from listening to Cecil Taylor and to

¹⁶⁷ Heraclitus. His famous saying was transmitted to various authors including Plato and Simplicius.

¹⁶⁸ Henri Bergson, ed. Keith Ansell Pearson and John Mullarkey, *Key Writings*, New York, Continuum, 2002, p.53.

¹⁶⁹ Bergson, *Ibid*, p. 74.

shamanistic practice. From my own point of view further experimentation of the austerities of the shaman have ceased on medical grounds, yet the less dangerous trance state of the improviser could be explored with a specific focus on the individual experience or on group work; an inquiry into sound operating as a Bergsonian flux¹⁷⁰ between, through and in, individuals within music ensembles.

In my work I took the improvisatory starting points as material for composition. Is there a false divide here between intuition and subsequent working? T.S. Eliot thought so and his response to thinkers like Bergson and Bradley was to suggest that in fact there is no division.¹⁷¹ He posited the idea that there is no separation of the two that relies on the absence or recessing of the intellect on the one hand and its subsequent working in 'objective' realisations of finished products. Thinking about this has allowed me to explore what actually goes on in the mind when undertaking tasks that appear at first to have different strengths of intellectual input. The idea of a trance state for improvising should not be taken as lacking in awareness, not a zoning out into a sensory null.¹⁷² Quite the reverse is the case as I have found when improvising and when experimenting with shamanic austerities. There is a feeling that intuition is driving my consciousness and intellect but in ways that are not understood. Isn't this true of composing too? When working on the post-improvisational aspects of the work the intuition surely played for me a vital part of the process of arriving at the sounds desired in response to things like the needs of a libretto, a desire to characterise members of the opera cast, the internal sounds (often appearing as mental pictures) for certain textures. Although intuition plays a role in both apparently divided aspects of my work I do see some distinctions that can be made. Improvisation is intuition 'in the moment' and composing is intuition 'out of the

¹⁷⁰ Bergson, *Ibid*, p. 74.

¹⁷¹ T.S. Eliot, *Knowledge and Experience in the Philosophy of F.H. Bradley*, London, Faber, 1964, p. 36.

¹⁷² 'Engage' is the key word in the Bergson quotation above.

moment'.¹⁷³ The former is an instantaneous response to the sounds as they are being made and the latter provides the opportunity to reflect outside the narrative thread. I have mentioned the temporal difference between these modes of operation above. I now feel that despite the theoretically unlimited time available (deadlines permitting) for aural contemplation of pre-existing improvisations it is still intuitive processes that are at work. Is the intuition unknowable? I'm not convinced that an appeal to even as personal a syntax such as that derivable from improvisation is enough to suggest a material answer. I might use pre-existing ideas like canon, chorale, aria, or even 'my own style' to develop ideas and create textures but choices about their use are still made intuitively. Tools are not abstract and can only live in intuitive relationship with the maker.

Where does knowledge reside in my work? I think not just in logocentric outcomes of analysis although these lead to many insights, some of which I hope I have uncovered, but also in experience and practice itself. This is a form of knowledge from within. I noted that in etymologies of the word knowledge the Old English suffix, *lac*, appears, denoting action or practice. It is this aspect of the word that I attend to here; the knowledge from active practice of work, a subjective involvement with the experience as it happens. I think this is one reason why the music holds its attention in terms of a definable syntax; it has knowledge of itself. More than hints of solecism here too. Perhaps because of this introverted view of knowledge I am still resistant to the argument that objective values in relation to my music can constitute knowledge. Are they not a set of opinions of which we can only say we have knowledge of? This is my unpicking of the Harold Pinter quotation above.

Does a work of art in itself constitute a contribution to knowledge? In my view, yes. It cannot only reside in verbal justifications of it since the latter can never replicate the

¹⁷³ In relation to Taylor I used 'inside the notes' and 'outside the notes'; the feeling is similar.

former as they live in mutually exclusive zones. We might think that in some way an analysis translates the music into knowledge but this would fail Popper's test of falsifiability since the 'translation' and the knowledge derived from it are conceived in the same terms, that is, words, and not in the language analysed or translated.¹⁷⁴ We might fantasise that if we analysed Mozart enough we could end up composing like Mozart.¹⁷⁵ Pseudo-science crashing the Muses party. This is why knowledge must primarily lie in the work, its practice and its world of subjective experience. This challenges the word as the primary language of the intellect. I think this view of the intellect is limited. Musicians' involvement in listening and practice is not some floating world of barely awake mystics; I believe the practice of music is its own form of intellect. Would we only say that Bach was intellectual because he writes fugues that can be both heard and analysed in textbooks? Or that the computer-Mozart gives us Mozart? I think this would be a greatly limited view of Bach, Mozart and the experiential world from within which they heard their music, and our own experiential realm that we receive it in. I would argue that the knowledge of music can also be derived from aural dialogue with other music not from words based on it. I've tried to show this in relation to Taylor, Coltrane, Ra and others (albeit having to use words to frame the influences!). Musical knowledge is a trigger to more music; it creates suggestions for other works within the process of practice. Music engenders other music; a chain of knowledge that we can 'talk' about in the act of listening and composing but also by using words in terms less of mere objective checking but in terms of relationship between behaviours, families of sound, evolution of style, and most importantly for my music, the knowledge within the very moment of creating the sounds, the experience/knowledge/reflection-in-action of improvised music. In playing and composing, works emerge from the web of previous works; emerge from experience and are folded into experience. This Capraesque

¹⁷⁴ With even more boldness, we might use 'analysis' instead of 'translation'.

¹⁷⁵ This has been tried by David Cope using his own computer algorithms. Hear <https://youtu.be/vctssFH-M5c> for his Mozart style sonata 3-3 for the curious results.

view of knowledge sees music as part of a dialogue with both itself and the music of which it is part. Words are about: but they follow at a respectful distance.

8. SUMMARY

The work presented here shows how initial research areas have evolved into musical responses and how practical involvement in composing processes have themselves entailed research from within and without, in order to find cogent methods of reaching completed works. These works have also suggested, through insights gained, further avenues of composing method lying beyond the thesis which could be projected into future work. The creative practice has involved a combination of many disciplines both musical and non-musical that have operated symbiotically, each feeding the other. Subjective experience of these activities informed by a wide range of musical practice has led to a consideration of the 'how' in relation to creative work, both technically and reflectively in an attempted examination into the states of mind of myself as improviser and composer. The interplay of ideas suggests a new model for research in this area with the constant flux of experience involved in creative work that whilst foregrounding that work takes account of the multifarious input from both musical and non-musical experience. This holistic approach to experience, substitutes for the impossible goal of artistic epistemological certainty, an individual approach based on subjective experiences rather than abstracted objectivism.

Self-reflection on method has kept in mind the fact that the observed is the observer, hence the accent on potentially solipsistic states; this seemed preferable to the idea that the observer is 'objective'; only a form of amnesia could allow this.¹⁷⁶ It is hoped that by reflecting on the work as part of that work rather than 'objectively' divorced from it, has allowed for an individual look at how the music evolved. Improvisation, with its focus on

¹⁷⁶ Problems of the observer are well known in science and anthropology. For example see the controversy surrounding the work of Margaret Mead in, Derek Freeman, *Margaret Mead and Samoa: The Making and Unmaking of an Anthropological Myth*, Cambridge Mass., Harvard University Press, 1983.

individual style as opposed to recreated texts, has emphasised the role of style and intuition as ways of composing. Following Sun Ra, the 'studies in ignorance' have also shown ways of circumventing learnt methods of playing and have stimulated spontaneous sound sculpting as a way to access and develop a new syntax divorced from years of special training. These aspects of the work stem from practical involvement in sound and performance and they feed into composed works and suggest future avenues to explore.

What is clear to me after having composed through, listened to and thought about the issues posed by improvised based works using a variety of often unfamiliar sources, is that there has been a radical departure from my previous practice of keeping improvising and composing separate. At their intersection and the methods by which this intersection was achieved lies the basis for building on what can be perceived as a way to achieve a combination of disparate elements into a whole.

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