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Hauntings − A Nodalist Study

David Ian Badger

A portfolio of original videomusic, multimedia, and one software instrument − plus accompanying commentary − submitted to The University of Huddersfield in partial fulfillment of the requirements for the MA by Research
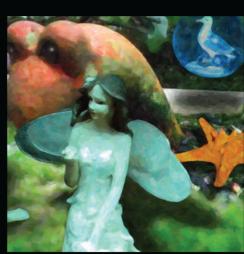
October 2013

hauntings

séance

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Written Commentary on Videomusic Pieces

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Multimedia Pieces

All of these are supplied with the included 16 GB memory card, enclosed in a DVD-style plastic wallet. They include:

Hauntings, a multimedia application for Mac OSX, created using Hyperstudio. This contains technical details for the four videomusic pieces offered, sample sounds derived from my Max-built instrument Séance, and background information about the BBC Radiophonic Workshop, the British hauntology movement (two key influences on my piece *Grandma's House*) and the story of photo-optic sound production. Although academically referenced, this written material should NOT be considered to be part of my written commentary; it is included merely to help contextualize the work for those who may be interested in reading further, or those who may be completely unfamiliar with finer historical details.

The Hyperstudio Player required to play and view the above application on Mac OSX.

Séance in Action, a very short QuickTime video which demonstrates that my Max-built 'drawn sonification' synthesizer, Séance, does indeed function on my MacBook Pro.

The Séance application is also included, although it appears, at present, only to work on my machine.

Four VideoMusic Pieces

Eight-eighty (14:40), 2012

Grandma's House (6:50), 2013

Saudade se286181.anomalies (10:46), 2012

The Bay Faeries (16:34), 2012-13

Abstract

Since Deleuze and Guattari first described the concept of the rhizome as a model of cultural transmission in *A Thousand Plateaus* (1980), a new way of processing information in the Arts and Social Sciences has emerged – 'Nodalism'. Philip Gochenour has convincingly argued that units of culture can now be thought of as 'nodes' existing in a nonhierarchical, web-like network. Information transfer between nodes in the network is horizontal, omni-directional and not necessarily teleological, a way of viewing the world which has been paralleled and actualized in the last twenty years by the emergence, growth and ubiquity of the internet and the World Wide Web.

The author – a developing audiovisual artist – here offers four videomusic pieces and one virtual sound-synthesis tool. At first glance, the pieces may appear to have little in common. However, the commentary will attempt to show that they are subtly linked together, immersed in a cocoon of rhizomatic, pluralistic, thread-like connections. The strongest 'thread' holding them together appears to be the trope of being 'haunted' in some way – either by influence, genre, or overarching concept. However, this thesis will attempt to show how a detailed consideration of each piece results in a highly complex final picture in which the pieces can be thought of as individual cultural nodes suspended in a dense rhizomatic mass of lateral cultural threads. For the sake of completion, however, the project has received the name *Hauntings* in reference to one of the strongest shared tropes running throughout all five works.

Copyright Statement

Acknowledgements

Introduction

"An artist is now much more seen as a connector of things, a person who scans the enormous field of possible places for artistic attention, and says, 'What I am going to do is draw your attention to this sequence of things.'"

-Brian Eno[1]

I am, as the quotation above illustrates, a self-confessed rhizomatic nodalist. I am merely a vessel, a conduit, for various influences. I cherry-pick ideas as and when I require them, and then try, like a detective, to attempt to find the links between what seem to be very disparate ideas. Deleuze and Guattari (1980) describe the term 'rhizome' in *A Thousand Plateaus*.[2] It is a model of cultural transmission that rejects the hierarchical, chronologically linear, teleological cause-effect system. With the rhizome, each unit of cultural transmission is horizontally connected to another such unit (rather like the vertex points on a Complete graph). If the links between cultural units are severed, each unit of culture can regenerate to forge new links independently.

It could be argued Deleuze and Guattari's rhizomatic view of cultural transmission is only one example of what Philip Gochenour might call 'nodalism'. Gochenour (2011)[3] argues that at the end of the 21st Century, 'we find that our conception of the world has taken on a particular form, one of nodes situated in networks. Our contemporary lives are filled with references to the World Wide Web, Internet, social networking, discourse networks, neural networks; all aspects of life, from the structure of the brain, to the thoughts it thinks, to the social and economic life of its individual owner, are described in terms of the node or knot and its connection or association with other nodes and knots.' Gochenour convincingly argues that nodalism is a contemporaneous state the digital humanities have reached over the course of a century, beginning with the spread of nodalist models in 19th Century neuroscience, through to Associationist models of the mind, through to attempts to model the mind as a nodalist structure in A.I., through to the development of the World Wide Web, which in turn acts as a platform for the growth of a model centred around the hyperlinked horizontal transfer of cultural tropes, fuelling the growth of nodalist thought in the arts.

This portfolio consists of four videomusic pieces and one sound-producing instrument. Each of the four videomusic pieces is accompanied by an essay. As well as an exploration of audiovisuality, a common thread running throughout the work is the trope of being 'haunted' in some way. However, as each piece is considered, it becomes clear that many rhizomatic links exist between them. Firstly, let us consider the four pieces and software in turn:

> *Eight-eighty* is a videomusic piece which is transparently haunted by its past influences: James Tenney, Phill Niblock, Eliane Radigue and La Monte Young.

> *Grandma's House* is a videomusic piece influenced by hauntology, a recent cultural trope in the Arts and Social Sciences.

> *Saudade se286181.anomalies* is a psychogeographical videomusic piece which explores how an abandoned train station 'haunts' its environment geographically, acting as a hidden, embedded figment of the past.

> *The Bay Faeries* is a travelogue piece inspired by the haunting quality of vague memory, and the way in which its spell can be broken after years by Proustian 'involuntary recall'.

> *Séance* is a sound-producing device which is haunted by similar ideas about 'drawn-sound' sonification theorized and practiced by pioneers in the Soviet Union and England in the mid-20th Century.

To illustrate the hidden depths within this commentary, let us examine one specific rhizomatic multiplicity:

Séance was inspired by the work of Daphne Oram and her Oramics system. The Oramics machine produced sound by reading sound waves drawn directly onto celluloid. Stan Brakhage worked with celluloid directly. Brakhage has been a visual influence on *The Bay Faeries*. Oram tutored Hugh Davies in electronic music whilst he was a student at Oxford. Davies made instruments that he called 'shozygs'. One of these instruments was based on an egg-slicer. An egg-slicer was used as a sound source on the audio score for *Grandma's House*. The audio score for *Grandma's House* is a partial homage to the BBC Radiophonic Workshop. Daphne Oram was one of the first studio managers of

the Radiophonic Workshop. The Workshop had links with Tristram Cary, who had links with EMS. Pink Floyd used an EMS VCS3 on their mid-1970s albums. A pastiche of Pink Floyd's music forms part of the audio score for *Saudade se286181.anomalies*. The latter contains artificially aged digital images. *Grandma's House* also contains artificially aged images. A voltage-controlled analogue synthesizer can be heard on the score to *Grandma's House*; the same synthesizer can be heard on the score to *The Bay Faeries*, where it is playing sustained tones. Sustained tones form the basis of *Eight-eighty*. James Tenney's use of a Shepard-Risset tone on *For Ann (rising)* has influenced *Eight-eighty*. Tenney appears in *Cat's Cradle*, a film by Stan Brakhage. Pink Floyd used a Shepard-Risset glissando at the end of their piece *Echoes*. Pink Floyd introduced their composition *Time* with a chorus of chiming clocks. A ticking clock forms the pulsitile backbone of the audio score for *Grandma's House*…

…and so on (a visual representation of this idea can be seen in Figure One, p.9). The beauty of the rhizomatic model is that one is able move from node to node in the rhizome multidirectionally, and individual units of culture can be reached via any pathway one chooses. This is how I conceive of this project: as five discrete entities bathed in a cocoon of threadlike connections. The question of exactly *what* connections may be made is entirely up to the audience. The above is simply an example extruded from one particular 'entry point', as it were. It is only right that the viewer form his or her own conclusion concerning perceived consonances and dissonances between the pieces presented in this web.

References

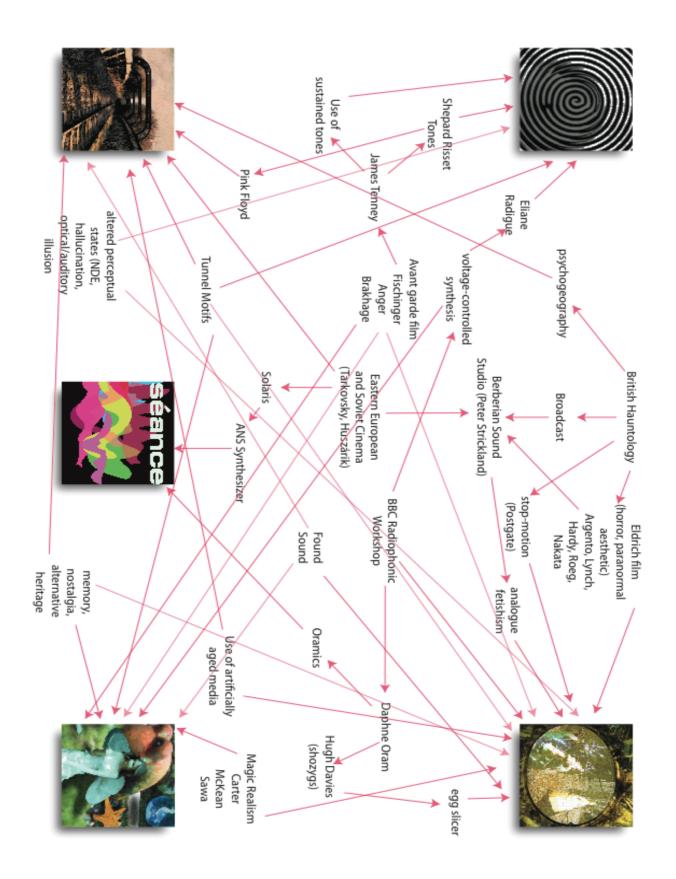Eno, Brian (1995) "Gossip Is Philosophy". *Wired* volume 3, issue 5, p. 207.

Deleuze, G. and Guattari, F. (1980) *A Thousand Plateaus: Capitalism and Schizophrenia*. Continuum International Publishing Group Ltd. (2004 ed.).

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Figure One: Proposed 'Rhizomatic Mindmap' depicting some of the ways in which the pieces are linked

Eight-eighty (14:40). 2012.

Introduction

Eight-eighty is a fixed-media videomusic piece which seeks to show how audiovisual stimuli alone can effect real perceptual changes in the viewer (the perceptant). The stereo audio track makes use of two psychoacoustic phenomena – binaural beats and the Shepard-Risset tone – whilst the visual presentation exploits a category of Gestalt optical illusions known as the 'motion after effect'. *Eight-eighty* attempts to alter human consciousness in a safe, socially responsible way, without recourse to pharmaceutical agency. As such, its aims can be thought of as being similar to Brion Gysin's celebrated *Dreammachine*.[1]

Most importantly, *Eight-eighty* is not presented as a novel, or pioneering piece; it is transparently influenced by the work of other artists: in particular, the work of composers who have previously explored sustained tones – in some cases, more than forty years ago - such as La Monte Young, James Tenney, Phill Niblock and Eliane Radigue. It is therefore *haunted* by its influences; where its chief interest lies is in its nodal approach – the conjugation of Gestalt illusion and sustained / rising tones.

Discussion of the Audio Component

The global audio structure of *Eight-eighty* was planned to produce a sustained tone piece in which timbral density swells vertically over time. The piece is built from 16 separate 'tone layers' which accumulate over the duration. Each tone layer joins the piece by ramping up to its maximum amplitude from silence. The piece is loosely parameterized around the integer 880 in the frequency and temporal domains. It is based on a concert pitch tuning of A=440 Hz (880/2). The first tone layer to enter is a binaural beat layer consisting of two sinusoids, one at 55 Hz (880/16) and another at (55 + 1) Hz, presented to the perceptant in separate channels of the stereo image. This layer reaches its maximum amplitude from a silent starting point after 55 seconds. Tone layer two, another binaural beat layer, then begins its trajectory at this point, climbing from silence to its maximum amplitude after 55 seconds. This process repeats, until all 16 tone layers have accumulated. The piece is unidirectional – once a tone layer has been added and reached its full amplitude, it remains part of the texture until the piece ends. The total duration is 880 seconds. Although the piece is parametrical, it is not ergodic (an ergodic music is one in which every part of a system or process, given enough time, will exhibit statistical

equivalency with every other part. The term was coined by James Tenney).[2]

The foundation of the piece is created from binaural beats. The physicist Heinrich Wilhelm Dove first described these in 1839, in his book *Repertorium der Physik*,[3] but the subject remained a scientific curiosity until Gerald Oster reviewed the phenomenon for *Scientific American* in 1973.[4] Binaural beats require the combined action of both ears, and they are illusory: they exist as a consequence of the interaction of cortical neuronal networks within the brain. The subjective mental sensation of binaural beats occurs when two sinusoids differing slightly in frequency (this is called the Interaural Frequency Difference, or IFD) are presented dichotically. If sinusoids of 220 Hz and 224 Hz are presented, a beat (a precise definition of *audio beats* can be found in Cipriani and Giri, pp. 212-219)[5] of 4 Hz, existing in neither monaural signal, will be perceived. The brain somehow internally combines the monaural tones, in the aural equivalent of an optical illusion.

The remainder of Oster's 40 year-old article remains a good introduction to the subject. He goes on to explain that the addition of white or pink noise to the signal chain seems to enhance the perception of binaural beats as opposed to masking them. Oster also notes that binaural beats are most effective when the IFD is below 30 Hz.

There is a widespread claim that binaural beats can somehow be used for 'brainwave entrainment' to achieve states of altered consciousness.[6, 7] The basic idea is that brainwaves will try to fall in sync with the IAF difference between binaural sinusoids over a long exposure time – the so-called 'frequency following response'. There is some scientific support for this.[8 - 11]

This is not a scientific study, however – it is a discussion of a videomusic piece, and a full, critically balanced review of all the peer-reviewed literature surrounding the supposed ability of binaural beats to alter human consciousness is beyond its scope. Instead, I will conclude here by stating that binaural beats have been included on the basis that they *might*, under certain conditions, cause perceptual shifts in the observer. However, the main criterion for their inclusion is that they constitute a proven psychoacoustic auditory illusion. Illusory effects represent, almost by definition, a perceptual shift. Along with the Shepard-Risset tone also included in the piece, binaural beats form an audio 'mirror' counterpart to the motion after-effect illusion which forms the visual component of *Eight-eighty*.

The first five tone layers of *Eight-eighty* consist of binaural beats based around a concert pitch of A (where A=440 Hz and integer multiples thereof), until the sixth tone layer, where a just-intoned or 'perfect'

fifth (1320 Hz) is added. The seventh tone layer consists of pink (1/f) noise, low pass filtered, with the cutoff point of the filter under LFO control. This was added in response to Oster's postulation that the addition of noise to binaural beats actually enhances beat perception.[4]

At this point I decided to add 'real' instruments to the piece. I was conscious of wanting to break free from pure sinusoids, and I was curious about what would happen if I were to add more harmonically complex tone layers. I chose initially to add e-bow guitar, as this is a very convenient way to make the electric guitar sustain indefinitely. Inspiration came from the work of Phill Niblock,[14 - 20] and specifically his use of the e-bow in tape compositions such as *Guitar Too, for Four* (1996),[12] or *Sethwork* (2003),[13] which was written for virtuoso guitarist Seth Josel, and consists of layers of unamplified acoustic guitar played with e-bow.

The main ideas appropriated from Niblock's output are: a) the multi-layering of harmonically complex string sounds, b) the use of inconsistencies in human playing technique to create harmonic interest throughout the piece.

Filtering, delay and reverb has been added to the e-bow parts. Later additional tone layers would be more electroacoustic in nature anyway, and it wasn't my intention to copy what seems to be Niblock's 'ideal' of photographic accuracy in recording whilst talking about *Five More String Quartets:*

'The 24 track tape was mixed to stereo, again with no processing (reverb, delay, etc.). The music is the purest, unadulterated sound of the instruments that we could achieve.'[20]

Perhaps of more interest to me here was the idea of juxtaposing real, fallible human performance with extremely precise digitally-controlled oscillators. Glover (2013)[19] recalls an e-mail communication between Benjamin Gait and the MELA Foundation in which Gait requested permission to perform La Monte Young's *Composition 1960 #7* (which consists of a sustained, just-intoned perfect fifth formed by B and F#, and the simple text instruction, '*to be held for a long time*') at the University of York in 2007. Young specified that the piece should only be realized using 'continuously tunable sustained instruments such as bowed strings and winds'.[21] The resulting deviations of pitch and timbre occur in spite of the sparse instructions. I was interested in exploring the same category of issues in *Eight-eighty*. The first e-bow guitar part enters the piece and reaches its full amplitude at 7:20, remaining in the piece until 14:40. I found it remarkably difficult to keep either my left (fretting) or right ('bowing') hand at a completely fixed position for seven minutes whilst recording. With four layers of e-bow guitar presenting

themselves prior to the piece's termination, I was interested in the way that human fallibility might produce slow, almost imperceptible modulations of pitch and timbre, both within a single layer of guitar and between the guitars and the sinusoid layers running in tandem. There are four tone layers of guitar, layers 8/9 and 11/12. Layer eight plays the note A_2, layer nine plays A_3, layer 11 plays $C\#_4$, and layer 12 plays G_4. With the addition of a layer of processed violin (tone layer 13), the final harmonic structure of the piece (disregarding the many overtones which may be perceived) is roughly A C# E F# G, an A major 6/7th chord.

Tone layer 10 of *Eight-eighty* introduces another aural illusion: that of the Shepard-Risset tone.[22] Actually, I have not employed a straightforward Shepard-Risset tone, but I used a recording of the phenomenon as the basis for an electroacoustic tone layer based on the illusion, taking care to preserve its basic character. Cipriani and Giri (2010)[5] define a Shepard-Risset tone as being 'an infinite glissando. The sound generated by this particular effect seems to slide endlessly, without ever arriving at a final pitch or passing beyond hearing. It can be obtained by crossfading between instances of a wavetable that are slightly out of phase with each other'.

Cipriani and Giri (2010) give a full explanation of how to create the Shepard-Risset tone illusion in Max/MSP,[5, pp. 455 – 461] and also helpfully supply a Max patch. It was the output of this patch that I have recorded and used as the raw material for tone layer 10 of *Eight-eighty*. The patch was adapted so that sawtooth waves, rather than sinusoids, create the sound. I was unhappy with the timbral quality of the raw Shepard tone, and for purely aesthetic reasons, I decided to run it through Christopher Hipgrave's 'Ambient' application. The latter is a sophisticated granular pitchshifting environment which also has delay, reverb, state-variable filtering and stereo widening capabilities. Itself built using Max/MSP, it is available from Audiobulb records.[23] Great care was taken to select a processing route that did not entirely destroy the illusion. The final tone layer is comprised of processed Shepard-Risset tones (which appear to be descending in pitch) and an unprocessed Shepard-Risset tone that appears to be ascending in pitch.

James Tenney's (1934-2006) compositions from the late 1960s and early 1970s are particularly pertinent to discussion of *Eight-eighty*, as it was during this period that Tenney became drawn to an increasing economy of musical notation and gesture. Arguably, Tenney's *For Ann (rising)* (1969)[24] is the purest expression of Tenney's ideas about ergodicity, lack of drama and exploration of psychoacoustic phenomena. At some 12 minutes in length, *For Ann (rising)* consists of nothing but continuously rising Shepard-Risset glissandi.[25, 26]

Tone layer 10 of *Eight-eighty* can be considered as a homage to Tenney's work (although, in actual fact, the first time I ever heard the illusion was at the conclusion of Pink Floyd's progressive rock composition *Echoes* (1971)).[27]

Some of Tenney's *Postal Pieces* (1965–71) have also informed *Eight-eighty*. The ten *Postal Pieces* were mostly written at Cal. Arts. Each score is small enough to be written on a postcard, and each piece explores one of three fundamental concepts; intonation, the idea of 'swelling', and the creation of steady-state structures which might produce meditative perceptual states.[28] In *Swell Piece No. 2 for Pauline Oliveros* (for five or more different sustaining instruments) (1971), 'each performer plays A-440, beginning as softly as possible, building up to maximum intensity, then fading away again into (individual) silence. This process is repeated by each performer in a way that is rhythmically independent of any other performer.' There should be as little change of pitch or timbre as possible within each tone. The decision to base *Eight-eighty* on a base pitch of A-440 Hz was informed by this score.

Specifically talking about the *Postal Pieces*, Tenney says:

'Those pieces have a lot to do…with…the avoidance of drama. They have a very high degree of predictability. If the audience can just *believe* it, after they've heard the first 20 seconds of the piece, they can almost determine what's going to happen the whole rest of the time. When they know that's the case, they don't have to *worry* about it anymore…what they can do is begin to really *listen* to the sounds, get inside them, notice the details, and consider or meditate on the overall shape of the piece, simple as it may be.'[29]

James Tenney, interviewed by Gayle Young for *Only Paper Today*, 1978

Tone layer 13 of *Eight-eighty* consists of treated violin sonorities. I chose violin because of the high harmonic content produced by the bowed string; layered up, I thought that such sonorities – the changing overtone patterns produced by the action of the bow – could contribute to 'metamusical' aspects of the piece. I asked my friend Abi Bliss, who plays first violin with amateur ensemble Paddock Orchestra,[30] to play an F# and an A in various positions, using steady slow strokes of the bow without employing vibrato or other expressive techniques. After these legato notes were recorded to disk, I created fade-in/out automation curves for each one individually using Logic Pro, and then bounced the results to a stereo file for further processing using the 'effects' room of U&I Software's Metasynth 5. Metasynth's 'Grain' effect was employed here to create a pad-like texture. The resulting sound is both organic and synthetic in character.

Finally, tone layers 14–16 were created using a MiniMoog Voyager analogue monosynth. The Moog on tone layer 15 plays an 'E', and the two other Moogs play an 'A'; one Moog is pitched an octave below the other in the latter case. I experimented with making very small cumulative changes to the cut-off frequency of the Moog's low-pass ladder filter in real-time as recording was taking place. The Moog's oscillators are continuously variable from a sawtooth wave to a pulse wave, and the third of its oscillators can be used as an LFO to modulate the waveform shape of another oscillator. Some gentle pulse-width modulation can also be heard.

The decision to include three layers of analogue synthesizer in *Eight-eighty* is a form of homage to my favourite 'sustained tones' artist, the French composer Eliane Radigue.[31 – 36] In an interview with Tara Rodgers, Radigue is forthcoming about her compositional practice:

'I always avoid dramatic change. This is what I've been involved with – [this] very slow changing, and also a great insistence on the game of the partial, of the subharmonic and the overtones.'[33, p.57/8]

What strikes me as being radical about Radigue's work is that she is clearly fascinated by the sonority of the electronic tones themselves; it's as if she hears these sources as possessing some innate physical vitality of their own. This allows her to create long-form pieces which 'transport' the listener by using sound sources that many composers might find drab or uninspiring. The 'slow change' in Radigue's work comes from properties of timbre intrinsic to the sounds themselves and not through some other process overlaid on the sound.

A final analysis of the musical component of *Eight-eighty* must include some discussion about the form of the piece; or, more pertinently, is *Eight-eighty* a truly 'minimalist' piece? Is it a 'process' piece? Does it exhibit teleology?

In his short essay 'Thankless Attempts At A Definition of Minimalism', composer Kyle Gann asks what (musical) minimalism actually means, and reveals that a solid definition of the term remains elusive.[37] Gann concludes by considering twelve ideas, techniques and devices through which minimalist music might be considered. Of these, it seems that *Eight-eighty* fulfils six criteria for being considered a 'minimalist' piece:

1) **Use of static harmony**. This refers to the minimalist tendency to stay on one chord, or to vacillate between a small repertoire of pitches. *Eight-eighty* is a piece which gradually introduces a single chord, that formed by the pitches A, C#, E, F#, G.

2) **Use of static instrumentation**. The early minimalist ensembles, such as Young's Theatre of Eternal Music, were based on the concept of every voice playing simultaneously. Furthermore, in the classic European tradition, each instrument in an ensemble tends to add its colour as and when required, with instruments entering into a 'division of labour' paradigm; some have a rhythmic role, others a 'solo voice' role, others are counterpoint, etc. In *Eight-eighty*, once a tone layer is added, it remains in the piece at the same amplitude until conclusion. By the end of the piece, all voices are sounding with equal weight simultaneously.

3) **Linear transformation**. This reflects a generalization for some minimalist pieces to move from one state to another over the course of the piece, e.g. from maximum tonality to maximum dissonance. *Eight-eighty* moves uni-directionally from a state of Cagean 'non silence' to a state of maximum (within its own pre-defined limits) 'vertical timbral saturation' by addition of tone layers until its conclusion.

4) **Metamusic**. This is slightly more controversial; 'metamusic' refers chiefly to the unintended acoustic details that arise as a side-effect of compositional processes. They might be heard as changing overtone patterns as one wanders through one of Young's sine-tone installations, for example. *Eight-eighty* might achieve this for some listeners. However, the inclusion of binaural beats in the piece is quite intentional, so one might refer to a sort of 'directed metamusic' in this case.

5) **Influence of Non-Western cultures**. *Eight-eighty* was not written with Indian classical music or *gagaku* in mind, but a lot of music that literally 'haunts' the piece was influenced by non-Western cultures (Eliane Radigue, La Monte Young).

6) **Audible structure**. This refers to a tendency in minimalist music for the structure of the piece to be totally transparent and 'without secrets'. In other words, the listener can divine, sometimes within a few seconds of first audition, what the overall process in the piece is, and extrapolate accordingly; the listener should not be surprised by some unforeseeable dramatic or narrative development at a later point. I would argue that this largely true with *Eight-eighty*: that a student of minimalism would be able to ascertain that they are listening to a sustained-tone piece within the first minute. By the third minute, they would apprehend that the piece is growing vertically by the addition of voices; and, certainly by the fifth minute or so, they will be aware that the piece is based on a restricted pool of pitches.

Criterion six is the most interesting, as it raises questions about teleology and process. *Eight-eighty* is not a 'process piece' in the same way that Reich's *It's Gonna Rain*[38] (1965) is a process piece, because in the latter, once initial conditions for the process have been set up, the piece effectively 'runs itself' until the process is concluded. Furthermore, many minimalist pieces are omni-directional; it would be possible to play a recording of Young's *Composition 1960 #7* or *1/1* from Brian Eno's *Music For Airports* (1978)[39] from any point in the WAV file and it would ostensibly be impossible to say whether we were listening to the beginning or the end of the piece. *Eight-eighty* is clearly not like this. Yet there is indeed a 'process' of sorts at work – each new tone layer is added after a predetermined length of time has elapsed, until all 16 tone layers have been added and the chord is complete. The process at work then does *help* to define the global form, but it is not synonymous with the form itself. Furthermore, the piece appears to be goal-driven. As Mertens[40] explains, the term *teleology* is derived from the Greek *telos*, meaning purpose, but in modern parlance a distinction can be made between 'end' (Zweck) and 'purpose' (Absicht). We can then think in terms of directedness, and whether this is external or internal to the piece. 'External' directedness – Absicht – includes the expression of feelings, symbolization of situations and imitation of actions. Internal directedness – Zweck – would refer to evolution within the music itself, and not to representational content directed from outside. We could then say that *Eight-eighty* is a-teleological from the 'Absicht' perspective, but teleological from the 'Zweck' perspective.

However, an analysis of teleology from a harmonic point of view tells us more about *Eight-eighty*. Nested within the final chord reached is an A dominant 7th, which in traditional Western European dialectical harmony implies a 'pull' back to a tonic chord. The piece can therefore be seen as a gradual accumulation of pitches leading to the formation of a chord which 'wants' to resolve, yet never does; the whole piece is perpetually 'waiting' for a Beckettian *deus ex machina* which never arrives. In this analysis, *Eight-eighty* begins to look like an absurdist piece. However, this was not my intention. I discovered this feature of the piece well after completion.

Discussion of the Visual Component

The visual component of *Eight-eighty* consists of a single, looping greyscale image: a large concentric spiral in which the arms of the spiral appear to be moving continuously 'inward' toward the focal point in the centre of the image. If the viewer trains their macular vision on the central point for the duration of the piece, and then immediately observes a static scene in front of them when the piece ends, the latter will appear to swell outwards and 'grow bigger', the percept of swelling having a periodicity similar to that perceived in the image. The resulting optical illusion is known as a 'motion after-effect'.

The motion after-effect (also known as the 'waterfall effect', henceforth MAE) was first noted by Aristotle in his *Parva Naturalia* (circa 330 BC).[41] In the late 1870s, Hering noted that an observer, after fixating steadily on a patch of uniformly blue colour, would perceive an illusory 'yellow' patch when forced to look at a neutral white surface immediately afterwards. This led him to speculate, based on the theories of Helmholtz, an 'opponent process' theory of colour vision. Central to this idea is the notion that there are competing neuronal populations which exist in a balance of tonic activity. Optical illusions of colour or motion perception might arise if a subpopulation of neurons became 'fatigued', allowing another subpopulation of neurons to 'dominate' temporarily in the 'tug of war' for the overall perceptual outcome.[42] This view was further supported by Sutherland[43] after Hubel and Wiesel discovered the existence of direction-sensitive cortical cells in the cat.[44]

In 1963, Barlow and Hill also bolstered support for the 'fatigue' theory of MAE. They recorded the firing rate of motion/direction sensitive ganglion neurons in the rabbit retina during and following prolonged stimulation with a rotating random dot pattern. When the retina was exposed to the stimulus, the initial firing rate was high, but decreased gradually over the first 15–20s. When the moving stimulus stopped, the firing rate actually fell *below* its baseline level, only recovering over a period of about 30 seconds. Later discoveries of adaptation effects in the feline and primate cortex encouraged the view that the origin of the MAE was probably adaptation in motion-selective cells in the primary visual cortex (V1). Experiments with human observers seemed to suggest that the duration of the MAE was a square-root function of the duration of the adapting stimulus.[45]

Interestingly, Bex et al. (1999) discovered that adaptation to rotational or radial patterns produced stronger MAEs than adaptation to translational moving patterns.[46] *Eight-eighty's* visual component is based on radial motion.

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Grandma's House (6:50). 2013.

Introduction

Grandma's House fits broadly into a genre which has, over the last 15 years or so, come to be known as 'hauntology'. The neologism 'hauntology' was first coined by Jacques Derrida in his 1993 book *Spectres de Marx: l'état de la dette, le travail du deuil et la nouvelle Internationale*.[1] The word is a pun on 'ontology', as the pronunciations of the words 'hauntology' and 'ontology' are almost indistinguishable in the French tongue.[2] Originally, Derrida was answering the political theses of Neo-Conservative thinkers such as Francis Fukuyama, who predicted the 'end of ideology' in Western and Eastern politics at the close of the 1980s, following the collapse of the Berlin Wall.[3]

Derrida's term was then appropriated by contemporary popular culture. The original polemic was de-emphasized, and instead deployment of the word 'hauntology' has more to do with the idea that ontology – the state of simply being – is *itself* haunted. In other words, popular culture contains within itself ghostly traces of the past, a past which constantly informs the present, and may therefore go on to inform the future.[2,4] If the *meme* is a cultural unit of transmission (Dawkins, 1976),[5] then memes may linger in culture, recombining with other memes over time to form new cultural phenotypes. The presence of these ghostly memes may be explicitly acknowledged, or be 'felt' to be there in some inexpressible, inchoate way. Much debate around the music and visual culture deemed to be 'hauntological' has occurred outside the sphere of academia, occurring on blogs or webzines posted by critics such as Mark Fisher (K-Punk) and Simon Reynolds; both have also written for British magazine *The Wire* on the subject.[4] A particularly British strain of hauntology (there is a parallel movement in North America) seems to have developed its own aesthetic codes, mainly focused on the output of a few musical collectives associated with the Ghost Box music label run by graphic designer/film-maker/sound artist Julian House and Jim Jupp. Ghost Box itself is home to The Advisory Circle, Belbury Poly and others, but many artists not of the label are strongly affiliated to it, sometimes working with House closely (the psych-pop outfit Broadcast have been the most visible example). In particular, many of these artists have foregrounded and even fetishized obsolete analogue technologies to suggest that their work is about how the past constantly infiltrates the present through the ubiquity, instant

accessibility and nonlinear temporality of vintage television shows, film and recorded sound on internet video-sharing sites such as YouTube or Vimeo.[2,4]

The past also seems to be haunting the present in palpable respects too; over the last few years, there has been an explosion in the availability and accessibility of creative digital tools that seek to artificially simulate obsolete analogue technologies. *Grandma's House* takes direct inspiration from these ideas, absorbing many of their aesthetic cues in acknowledgement of recent macro-cultural trends.

However, this strand of thought informs only part of *Grandma's House.* The micro – the personal – is also addressed. My grandmother, who will be 87 in February 2014, has dwelt in her bungalow for more than 40 years, and, like a lot of elderly people's domiciles, it almost reads like a curatorial record of the years 1955–1985. Her vacuum cleaner dates from around 1962. She owns a ceramic coffee-grinder dating from the 1950s. I found a Paterson slide viewer dating from the early 1960s in a cupboard. Her record turntable is of similar vintage. By the time a person reaches their ninth decade, their possessions are not simply statements of their gender, class, politics or aesthetic tastes; they have formed a kind of narrative documenting the minutiae of their lives, too. Sometimes this inventory is accidental – the accumulation of objects that simply 'got forgotten about' and so were never discarded.

Grandma's House is also about the future, too. At the present time, some of the kitsch objects featured in the film act as comforting signifiers when I'm visiting my grandmother at home. However, her mobility took a turn for the worse in February 2011 when a heavy fall necessitated a hemiarthroplasty. I have a heightened awareness that she is now in the twilight of her life; time spent with her now feels more precious, more 'stolen from fate'. Upon her passing, these kitsch objects will have something of David Toop's 'sinister resonance' about them.[6] They will, quite literally, be the spectral traces – the ghosts – of my grandmother, both in their physical presence and what they have come to signify in my psyche. Perhaps they will one day evoke their own soundtracks in my private aural space.

Grandma's House contains various audiovisual references to avant-garde filmmakers such as Kenneth Anger and Oskar Fischinger, the work of Hugh Davies and the BBC Radiophonic Workshop, animator Oliver Postgate, horror films, and the contemporary video artist Hiraki Sawa.

Implementation and Exposition of Selected Elements

Two key influences on the piece – the British hauntology movement and the output of the BBC Radiophonic Workshop – are contextualised in the multimedia application *Hauntings*.

The British hauntology movement, in particular, is difficult to define precisely. Its aim is to create what Sexton, (citing Foucault) calls a 'psychic heterotopia',[4] an 'alternative history' full of esoteric popular culture references culled roughly from the years 1960 – 1979, what Reynolds calls a 'technocratically utopian'[2] vision of Britain embodied by educational Penguin paperbacks, library records, the rise of Polytechnics, 'New Build' towns and a slightly starchy State maternalism. However, there is a darker side to the movement, one which acknowledges the eldritch in the everyday; some public information films from the period were disturbing to the childish imagination, as were some ostensibly 'early years' children's programmes. There is also a preoccupation with horror films: a 'wyrd pastoralism' is explored, the movement citing Robin Hardy's *The Wicker Man* as an influence, for example.[4]

Visual Material

A cursory viewing of the film immediately reveals a number of tropes.

Use of Stop-Motion Animation

Stop-motion animation of found objects is used periodically throughout *Grandma's House*, most notably between 01:42 and 02:02, when my grandmother's 1950s mechanical ceramic coffee grinder appears to come to life autonomously, its central lever rotated by invisible hands. My decision to use stop-motion animation for the project is a homage to, and an attempt to recreate the atmosphere of, children's television from the 1970s cited by the British hauntologists – particularly the work of Oliver Postgate.[2, 4]

Stop-motion animation seems to leave a perceptible epistemological gap between observable patterns and non-visible processes; in some intangible way, one is still peripherally aware of the human activity behind invisible events. This is ghostly in itself, even before the incongruity of inanimate objects appearing to perform impossible movements is taken into

consideration. Thus, it made perfect sense to choose stop-motion as the *modus operandi* for a film that seeks to deal with the notion of 'hauntings'.

Some of the stop-motion marionettes employed have significance. The white 'powder brush lady' was chosen because she resembles a stereotypical ghost, and also superficially reminds me of the 'lady in the radiator', one of the central characters in David Lynch's 1977 surrealist-noir debut feature *Eraserhead*.[7] The red-and-white Royal Doulton figure was chosen because it represents the end of my grandmother's working life (the ceramic figure was a retirement present from office colleagues). The brass horse was chosen for reasons of intertextuality. Hiraki Sawa (b. 1977) is an artist who constructs beautiful video dreamscapes from pedestrian subjects. Sawa's three-channel video projection *Going Places Sitting Down* (2004) is similar to *Grandma's House* in that it attempts to make the prosaic poetic through the medium of magic realism. Sawa uses digital tools to transmogrify the interior of an English country house into a child's eye-view of a magical playground, one which includes rocking horses mysteriously moving of their own volition, bobbing rhythmically in a bathtub, or galloping through a white sheepskin rug that has been digitally manipulated to resemble a snow-covered forest.[8, 9]

The trope of inert marionettes magically coming to life is no stranger to literature. Over the years, I have gained inspiration from the work of English novelist Angela Carter (1940–1992). In her short story *The Loves of Lady Purple* (1973)[10] Carter introduces an elderly Professor who travels West with his puppet show. The protagonist is an marionette orphan who seduces her foster-father, and then stabs her adoptive parents before becoming a courtesan. As the Professor grows increasingly frail, Lady Purple becomes ever more vital, as if she is literally deriving her power through sucking the life from her curator.

Use of vibrant/oversaturated colours

By using visceral, lysergic explosions of colour I seek to resurrect the vitality of Kenneth Anger's *Inauguration of the Pleasure Dome* (1954/66)[11] or Ken Russell's *The Devils* (1971).[12] I am aware that juxtapositions of supersaturated colours might be considered kitsch or 'tasteless'; but kitsch elements are integral to the film in any case.

Use of translucent composite images, often in multiple

All the pieces in my portfolio, with the exception of *Eight-eighty*, make use of image compositing techniques. I am intrigued by the way in which interstices between separate elements are obfuscated, leading to a kind of 'visual acousmaticism'; it sometimes becomes hard to divine the source material, or find the boundaries between one image and another. Anger's *Inauguration of the Pleasure Dome* makes extensive use of this kind of compositing, but another good example would be Ian Hugo's experimental short *Bells of Atlantis* (1952).[13]

Bells of Atlantis is notable, and deserving of further discussion, as the dreamlike phantasmagoria it evokes is pertinent to all my work. Additionally, it has a wholly electronic score, produced by Louis and Bebe Barron. Louis Barron was inspired by Norbert Weiner's book on feedback systems, *Cybernetics: Or Control and Communication in the Animal and Machine (1948).*[14] Louis applied Wiener's ideas, making random alterations to his electronic sound-producing circuits, which would respond in turn; very often the circuits would burn out, and any specific electronic sonority could be produced and recorded only once. Bebe's role was to record, process and splice these electronic fragments together to produce finished compositions.

Whilst the Barrons met and collaborated with John Cage, David Tudor and others on (*The*) *Williams Mix* (1952–3),[15] they also worked on *Bells of Atlantis* with Hugo.[16] The finished nine-minute film is an impressionistic collision of protean phantasmagorical images, recordings of Hugo's partner, the celebrated French/Cuban diarist/novelist/actress Anaïs Nin, reading from her volume of prose-poetry, *House of Incest* (1936),[17] and the Barrons' electronic tonalities. The imagery – of water in flux, Nin reclining in a hammock – comprises vividly coloured, visually inscrutable superimpositions.[13]

Grandma's House takes a similar approach at times. The sequence which runs from 05:10–05:21 consists of several composite images, producing an impressionistic, fleeting collage: a dead spider filmed in my grandmother's garage, a shot of French bay windows treated with a 'ghosting' effect – produced by prismatic separation of the RGB channels, each moving independently (in partial homage to the projected component of Nam June Paik's site-specific *One Candle* (1989)[18]) – and a barely-visible cat which I filmed in the garden. The sequence running from 03:14 to 03:34 is similarly heterogeneous. Five layers of material are collaged:

an abstract fractal animation, an image of running water taken from a stream in Wither Wood (Skelmanthorpe), winter trees, and two image layers derived from coffee coasters owned by my grandmother – one depicting a fishing harbour, and another depicting a stylized Ancient Athenian trireme ship.

The 'Matryoshka Effect': Images Within Images

Most of the 'action' in *Grandma's House* takes place within a 'magic mirror', which effectively acts as a mutoscopic window to an alternative universe in which impossible events occur. Thus we have images (the 'stage') nested inside another image (the mirror-frame), which is itself nested inside the frame of the film – a 'Matryoshka effect'. The idea is revisited in my piece *The Bay Faeries*, when the viewer is presented with an ersatz dual-screen 'installation' within the interior of Boggle Hole cave.

My treatment of the mirror frame itself is also worthy of further comment. When it first appears (00:56–01:07), it is free from organic detritus. As the film proceeds, the mirror frame becomes covered with arboreal textures, giving it an increasingly gnarled, weathered appearance; it is succumbing to entropic forces. The effect, which helps to imbue the film with magical realism, suggests that the mirror is somehow 'alive' and possesses internal autonomy.

The visual aesthetic of David McKean's film *MirrorMask* (2005)[19] was an influence on the visual appearance of the mirror. McKean is best known for his illustration work for Neil Gaiman. *MirrorMask* sometimes has a visual aesthetic reminiscent of Victorian peepshows.[20] Central to the peep show was the Mutoscope.[21] The Mutoscope also features as a prominent plot device in Angela Carter's picaresque, surrealist novel *The Infernal Desire Machines of Doctor Hoffman* (1972).[22] In Carter's story, the protagonist Desiderio visits seaside resorts to view mutoscopic exhibits. He discovers that the tableaux depicted within these show events that either have, or will occur in consensus reality. I have tried to assimilate these tropes into the function of the mirror depicted in *Grandma's House*. The mirror reflects scenes, objects or people that either exist (literal depictions of rooms), or have existed (such as the image of my mother), objects which used to function but are now inoperative and only move through 'sleight-of-hand' (such as the Grundig tape recorder), or scenes which explore magic realism through spatial dislocation.

A mirror features prominently in Hideo Nakata's horror film *Ringu* (1998).[23] When the film's protagonist, the investigative journalist Reiko Asakawa (Nanako Matsushima) views a cursed videotape for the first time, she is presented with a series of disturbing and seemingly unrelated cyanotype images, one of which is an image of Sadako Yamamura (Rie Inõ), the deceased instigator of the curse, combing her hair methodically in a mirror. The hauntology movement makes intertextual reference to horror movies, and the inclusion of a mirror in *Grandma's House* might be seen as an attempt to follow suit. *Grandma's House* also begins with the unprocessed sound of a VHS cassette being ejected, a subliminal nod to this item of cult cinema.

The 'Accidental Archive', Heritage and Analogue Fetishism

I often think of my grandmother's house as an 'accidental archive' of Duchampian readymades. I have intensely focused my gaze on a few key pieces of obsolete analogue technology, allowing the camera to linger upon them for more than a fleeting moment. The fetishization of obsolete analogue technology is a repeated trope of hauntology.

In 2012 director and screenwriter Peter Strickland released his second feature through Warp X films, *Berberian Sound Studio*.[24] The film is essentially an exploration of what happens to mild-mannered Foley artist Gilderoy when he is placed in a claustrophobic, hostile environment far from the comfort of home. Eventually Gilderoy's psyche fragments; the film is ultimately ambiguous in interpretation.

Berberian Sound Studio has clear links with the hauntology movement. The film's set design and soundtrack create strong simulacra of the mid-1970s. The titular studio is littered with so much vintage analogue equipment that the film resembles a museum of sound design. Lingering shots of test-tone oscillators, analogue desks, Nagra tape machines and WEM Copicat tape delays are strewn throughout. There is a kind of analogue fetishism at work. Toby Jones ('Gilderoy'), interviewed for the *Making Of…* short included with the Artificial Eye DVD, says:

'[Strickland's] interest in sound is profound…but then there's this other area that he's also interested in…which is the *actual physical kinesthetic pleasure* of watching tape spooling and unspooling, of the kind of industrial design of those machines…'

-Toby Jones, Interview for *The Making of Berberian Sound Studio*, 2011.[24]

I watched *Berberian Sound Studio* for the first time whilst making *Grandma's House*, and these ideas have made their way into my piece. More specifically, my inclusion of a 1950s ceramic coffee grinder (01:42–02:02), an early 1970s Bush vinyl record player in action (05:11–05:35), a Grundig TK-18 reel-to-reel tape recorder from the early 1960s (05:35–05:48) and a Gnome slide projector (05:48–06:11) – probably also from the early 1960s – can be seen as analogue fetishism. Two of these items – the tape recorder and the slide projector – are also 'ghosts' of their former selves because they are currently inoperative. In the case of the Grundig recorder, I have artificially breathed life back into it through the use of stop-motion techniques, rendering it 'undead'.

The 'archival' aspect of this equipment is also important to the film. These antiquated pieces tell, in a sense, the 'story' of my grandmother's life. This is most keenly illustrated by the 'record player' sequence (05:11–05:35) in which footage of the player's mechanism is composited with a stop-motion sequence that pays homage to the inventory of my grandmother's vinyl collection.

My own interpretation of the decision to include and focus on these antiques also has something to do with obsolescence. It could be argued that contemporary culture presents built-in obsolescence of consumer goods as a normalized condition. I sometimes feel that we extrapolate this flippancy about material objects to the elderly themselves, something which contributes to (my) perceived marginalization of the elderly in Western culture. On 29th May 2013, *Grandma's House* was screened for one night alongside the work of critically-acclaimed photographer Penny Klepuszewska at the Art House, Drury Lane, Wakefield. Klepuszewska's exhibition *Living Arrangements* investigates how the home can become a prison for many elderly people, one in ten of whom spend their day-to-day lives utterly alone.[26]

Use of Artificially Senescent Images

Purveyors of hauntology on the Ghost Box label will often use vinyl sources to signal that their work is about the past and the way it is embedded into the present. The visual corollary of this practice is the use of images which are either genuinely aged, or the use of digital images which have been filtered to simulate a distressed look. *Grandma's House* contains both types of image. For example, the image of my mother as a young woman (04:33–04:51), was originally a mounted slide taken by my father on Kodachrome or Agfa 35mm film stock in about 1965. I placed the slide into an heirloom Paterson viewfinder, filming the slide whilst it was backlit by the lamp of the viewfinder; I used the camcorder's optical zoom to zone in on the image. However, the sequence from 05:48–06:11, which contains a panning close-up of a Gnome slide projector (early 1960s vintage) has been treated with filters provided by a commercial plug-in tool (DigiEffects Damage for Adobe After Effects).[27] This particular plug-in was chosen for its parametric flexibility; it offers seven categories for achieving the appearance of distressed/aged film, and each separate category contains further customisable parameters.

Still images, whether they have been used in isolation or as part of a stop-motion sequence, have also mostly been post-processed using Instagram-like tools such as Nevercenter's Camerabag 2.0[28] or Digital Film Tools Photocopy 1.0[29] software.

Why have I chosen to use artificially senescent images? For many artists, the appeal is purely aesthetic. For others, it signifies 'authenticity', but this is problematic because it is tied up with aesthetics. 'Authentic' camcorder footage *looks* like contemporary camcorder footage, after all; the act of spuriously ageing the footage is 'dishonest', even if the results convince as authentic Super-8 film. For me, a more interesting use of these filters is to imply that the work shows how the present perpetually contains within it ghosts of the past. The applied artifice therefore has a semiotic, as well as aesthetic function: current digital technologies are literally 'haunted' by ancestral analogues.

Geographical Dislocations, Juxtaposition of 'Impossible' Elements, Hallucinatory Elements

These tropes are dotted throughout *Grandma's House*. In the immediate hours following her fall, it would appear that as severe pain resulting from the fracture increased, my grandmother experienced a hallucinosis. Several scenes in the film allude to these biographical events.

Topological dislocation was a feature of my grandmother's experience; elements from one room in her house would appear in another; very often these visual dislocations would have the appearance of sepia-toned films, apparently 'projected' from some unseen source onto the walls. In the piece, dislocated geographical elements appear during a sequence situated in the guest room (02:02–02:12), most notably the appearance of a cherub-themed soap holder (from the bathroom) materialising on the walls. In the following sequence, roses – the subject of an amateur oil painting hanging on the wall – become hyper-real. This is a reference to a 'full sensorium' hallucination in which my grandmother's field of vision was filled with 'beautiful flowers, unlike any found on Earth'. From 04:18–04:33, ornamental crystal fawns (from the front room) appear to be lying down on a bridleway, part of the Trans-Pennine trail which can be accessed from Cross Lane, Skelmanthorpe. In the kitchen scene (01:42), a Brobdingangian mollusc shell is given Surrealist pride of place on the kitchen table.

Predominance of 'winter' motifs

Grandma's House explores the twilight of human life. It seemed natural to use photographs of snowy scenes to suggest this. However, my decision to film denuded trees is also a direct reference to an extant hauntological text, Julian House's in-concert film for the British band Broadcast, *Winter Sun Wavelengths*. *Grandma's House* is full of arboreal motifs, as is House's film, and in some cases, the treatment is similar – particularly the use of inverted silhouettes between 04:46 and 04:50 (compare with 0:16 in *Winter Sun Wavelengths*.[30]). *Grandma's House* therefore might be seen as a hauntological film referencing another hauntological text; the same argument might apply to the analogue fetishism deployed in referencing *Berberian Sound Studio*.

Further Discussion of Selected Scenes

After the title sequence has elapsed, the viewer is introduced to an establishing shot depicting Arquiva's Emley Moor transmission tower. At 1083 ft, this Grade II listed building is the tallest freestanding tower in the UK, and the 25th tallest in the world. In March 1969, a combination of strong winds and the weight of ice forming on the tower apex and guy wires led to its total collapse.[31] Erection of the replacement tower was completed in 1971, when UHF colour transmissions commenced. My grandmother moved to her bungalow in Skelmanthorpe the same year; the two stories are intertwined.

The brief sequence of a verdant passageway near my grandmother's house (00:35–00:47) has been symbolically included because it is this very passageway that now acts as a geographical barrier to her leading a fully autonomous life. It represents a sanction on her independence. The clip has been composited from two vantage points to suggest the downward motion of 'falling', or the misalignment of a 'fracture'.

From 01:10–01:31, we are presented with a series of composites; images of my grandmother's front room are composited with crystal ornaments, lit from behind by candles in a crepuscular environment. The production of coal in the UK was severely limited by late 1973 due to industrial action by coalminers and the NUM. In the early part of 1974, Edward Heath proposed that consumer-level consumption of electricity be limited to three consecutive days per working week to conserve resources. This short-term austerity measure ran from January–March 1974, and resulted in almost everyone in the UK using candles to provide domestic lighting during regular power cuts. The candles act as signifiers of this historical episode.

From 01:31–01:42 we move from 'austerity' to 'glamour'. The furniture of my grandmother's bedroom has remained largely unchanged since the 1950s, a period traditionally associated with a kitschy, Hollywood-inspired über-vibrant post-war glamour (Dyhouse, 2011).[32] I have assayed my grandmother's vanity table in ultra-feminine pinks and blues. This concentration on notional 'glamour' is also a conscious nod to Kenneth Anger's 16mm short *Puce Moment* (1949),[33] a fragment from his never-completed feature *Puce Women*. According to Anger himself:

'*Puce Women* was my love affair with mythological Hollywood…with all the great goddesses of the silent screen. They were to be filmed in their homes; I was, in effect, filming ghosts.'

-Kenneth Anger, quote taken from the booklet accompanying *Magick Lantern Cycle* DVD (BFI)[33]

One particular scene in *Puce Moment* (3:15 in Anger's film),[34] a shot of a vanity table, bears more than a passing resemblance to the 'bedroom scenes' in *Grandma's House*, and my inclusion of the vanity table with its associated paraphernalia in stereotypically 'feminine' hues is a nod to Anger's treatment of a similar subject.

Between 02:24 and 02:40, we see a scene that has a passing resemblance to one of Oskar Fischinger's early abstract films in terms of colour, shape and kinetics – 1933's *Kriese* (Circles).[35] Fischinger's work anticipates the Op-Art of the 1960s so beloved of hauntologists (as typified by Julian House's sleeve for Broadcast's *Microtronics*.) Satisfied with this happy accident, I realized that footage of ordinary domestic props (the 'circles' were processed footage of my grandmother's antique Cannon K16/E gas fire) could be manipulated digitally to create painterly, non-representational effects. The strategy is repeated between 04:51 and 05:10. In the foreground, to the left of the frame, a moving luminous feathered texture of indeterminate origin appears to be projected from an unknown source onto a tree trunk. The texture was actually derived from source footage of my grandmother's bedroom carpet. Layer masking and feathering was used to blend the texture onto the trunk of the tree. The overall notion of projecting 'unidentifiable' textures onto trees was appropriated from a brief shot in Dario Argento's *Suspiria*[25] (04:51 in Argento's film). *Grandma's House* thus contains modest nods to early pre-digital abstract expressionist videomusic, avant-garde cinema and horror movies – hauntological tropes.

Audio Score

I envisaged the audio score for the piece drawing upon a key hauntological audio touchstone – the output of the BBC Radiophonic Workshop. More pertinently, I wanted the score to reflect two key phases in the life of the Workshop – the years 1958 to 1969, when the Workshop relied mainly on established or nascent *musique concrète* techniques to produce its output, and the years 1969–1983, when the Workshop consciously moved away

from the manipulation of magnetic tape loops and turned increasingly to voltage-controlled subtractive synthesis.[45]

I also thought it fitting that the audio score should reflect the archival or 'found source' preoccupations of hauntology. As such, electroacoustic components of the audio score all use, as their source sounds, *les objets sonores* from my grandmother's bungalow. They include:

- An antique mechanical clock made by Elliot and sold by Fillans of Huddersfield.
- The iterated transient noise made by my grandmother's antique coffee percolator as it reaches the climax of its brewing cycle
- Various crystal and brass ornaments owned by my grandmother, struck once with a small hammer and recorded from initial transient to final release
- The alarm of my grandmother's battery-operated alarm clock (I presume that this is a simple transistorized oscillator)
- The churning and bubbling sounds made by my grandmother's turkey soup as it simmered in the pan
- The sonority resulting when the antique coffee grinder featured in the film is filled with beans and mechanically ground by hand
- The sound of coffee beans being poured into the cavity of the coffee grinder
- The sound of a VHS cassette being auto-ejected from a 1980s Toshiba video player/recorder
- An egg-slicer which I found in my grandma's kitchen utility drawer. The 'blades' of the egg slicer are taut wires that act like the strings of a zither; plucking and strumming gestures were used to produce various sonorities, which were then recorded for electroacoustic processing.

I deliberately chose an egg-slicer as one of my 'found sound' sources for intertextual reasons. I attended a research seminar entitled 'Hugh Davies and Stockhausen' by Dr James Mooney (University of Leeds).[36] An ongoing research interest of Mooney's is the life and work of the composer, performer, improviser, musicologist, academic and instrument-builder Hugh Davies (1943–2005).

Davies had a very diverse career. He read music at Worcester College, Oxford from 1961–
64. Whilst he was still an undergraduate, Daphne Oram became his mentor, giving him
private lessons in electronic music. She introduced Davies to EMS founder Peter Zinovieff.
It seems likely that Davies knew about Oram's prototype Oramics machine well before its
wider recognition. In 1963, he completed an electronic tape piece entitled *The Scarecrow* in
Oram's private Tower Folly studio in Wrotham, Kent for a theatre production.[37]

Davies began to construct hand-made musical instruments from unlikely sources. He
referred to these generically as 'Shozygs'. The name was derived from the first two such
creations (1969), whose contents were packaged in the cover of the final volume of an
encyclopaedia, which covered everything from 'SHOAL' to 'ZYGOTE'. The Shozygs were
Heath Robinson-like affairs constructed from found objects such as bedsprings, guitar
headstocks and, recurrently, egg-slicers. Mooney alluded to Davies's growing belief in the
idea of the 'instrument as score' – the idea that the instrument's ontology is its own score.[38]
Davies's work is therefore rhizomatically connected to mine in three ways: firstly, he built
Shozygs from egg-slicers, and I have used an egg-slicer as a concrete sound source in
Grandma's House; secondly, he was connected to Daphne Oram, co-founder and first studio
manager of the Radiophonic Workshop, a key touchstone for the film - the principle behind
my Max patch, *Séance*, is shared with the Oramics machine; and thirdly, *Séance*, given how it
is configured, could be considered to 'be its own score'.

It is the sound of a mechanical clock that forms the backbone of the audio score for
Grandma's House, imparting a pulsitile momentum, and also reiterating the implication that
the film is about the passage of time. It was a simple matter to create more complex
polyrhythms from the initial clock recording using Max/MSP. I intended the score for
Grandma's House to function partly as a homage to the Radiophonic Workshop; the audio-
shaping possibilities open to Maddalena Fagandini or Delia Derbyshire in the 1960s were
somewhat rudimentary by contemporary electroacoustic standards. Fagandini could have
chosen to time manipulate, splice or reverse her tape-recorded sounds. Her postproduction,
options would have been limited to the use of tape echo, reverberation, ring-modulation or
filtering.[46] For the 'clock' part, I deliberately restricted myself to the use of varispeed
techniques, because I wanted the sonority of the clock to be recognisable for semiotic
purposes; I also wanted the piece to capture at least some of the flavour of early *musique
concrète* rather than contemporary electroacoustic music with its associated ear-bending sonic

manipulations. This same rationale was applied to the sound of the coffee percolator; its single-shot percussive 'thud', followed by hiss (01:29) has been left almost unadulterated by DSP.

I felt that, because the clock and percolator sources remain relatively untreated, this left me the freedom to be a little more *outré* when treating some of the other concrete sound sources. I used mainly granular synthesis techniques to produce a variety of textures and timbres. Perhaps the most pleasantly surprising effect accidentally achieved after feeding my sound sources into these tools was a transmogrification of the egg-slicer. Audiobulb's Ambient software transformed this unlikely 'stringed instrument' into a tremolando texture reminiscent of a cimbalom[39] – a concert hammered dulcimer. In *Grandma's House*, this electroacoustic texture can clearly be heard between 03:24 and 05:03.

The film begins with a clear, unprocessed sound of a VHS cassette being ejected, a sonic signifier that the film might refer to, or contain, obsolete archiving tools. This is followed, almost immediately, by a high-frequency cloud of pitch-manipulated coffee beans; the effect is curiously like a cold winter wind.

Between the start of the score and approximately 01:30, a time-reversed metallic texture, a graduated continuant sound, rising in amplitude, its reversed transient coinciding with scene changes, appears four times. This texture was created from processing various sound sources – crystal and brass ornaments, struck once then allowed to decay – through the 'Spectrum Synth' room of Metasynth, which contains complex Fast-Fourier algorithms for analysis of partials and resynthesis (partials can be tuned or erased). The processed sounds were layered together and time-reversed, with reverb being added in postproduction. An upper-mid frequency 'pad' sound can also be heard at 01:10; this was derived from an alarm clock using Audiobulb's Ambient software, which allows the user to vary the pitchshift and density of grains to create smooth pad-like textures. Crude granular synthesis treatment of the mechanism of the coffee grinder in action was realized using Ircam's FTM (**F**aster **T**han **M**usic, an extension for Max/MSP), and the results can be heard at 04:44. The source sound was quite 'granular' in nature to begin with, and rough chopping of the soundfile using large grain sizes produces a coarsely variegated texture. This texture is accompanied and layered with the sound of my grandmother's soup simmering, which has been lowered in pitch and treated with copious amounts of reverb.

The use of concrete sound within *Grandma's House* symbolize the early years of its key musical influence, the Radiophonic Workshop. Sounds symbolic of the 'middle years' of the Workshop, created using a voltage-controlled analogue synthesizer, complement the electroacoustic timbres and complete the score. My synthesizer of choice was the MiniBrute, a single-oscillator analogue monosynth made by Arturia, a company hitherto best-known for software emulations of 'classic' analogue synthesizers such as the Yamaha CS-80.[40] The MiniBrute was chosen because it eschews presets, forcing the user to be genuinely creative every time he or she turns it on. The MiniBrute's single analogue oscillator is almost as advanced as those found on modular synthesizers.[41] Every waveform – sawtooth, pulse, triangle and white noise – is simultaneously available, and the relative contribution of each shape to the final waveform is adjustable via a mixer section. A sub-oscillator is available, with a choice of sine or square waves. The Minibrute's multi-mode filter is well-specified, offering a 12dB/octave low-pass mode or 6dB/octave high-pass, band-pass and notch modes. The filter, modelled on that found in Nyle Steiner's Synthacon, will self-oscillate at high resonance (Q) values. The Steiner-Parker Synthacon was produced between 1975 and 1979,[42] and although the Minibrute is a contemporary synthesizer, to my ears it sounds remarkably like a vintage 1970s machine –a Korg MS20.[43] The Minibrute's LFO is also well-specified, its internal clock generating frequencies of up to 100 Hz, meaning it is capable of frequency, ring and amplitude modulation. Arturia collaborated with Yves Usson of YuSynth,[44] a man with many years experience in building modular synthesizers.

The featured synthesizer parts attempt to recall and conjoin the wild, anarchic style of erstwhile Radiophonic Workshop composer Malcolm Clarke (as heard on his contribution to the score for the Dr. Who serial *The Sea Devils*), and the more melodic/harmonically orthodox style of Paddy Kingsland. I had only owned the Minibrute for a few weeks prior to recording, and I added the synthesizer parts before becoming fully conversant with specific features offered by the hardware. According to Niebur,[45] Malcolm Clarke's score for *The Sea Devils* 'cement[ed] his dual reputation as either the mad genius of the 1970s Workshop or the incompetent hack who tried to shock audiences rather than placate them.' I wanted some of this Art Brut ethos to infuse into my score for *Grandma's House*: I threw myself into recording almost the first sounds I made, trying to dispense with the 'crutch of memory' that I have relied upon in the 15 years since my first experiments with a Roland SH-101

monosynth.

The Minibrute provides a wide range of timbres for the score. It first becomes discernible at 01:06: white noise is dynamically low-pass-filtered to create the impression of wind. The cutoff point of the filter was manually adjusted in real-time, to mimic stochastic variations in 'real' wind timbres. Eventually, the low cutoff point and high resonance values applied to the noise are set to values that produce a timbre with a fundamental corresponding approximately to a C#. This has faded out by 02:33, by which time synthesizer percussion has appeared in the form of more white noise. A short, attacking sound shape is obtained by setting the Sustain and Attack values of the amplitude envelope's ADSR to zero and keeping D and R values small. The LFO was routed to the filter cutoff point to give the rhythm textural variation. The percussion was manually recorded in real-time.

At approximately 02:57, three sustained tones enter. One of these is the sub-oscillator, with a fundamental frequency corresponding to a D. Another low frequency drone one octave above is treated by an LFO controlling the cutoff point of the low-pass filter. The LFO rate is manipulated in real-time, such that it sometimes enters the audible frequency bandwidth, interacting with the oscillator to produce unpredictable harmonics. A third, higher tone with a fundamental corresponding to an F also plays, forming a D/F dyad. Juxtaposition of the three tones with the electroacoustic timbre derived from the egg-slicer results in a harmonic bed of shifting complexity. The electroacoustic timbre contains an approximate C#, and so chromatic dissonance between layers can be perceived.

At approximately 3:53, a simple four-bar melody, played by a triangle wave, enters. This section of the score could thus be thought of as being in the key of D minor. It accompanies images that deal with magic realism: ships floating through woods, dancing marionettes, and so forth.

By 4:48, the four layers of synthesizer have faded out. At approximately 5:08, two new synthesizer parts fade in. The tone playing the bass part follows the chord sequence [C# minor–A major–E major–F# minor–C# minor]. Thus, the piece has shifted key, denoting a change in the accompanying imagery – we have moved from scenes of 'magic realism' to scenes of analogue fetishism and nostalgia (a spinning record player, a old tape machine). The key shift helps to emphasize a shift in the semantics of the visual imagery depicted,

demarcating the film into rough 'sections'.

The synthesizer tone chosen for the bass part is made up of sub-oscillator and white noise waveforms. The noise content is revealed or masked by raising or lowering the cutoff point of the low-pass filter in real time. The harmony part is played mainly by a square wave-like timbre on which the pulse width (duty cycle) is modulated in real time. Gentle pulse-width modulation (PWM) creates the impression that the waveform is becoming timbrally 'thicker' or 'thinner' over time, a dynamic timbral shift. The harmony part is treated with copious amounts of reverb; the timbre of the reverb itself changes as the timbre of the underlying waveform alters.

After these two parts have faded out, it is mostly the pulse of the clock which remains; it seemed natural to conclude the score by fading this out slowly.

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Saudade se286181.anomalies (10:46). 2012

Introduction

'Saudade' is a Portuguese or Galician word that has no direct translation in English. It describes a deep emotional state of nostalgia, or a melancholic longing for something or someone which is absent. Moreover, the 'something' is felt to be 'lost forever'.[1]

'Se286181' is the Ordnance Survey National Grid reference number for the area occupied by Horbury and Ossett railway station, which formerly served the commuting population of my home town, Horbury, which lies some three miles away from the city of Wakefield, West Yorkshire, England UK. It was located on the Manchester and Leeds Railway, which cut a swathe through the valley of the River Calder, and served as an important connecting route between the North-West (Manchester and Liverpool) and the North-East (Leeds, York and Hull). The station was opened in 1840, a child of the late-stage English Industrial Revolution. It was finally closed in 1970. Almost all that remains of it now is the old commuter subway, which ran under the tracks.[2]

'Anomalies' in this context refers to 'anomalies in the landscape'.

Putting these three components of the title together, we have something that expresses the following sentiment: 'A melancholic longing for something which can never come back. An area containing a disused railway station. An anomaly in the landscape.'

Saudade se286181.anomalies is a psychogeographical videomusic piece which explores notions of time, loss, nostalgia, the changing nature of society, 'progress traps' and geographical 'memory'. Visually, it can be divided into two parts. Sonically, it can be divided in to four; audio parts 1-3 accompany Part One, audio part 4 accompanies Part Two. Part One visually consists of treated stills taken either directly within the site of the disused station itself, or the surrounding area. The image shown at 03:10 is of Calder and Hebble Bridge, still owned by Network Rail. The railway line on which the bridge stands is now inoperative, and officially out-of-bounds to the general public. The image depicted at 02:26 is of the River Calder Bridge. These two structures lie close to the former train station. Images depicting the abandoned commuter subway run from 03:40 to 05:11. Other scenes are atomised, and depict the ephemerality of bygone industrial processes. The sequence (01:53–02:07) functions as a micro-montage,

depicting a rectangular hole I discovered in the ground, some four feet in depth, containing a pot-pourri of abandoned, functionally-ambiguous objects: metal fragments, rocks, electrical cables, twigs and perforated wooden planks. This is an interrogation of the effects of entropy on human-made artefacts, as is the montage running from 02:30 to 02:54, which displays brickwork being literally devoured by fungi. Other shots in the film are fetishistic close-ups of ostensibly prosaic subjects – barbed wire running through a fence at 01:07, for example. Order, entropy and redundancy are juxtaposed. The theme of fetishism explored in *Grandma's House* is re-scrutinized from a slightly different perspective; the fetishization of the 'mundane-yet-arresting' is a recurrent feature in 'slow cinema', and occurs in the work of Tarkovsky[3,4] and Eastern European directors suuch as Zoltán Huszárik.[5] Peter Strickland has spoken about the influence of Huszárik on his work[6] and so here lies another rhizomatic tendril between the two portfolio pieces.

Part One of the film (00:00–05:14) explores themes of abandonment, decay, entropy, and redundancy of function by utilizing fairly straightforward representational images.

Part Two of the film (05:14–10:46) is different in its aesthetic and its aims. I wished to use the same images introduced in Part One, but in a recombinant manner, eschewing strictly representational forms in order to embrace a more proto-Impressionistic style. At the time of filming and composing, Horbury and Ossett train station had lain deserted for 42 years. I decided to take 42 'already seen' still images – one for each year that the station had been abandoned - and stack them vertically. I would use dynamic temporal variations in the opacity levels of each image layer to create a shifting tableau of impressionistic textures and colours, effectively creating a 'moving painting'. I sought to impart the suggestion that the station, having 'died', might be recalling its own 'life' from some metaphysical realm existing outside linear time.

The diptych form is as follows: Part One represents geographical features that once had a defined role, but no longer do. These are freight train lines that no longer go anywhere, bridges that are crumbling, literally fossilizing, collapsing back into the landscape like skeletal ley lines; there are commuter subways that no longer contain people but instead are home to reclaiming armies of ivy. They are scars – anachronistic *anomalies* – of the landscape. They are ghosts, *haunting* both the area and the memories of residents old enough to recall a time when they were operational. In a sense, they are frozen – they 'died' back in 1970, and the accompanying soundtrack, a deliberate pastiche of pastoral psychedelia and progressive rock, two genres of popular music very much in vogue between 1968 and 1975, has become their funeral march.

Part Two, however, is an interrogation of what might transpire after this 'death-event'. The proto-Impressionistic imagery (partly inspired by 19th century painter J.M.W. Turner's composition *Rain, Steam and Speed* (1844),[7] a *magnum opus* also concerned with the (optimistic) potential of the Industrial Revolution) is being used to interrogate a number of tropes simultaneously. Firstly, despite my careful use of layer blending modes, the luminous mouth of the subway can be seen throughout, giving the impression of an incandescent 'tunnel' reminiscent of the extra-visual 'tunnels of light' described by those individuals who claim to have suffered a Near Death Experience (NDE).[34-38] The theme of tunnels, or tunnel-like structures, is recurrent in my work, quite possibly because of my own NDE in September 2002.

As Ernst Mayr[8] points out, the key Victorian hypothesis in the natural sciences – Darwinian evolution by means of Natural Selection – went hand-in-glove with ideas of 'progress' enthusiastically endorsed by proponents of the Industrial Revolution. As Ronald Wright argues in *A Short History of Progress* (2005),[9] every chronicled human civilization on Earth has eventually succumbed to a series of 'progress traps'. A sense of *saudade* might be felt for the loss of innocently disingenuous Victorian faith in 'progress'; we now realize that the epoch of Western civilization we call the 'Industrial Revolution' may have been a severe progress trap. Over-reliance on fossil fuel sources has created environmental damage and hostile territorialism on a global scale, leading to war, iniquity, unrecoverable debt and poverty.[9] As the 21st century marches on, and the internet becomes ubiquitously intrusive, the idea of being obliged to physically travel long distances by rail networks (a key architectural achievement of the Industrial Revolution) in order to work or communicate seems increasingly quaint. And yet, might not the 21st century bring new traps afresh? Mathieu Roy and Harold Crooks's companion film to Wright's book, the Scorsese co-produced *Surviving Progress* (2011),[10] discusses these points further, particularly with respect to environmental concerns, as does *Race Against The Machine* (2011),[11] a semi-cautionary polemic by Brynjolfsson and AcAfee. In the latter, the authors point out that, at the dawn of the 21st century, (digital) technological change is faster (the rate of change itself increasing exponentially in accordance with Moore's Law) than the transformations effected during the transition from an agrarian to industrial society ever were. Computers are in some sense a 'panacea machine' with potential applications in almost all industries and tasks. General-purpose computers are directly relevant to 60% of the labour force involved in information-processing tasks.

As digital technology moves into increasingly accelerated phases of development, each successive doubling in processing power will increase the number of applications automatic work and,

consequently, human replacement: an increasing proportion of the labour force, including the nominal middle-class demographic, faces 'technological unemployment'.[12]

NeoMarxist ruminations aside, *Saudade se286181.anomalies* seeks to capture a sense of transmogrification, the celebration of one epoch of civilization and the exciting uncertainty of a new one – the pre- and post- digital worlds. This is suggested through the use of knowingly retrogressive instrumentation in Part One, and contemporary DSP in Part Two. A time-stretched field recording of a passing train runs throughout the latter like a sonic spectre; the train tracks are now deserted. The train is accompanied by amorphous, jittery granular textures, sonic signification of perceived unknowability concerning the stochastic multiplicity of future events. Both visual and audio are deliberately 'agnostic' in their aesthetic, their textural patina smeared and blurred, recognizable elements half-glimpsed or heard, poking through a hazy substratum for a brief instant before submerging again.

Further Discussion of Influences/Exposition

As already stated, because Horbury and Ossett train station finally became inoperative in 1970, I aimed to create music utilising instrumentation evocative of this era in British popular music.

For Parts One and Two of my audio score for *Saudade se286181.anomalies*, I have made several sonic allusions to the work of quintessential progressive rock band, Pink Floyd, 1967-75: the years immediately preceding, during and after the closure of Horbury and Ossett train station, and therefore idiomatic of themes in popular music during this era. Part One begins with bucolic field-recorded sound: birdsong and running water. Pink Floyd's 'Cirrus Minor' (1969)[13] begins with a full minute of gently panning birdsong. The Roger Waters composition, 'Grantchester Meadows,' (1969),[14] an evocation of idyllic youthful days spent by the River Cam, begins with the sound of bees, swans and other birds. Almost immediately, a Richard Wright-influenced piano part enters and establishes the cyclic chord sequence for Part One, played using broken chords: F major – B flat major – G minor - C major – C major/B flat bass. At 00:30, an obviously antique sonic signifier, a Mellotron Mark II flute sound (made famous by the Beatles on their 1967 single 'Strawberry Fields Forever') enters. Pink Floyd were actually quite sparing in their use of this iconic tape-based proto-sampling instrument, but a Mellotron Mark II flute sound unmistakably introduces the Roger Waters composition 'Julia Dream' (1969).[15] Fender Precision bass then joins the Mellotron flute.

At approximately 01:03, slide guitar can be heard. This had been played as gently as possible, but is still rather erratic in its pitching due to the limitations of my technique. Slide guitar can be found on numerous Pink Floyd tracks: 'Remember A Day' (1969),[16] 'Echoes' (1971),[17] 'Breathe' (1973),[18] 'See Emily Play' (1967)[19] and 'The Great Gig In The Sky' (1973)[20] contain examples. My slide guitar part has been treated with relatively large amounts of reverb to give it an ethereal 'Pink Floyd' shimmer, a technique used throughout by engineer and producer Alan Parsons on *Dark Side Of The Moon*.[21] At 01:18, gently played MIDI percussion enters, using Native Instruments' 'Abbey Road 60s Drums' package for Kontakt.[22] I have deliberately used this software drumming tool because its featured multisamples were recorded in the studio Pink Floyd favoured throughout their career.[23] Native Instruments claim that the acoustic characteristics of the studio's second room are captured by their samples.

After this pastoral introduction, Part Two enters. Between 01:50 and 02:22. A full drum kit appears, the virtual Wurlitzer and Farfisa organ parts are introduced, and a Telecaster lead line, replete with hammer-on/off trills, muses on a C minor chord. The Wurlitzer 200A nods mainly to Pink Floyd's *Dark Side Of The Moon*, where it is one of the most prominent keyboard instruments throughout the record, The Farfisa Compact Duo organ was Richard Wright's go-to keyboard sound for the first six years of Pink Floyd's career.[23, 24]

There was also a conscious decision not to quantize the drum parts, preserving the rather loose, if sometimes clumsy feel of the improvised percussion. Quantizing would no doubt have improved the USB-MIDI performance from a technical point of view, but it would have removed any traces of human error. Sophisticated 'human feel' MPC machines simply didn't exist in the early 1970s. At 02:22, Colin Crichton's improvised tenor saxophone part, mixed quite high, enters with the introduction of the first G minor chord of Part Two. The piece then vacillates between the chords of G minor and C major, chords chosen because they form an important 'turnaround' in Pink Floyd's 'Shine On You Crazy Diamond', the opening suite of 1975's *Wish You Were Here* album.[25] A single guitar chord, treated with Leslie cabinet/rotary speaker effects, and played using a 'rake' gesture, signals the chord changes. David Gilmour favoured rotary speaker treatments for his guitar on an instrumental piece from *Dark Side Of The Moon*, 'Any Colour You Like'.[26]

The instrumental backing track was fully written before I approached Colin Crichton and asked him if he would be happy to contribute tenor saxophone to the piece. Conversations revealed that he had been studying the production techniques employed by Alan Parsons for *Dark Side…*, and that he enjoyed the

work of Pink Floyd from this era. Having heard his saxophone work on his own compositions, both in the CeReNeM colloquium sessions and online, I had a hunch that he might be able to reproduce the playing style of Dick Parry, Pink Floyd's go-to saxophonist on *Dark Side Of The Moon* and *Wish You Were Here*. He duly obliged, sending me the raw saxophone parts in three different takes. I chose what I subjectively judged to be the most 'Parry-esque' of these performances. My only instructions were that he should attempt to sound as much like Parry as possible – I neither explained the piece, nor the chord structure to him in advance. What you hear is simply one of Crichton's first takes after an hour or so of contemplation.

Part Three, which begins at approximately 03:38, as the saxophone drifts away, does not directly reference Pink Floyd. However, the arrangement, which consists of just piano, Mellotron vibraphone and simulated tape hiss/vinyl crackle, is still subjectively evocative of the late 1960s and early 1970s. The *rondo* chord sequence here is simply C major – A minor – F major – D minor. The G Force M-Tron Pro,[27] has a feature which allows the user to play back the included Mellotron samples at half-speed (and therefore an octave lower), which explains their rather artificial timbre.

Part Three of the audio score accompanies still photos of the subway, the only physical remnant of the station. Even though these are contemporaneous photographs of a now-defunct architectural feature, I have filtered them such that they appear more 'Kodak'-like in appearance: a visual-temporal dislocation, suggesting that the present always carries the past within it. As a counterpart, I wanted the audio score to demonstrate an antique quality, to signify that the subway is a fragment of a lost epoch of civilization. Hollow Sun's Kontakt instrument 'Interference'[28] was used to simulate crackle, vinyl static, and magnetic tape hiss. In many ways, the audio score for *Saudade se286181.anomalies* is concerned with illusion and artifice; the drum kit, organ, electric piano, tape hiss and Mellotron are not real. I consciously set out to see how far such modern confections could be made to sound period-'authentic' within the context of a piece. There is one staggering audio 'anomaly', however: the pad sound which appears at the end of Part Two is derived from a complex additive synthesizer, using over 200 sinusoid partials, that I built myself using Native Instruments' modular environment Reaktor 5. This could never have existed in 1970, and so it constitutes one of the 'anomalies' of the composition as a whole.

In order to create the swirling, amorphous audio textures for Part Two of the images (05:14), I simply ran parts One and Two of the audio score through as many granular DSP units as possible. The percussion parts now appear to 'clatter' in a manner evocative of a train passing over tracks. As already discussed, there is also an actual recording of a train, functioning as a sustained graduated continuant

bass drone, in Part Two of the film (it begins to appear at around 05:37). This was originally a field recording of an actual passenger train, recorded from the location Bridge MVN2/222 (Grid Reference SE2917) in the Addingford area of Horbury. The field recording was then subjected to much the same algorithmic processing as the score parts; Metasynth was used mainly to time-stretch a 30-second recording to a duration of five minutes. The results could then be 'tuned' relative to the granular textures using the *sfplay~* object in Max/MSP. I think of the train as signifying a 'ghost'; the train tracks depicted between 02:54 and 03:10 (which lead to the Calder and Hebble bridge depicted at 03:10) have been bereft of cargo for many years. The train becomes a 'sonic spectre' in Part Two, as if the station is recalling the traffic of its formative existence.

I now wish to discuss the images in a little more detail. Part One of *Saudade se286181.anomalies* contains several painterly stills which appear to be fetishistic close-ups of prosaic elements: a wooden stile which has been rendered multicoloured by the digestive action of microorganisms on its bark (00:36); the same stile covered with spider silk (00:54); a close-up of barbed wire on a fence leading to the now-defunct railway line (01:07); stripy plate fungus resting butterfly-like on a tree trunk (01:32); a sun-dappled wall (02:20); spider silk-encrusted crumbling brickwork (02:46, 02:52) and so forth. The decision to follow this path was influenced by the work of Hungarian director and illustrator Zoltán Husárik (1931-1981). Husárik's 1971 feature *Szindbád* is based on several of surrealist writer Gyula Krúdy's (1878-1933) 'Sindbad' stories, first published in 1911.[29] Krúdy's protagonist takes his nickname from the hero of the famous Middle Eastern 'Arabian Nights' stories, but Krúdy has translocated him to *fin-de-siècle* Hapsburg Hungary and given him a top hat and a cane rather than a turban and scimitar sword.

The first 10 minutes of *Szindbád* are visually stunning, and cast their spell over the viewer entirely through the use of dreamlike, intoxicating imagery. An initially bewildering montage of extreme close-ups of everyday objects is presented. These include pressed and blooming flowers, oil globules floating in clear fluid, a lock of blonde hair, old sepia photographs covered with lace, a sundial, spiders' webs, wooden roof shingle slats dripping with rainwater, tree bark and the glowing embers of a dying fire.[5]

Although *Saudade se286181.anomalies* comes nowhere close to achieving this kind of cinematic artistry, the idea of the fetishized close-up acting as a kind of 'acousmatised image' has been borrowed from this lost classic of Eastern European cinema. Peter Strickland, director of *Berberian Sound Studio*, which I cited as a hauntological influence on *Grandma's House*, has spoken about the influence of *Szindbád* on his own work. He has many interesting observations to make:

'Some of it reminds me of Stan Brakhage or even Jordan Belson in terms of the way he uses light and so on…What was so fascinating about it was this obsession with texture, with objects. In *Szindbád* it's in the foreground. [Husárik] makes [food] look alien. There's this shot with the soup, the globules of oil, and [Sáras's] using a macro lens, and it's like abstract cinema. You have this psychedelic montage of images, but they take on this emotional resonance. There's this great sadness, this nostalgia for something which probably never existed. It moves almost like a tapestry, it moves in terms of themes or even colours [rather than time]...'[6]

Peter Strickland, interviewed by Lucy Kaye for the Second Run DVD of *Szindbád,* 2011. All parentheses are mine.

Interestingly, Strickland mentions the work of Stan Brakhage and Jordan Belson, two experimental filmmakers who have had an influence on the final videomusic piece in my portfolio, *The Bay Faeries* (2013).

Part One of *Saudade se286181.anomalies* also makes extensive use of Photoshop manipulation and a third-party plug-in effect, JixiPix Moku Hanga 1.0. Some of the photographs have not been extensively retouched; I have simply enhanced the vibrancy of natural colours already present. Other still images are more obviously post-processed. The 'industrial' sequence which accompanies the more aggressive, Wurlitzer-driven Pink Floyd pastiche, beginning at 01:50 and ending at 03:38 approximately, is a montage of stills treated with Moku Hanga, a plug-in which gives surfaces a stark, thick dark outline. The plug-in is meant to impart a certain kind of Japanese woodblock printing effect to one's images,[30] but it subjectively reminds me of the signature characteristics of those German Expressionists belonging to the 'Bridge' group (die Brücke): the group counted Erich Heckel, Ernst Ludwig Kirchner and Otto Mueller amongst its members.[31] I felt that the stark black outlines emphasized the man-made angularity of the huge corrugated steel structures featured in this montage, and contrasted well with the more pastoral montage immediately preceding.

Part One of *Saudade se286181.anomalies* also includes elements of 'aesthetic syncresis'. Part One of the audio score, which is pastoral in nature with its emphasis on piano, flute and slide guitar, is accompanied mostly by shots of the River Calder, and organic/arboreal forms (fungi, trees, human-made objects constructed from timber). Part Two of the audio score is more aggressive in its use of percussion, the bass is denser, and the abrupt transients of the Wurtlitzer cut through the mix; this is coupled with scenes of a more industrial nature (and the accompanying stills are more obviously processed). Part Three of the audio score makes use of nostalgic sonic signifiers, and is accompanied by contemporaneous shots of the subway as it is being reclaimed by nature, except that these stills have been artificially aged: temporality is de-linearized, and simultaneous time-zones suggested.

Part Two of *Saudade se286181.anomalies* is, by its very nature, possibly more ambiguous in terms of interpretation. I was trying to create a sense of the station 'dying' and reflecting upon its 'life'. I decided to do this by taking 42 separate stills of the subway and the surrounding locale, all of which have already been seen by this point in the film, and stack them vertically in Apple's Final Cut NLE. The opacity level of each image layer could then be turned up or down over time, with some layers becoming more prominent at certain points on the timeline, others receding into the background. The basic inspiration for this idea came from watching a videomusic performance hosted in Phipps Hall, Creative Arts Building, University of Huddersfield by guest artist Peter Hölscher at 2012's 'Electric Spring' festival.[32] In collaboration with electroacoustic sound artist Michael Rüsenberg, Hölscher produced >>…<<*the cragged version 3.5*, a study of works by British sculptor Tony Cragg, as exhibited in his sculpture park in Waldfrieden, Wuppertal, Germany. Whilst Rüsenberg's audio contained samples taken from the park and from the sculptor's personal workshop, Hölscher's visuals carried evidence of his 'signature' techniques, what he calls 'liquid photographs'. Motion blurs are used whilst shooting on location, and up to six superimposed photographs might be presented at any given time. The overall effect was of a 'melting painting', a 'visual acousmaticism' in which the final outcome betrayed very little information about how the images might have been produced.[33]

Further Points of Interest

I noted in my introduction that *Saudade se286181.anomalies* is a psychogeographical piece. Psychogeography has flourished in Britain over the last few decades since it was first brought to attention by the Situationists of the 1950s such as Guy Debord.[39] It has links to hauntology in that it concerns itself with a form of alternative heritage. Iain Sinclair is perhaps one of the best-known psychogeographical writers; he documents certain 'off the beaten track' walks around London. Often these walks investigate occult traces and other little-known phenomena, the culmination of which is the construction of a hidden history of the capital. One such work is 2003's *London Orbital*,[40] a book related to a 2002 documentary of the same name that Sinclair made with Christopher Petit.[41]

Psychogeography often focuses around the concept of *dérive*, a kind of aimless drifting through urban space accompanied by a conscious effort to refuse the 'prescribed' routes of urban planning. Andrew Burke has noted that Sinclair, Shena Mackay, Chris Petit, and Patrick Keiller (who made static-frame explorations of England on film such as *London* (1994)[42]) are all attempting to excavate a 'secret history

of London' whilst championing 'the value of neglected spaces and disappearing forms of modern life'.[43]

It is possible to walk past the crumbling, ivy-covered subway of the former Horbury and Ossett railway station without ever knowing it was once an active part of the community. Indeed, given the site's appearance today, it might even be difficult for the uninitiated to divine what it actually *was* only 43 years ago, because the rail tracks that used to run across it are no longer in use. It was built in 1840; what it might have represented in the minds of local residents then – a structure symbolizing and heralding the perceived 'magic' of fossil fuel-powered high-speed transport – is, increasingly, a spectral representation, an after-image of a lost epoch of civilization. It forms part of my home town's increasingly-forgotten alternative heritage. The 'true-but-lost' purpose of architectural features in urban space is at the heart of psychogeography; only those old enough to have been there will retain the memory of what these things once were; when these people have died, only those prepared to do a little detective work will be able to decipher the 'hidden map' of urban spaces. *Saudade se286181.anomalies* is my own - very modest - contribution to this field.

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The Bay Faeries (16:34) 2013

Introduction

Of all the spectres that can haunt us, supernatural or otherwise, it is our own private experiential memories that can be the most powerful, but also tantalisingly elusive. We live in an age of rhizomatic hyperlinks, instant information gratification, on-tap image-based nostalgia, and sharing. Private experiential memories are un-shareable. The 'videomusic' piece that rolls exclusively in one's own mind cannot even be converted into the correct codec, let alone uploaded.

The Bay Faeries investigates private experiential memory, concerning itself with what has become known as Proust's 'madeleine cake'. *Remembrance of Things Past* (*À La Recherche du Temps Perdu*) is an epic novel in seven volumes by Marcel Proust (1871–1922), originally published in France between 1913 and 1927. Volume One of the work, *Du côté de chez Swann*[1] (*Swann's Way*), has become widely celebrated for an incident in which the Narrator has an unforeseeable private revelation. The nameless Narrator has only one sole memory of his early childhood in his family's country home, until a chance event many years later – the taste of a madeleine cake dipped in tea – unlocks one, and then a chain of repressed memories concerning his childhood in the semi-fictional town of Combray.

Proust's Narrator experiences an episode of 'involuntary autobiographical memory', a subclass of memory that occurs when exogenous stimuli encountered provoke recollections of the past without any conscious effort. Its antithesis, voluntary memory, is characterised by a deliberate effort to recall past experiences.

Robin Hood's Bay, a small fishing village and tourist destination which lies on the East Coast of England, between Whitby and Scarborough in North Yorkshire, is my Proustian 'madeleine cake'. All my life, I had been plagued by the memories of a place with narrow cobbled streets, wrought-iron gates, arched doorways, goblins, and verdant gardens. I also saw a beach covered with repulsive dark forms. These memories felt experiential to me, and yet were so diaphanous that they could have been dreams. I assumed such visions must come from the very margins of my conscious life, possibly the recollections of an infant-self. The memories haunted me for some 30 years, until I visited Robin Hood's Bay for what I assumed was the first time in autumn 2008. I was shocked as I explored the Bay: I subliminally recognised the topology of the village. I 'knew' what would be at the end of any

particular cobbled street, or how many bifurcations any particular walkway would take. I had been here before; it was the place of my real/virtual memories, and the ghost was finally exorcised. My grandmother confirmed that I had visited the Bay in 1975 or 1976 with my parents (I was born in 1973).

I have thus attempted to make an audiovisual document that captures some 'essence' of the way that a young infant might apprehend the area. I found an online interview with influential filmmaker Stan Brakhage (1933-2003).[2] One of his remarks struck me as particularly intriguing:

For me, vision is what you see, to the least extent related to picture. It is just seeing – it is a very simple word – and to be a visionary is to be a seer. The problem is that most people can't see. Children can – they have a much wider range of visual awareness – because their eyes haven't been tutored to death by man-made laws of perspective or compositional logic…This simple idea seems to be the hardest to get through to people.

- Stan Brakhage, interviewed by Suranjan Ganguly for *Sight and Sound* magazine, 1993.

This view seemed to encapsulate my sentiments. An investigation of the life and work of Brakhage has informed at least part of *The Bay Faeries*.

Other considerations abound. The audio score for the piece makes extensive use of field recordings, and so discussion of the score should include some discourse on the subject of acoustic ecology, especially with respect to the 'honesty' of the material. The viewer sees photographic evidence of the area where these field recordings were made – the jetty area around the cobbled slipway known as Wayfoot.[3] There is evidence of human activity – trawlers, fishing baskets, a public house, shop front windows – and yet, no actual people are depicted visually; we can only infer their presence from the schizophonic audio material. The disembodied voices therefore resemble audio *spectres*.

The title of the piece is a pun on the title of the printed parish magazine for the area, which mainly reports minor incidents and acts as an advertising space for local businesses – *Bayfair*.[4]

Further Discussion

The piece does not shy away from having a nonlinear narrative arc. *The Bay Faeries* can be seen as a phantasmagorical, protean journey through the area of Robin Hood's Bay, perhaps over the course of 24 hours, by an observer who is engaged in the process of forming 'sense impressions' of their

immediate surroundings. In this respect, it is an audiovisual travelogue, but it is nonlinear both because interim journeys between immediate scenes are largely undocumented, and, within any given section, different temporal zones or place zones might be conflagrated by juxtaposition. Nonetheless, it is not too problematic to declare that some observers might deduce the following broad narrative trajectory:

Part One (00:16–02:54). The 'observer' takes in the sights and sounds of New Road, encompassing Wayfoot, the public house and shops a little further up, gardens and houses of local residents, the beached fishing trawlers, and finally the memorial stone at the top of New Road. The sonic world is dominated by the vocalisations of fellow tourists.

Part Two (02:54–03:36). Our observer takes a brief walk along the coastline. The sound world becomes less densely populated, consisting mostly of footsteps on gravel.

Part Three (03:36–04:35). Our observer re-enters the narrow, cobbled, partially covered alleyways of the village; nearby, they begin to hear the brook babbling. Night falls over the silhouetted rooftops of the Bay houses.

Part Four (04:35–06:40). Inexplicably, the observer enters a dreamy reverie, apparently whilst in the cavity of Boggle Hole cave – although this lies some considerable distance from the village. Perhaps this is a recollection. However, time appears to be behaving contiguously, as the sky above the beach horizon does indeed show that night has fallen. 'Installation' screens inside the cave display mysterious mannequin countenances lit by street lamps. The audio cues, too, seem disjointed – if we are 'in' the cave, why can we hear spectral traces of the children we heard earlier whilst we were on New Road, or the continued babbling of the beck?

Part Five (6:40–08:24). The observer is excised from this 'internalised' environment and thrown back towards daylight. He/she apprehends that they are near the sea, and yet the sea is somehow approached from multiple vantage points. A maritime presence is sonically represented by a low, ominous drone, and the wind chime-like emissions of a bell tree; the drone is suggestive of unfathomable depth, the bell tree of fluid forces producing kinetic motion.

Part Six (08:24–12:50). The observer countenances the strange magic of the sea directly. Grotesque organic forms writhe and churn in two and three-dimensional space, seeming to have the characteristics of both plants and animals. Numerous superimpositions of the beach skyline and the sea

in motion overlap. Sea birds appear and leave visual traces behind through linear time. Visceral bursts of supersaturated colour form overlapping juxtapositions of shape, hue and texture. The bass drone has swollen in vertical texture, and begins to pulse erratically. Sea birds squall and swoop, waves crash against rocks. A harp plays a simple ascending melody. The sustained drone seems to spit and growl, throwing up flecks of sizzling high-frequency sonic energy.

Part Seven (12:50–14:40). The observer seems to be in a liminal space; the abstractions of the 'sea section' give way gradually to the familiar, the human-made – gardens, houses, stacked firewood. The sustained drone slowly begins to fade; a human voice announces that the observer is back on *terra firma*; the chimes reappear, as if blown by a coastal wind. Yet the observer can still hear the sea, calmer now.

Part Eight (14:40–16:34): The observer enters a florid, verdant hyper-real space in which ornamental fairies, owls, starfish and other curiosities appear to have been surreally divorced from their previous context, appearing not in the tourist trap of the streets, but rather amidst the gardens and window boxes of cottages. Although the observer is in these fantastic garden spaces, the sea is still audible, forming a constant bed punctured by music-box sounds and time-reversed, legato ambiences. It is as if the sea has visited these gardens and spread its occult ozone spirit around, liberating these inert marionettes from their pedestrian 'lives' as souvenir trinkets.

This is how I would respond if asked to describe the narrative arc of the piece. What is important, I feel, is that the piece exhibits a narrative trajectory when considered holistically, and yet contains within it sufficient dislocations of physical space and temporality, as well as breaking cause/effect associations between sound and image, to be considered non-narrative on a micro level.

Some Acoustic Considerations

In the first three minutes of the piece, one is presented with the acoustic ecology of the Wayfoot area of the resort. It might seem as if one is listening to an unadulterated, purely documentary piece of audio; one continuous WAV file recorded from one particular point in the Bay, my bench outside Cromwell's gift shop. Nothing could be further from the truth – the first three minutes of the soundscape are an audio illusion, an artifice as elaborate as the hand-crafted confectionery that can be seen in the sweet shop window at 00:45.

Hildegard Westerkamp (b. 1946) is a soundscape artist who, after her undergraduate studies at the University of British Columbia, was an early and influential member of the Vancouver-based World Soundscape Project, working as a research associate with R. Murray Schafer at Simon Fraser University (1973–1980). In her seminal 1989 piece *Kits Beach Soundwalk*,[5,6] she narrates a January morning 'soundwalk' across Kits Beach in Vancouver. Westerkamp loses no time in debunking the myth of 'purity' in acoustic ecology. Like Dorothy in Fleming's *The Wizard of Oz* (1939), she pulls back the curtain to reveal that the 'wizard' is no more than an expression of technological sleight-of-hand. Her calm narration invites the listener to link arms with her as she unashamedly walks them through the artifice:

'…I could shock you or fool you by saying that the soundscape is *this* loud…but is more like *this*. The view is beautiful. In fact, it is spectacular, so the sound level seems more like *this*…it doesn't seem that loud. But I'm trying to listen to those tiny sounds in more detail now. Suddenly the background sound of the city seems louder again. It *interferes* with my listening. It occupies all acoustic space, and I can't hear the barnacles, in all their tiny-ness. It seems too much effort to filter the city out…luckily, we have band-pass filters and equalizers. We can just go into the studio, and get rid of the city. Pretend it's not there. Pretend we are somewhere…far *away*.' (Emphasis is mine).

-Westerkamp's narration, transcribed from *Kits Beach Soundwalk*, 1989.[5,6]

Westerkamp turns the overall dB level of the soundscape up and down to illustrate her first point, and replaces the initial soundscape recording with a studio 'cleanup' of the barnacle sounds, their high frequency content enhanced, to illustrate her second. As she narrates, she exposes the artifice of her own soundscape in 'real time' (from the listener's perspective). I have taken a completely antithetical stance in the first three minutes of *The Bay Faeries*: I leave the listener uninformed of my artifice; I want them to be seduced by the illusion that they're hearing one unadulterated documentary recording, an aural 'photograph' of one location in real time. In reality, the soundscape actually comprises seven layers of audio, and the Bay was considerably less gregarious than portrayed. Furthermore, temporality has been rearranged: the main file of the piece, which included most of the human vocalisation sounds, had an original duration of 15 minutes. I segmented this into five equal three-minute snapshots. The snapshots were then vertically layered – five concurrent, but staggered, 'time slices'. Two further files were layered into the piece – audio postcards from the garden area at High Sea View cottage, in which distant tidal crashings commingle with birdsong and the footsteps of passers-by. This is all far from the notion of acoustic ecology as 'unmassaged documentary photograph': we are presented with a montage of temporal/spatial illusion.

Francisco López (b. 1964) rejects the idea that even the simplest linear sound recording can ever be purely representational, arguing instead that the very act of recording a sonic environment is creative.[7] López discusses what he calls the 'illusion of realism' in environmental recordings. He begins with the microphone itself, a 'non-neutral interface' – the very choice of microphone used will colour the sound matter. Additionally, the sound artist has already made an editing decision by choosing microphone locus, degree of omnidirectionality, and by framing the recording in the choice of entry and exit points. Thus the lack of 'true sonic realism' in the soundscape that introduces *The Bay Faeries* would not, for López, be problematic; he would argue that the artifice began the moment I chose an appropriate spot to lay down my microphone and press 'record'.

The images accompanying the soundscape depict no people, only the environment that people *might* have occupied as the recording was being made. This has the instant effect of acousmatizing the human vocalisations, encouraging the user to engage in profound listening. It also encourages the viewer to think of this human-made place as a complete (a)biotic environment. Because the images focus mainly on general topology, perhaps the listener/viewer is subconsciously nudged towards a consideration of how the presented sound world includes not just active human vocalisations or movements but also how these sounds are shaped by reflections from local architecture. Finally, I would argue that the visual absence of people during the first three minutes of *The Bay Faeries* suggests that their audio presence is a 'ghost' or haunting spectre, rather akin to the sounds that the protagonist of J.G. Ballard's short story *The Sound-Sweep* (1960) must remove from the environment by 'vacuuming' them up.[8]

The sound world of Part One also blurs the boundaries of Chion's most celebrated divisions for film sound – the diegetic and non-diegetic.[9] The sounds we hear – human voices, reflections from stone, footsteps, an aeroplane – are diegetic in the sense that they do indeed have their origin in the image-world depicted, and yet because there is no obvious depiction of a proximate mechanism for their production, they are simultaneously non-diegetic – the sounds are not obviously emanating from the world of the film. They are, instead, semi-diegetic: the viewer may use his or her cognition to unite location with sound retroactively; however, the film itself is not *instructing* the viewer to do this: the viewer meets the film halfway.

Parts Two and Three of the audio score have a largely narrative function, following our observer's 'journey'.

Part Four is concerned with spectral memories. The observer appears to be in a fantastic, surreal space: the interior of Boggle Hole Cave, overlooking the sea's horizon. However, rather than apprehending the sea, the observer hears wind, the churning of the beck in the village, and the electroacoustically-manipulated sounds of what appear to be children's voices. The representational mapping between visual and sonic has again been broken, and the sounds are perhaps more suggestive of the observer entering a nocturnal reverie, reminiscing on the sounds heard that day. Again, personal interpretations are subjective.

It occurred to me that a conceptually interesting angle might be to dynamically filter the sounds of the beck with still images taken directly from Robin Hood's Bay itself. In this way, a direct mapping between sonic and visual source material could be achieved. I simply ensured that Metasynth's Image Filter's workspace was set to stereo, imported my beck sounds, and then imported a still image –a shot of the beck – and allowed pixel information to control band-pass filtering of the sound over time. Some of the more dramatic filter sweeps heard in Part Four were created in this manner. In addition, audio recordings first heard in Part One were treated with ina-GRM's 'Evolution' spectral-freezing toolkit to yield ghostly voices.

At the beginning of Part Five (06:41), a mid-low frequency sustained tone can be heard to emerge. This acts as a bass drone, a bed underpinning all the musical material of Parts Five and Six. This electroacoustic texture has actually been derived directly from a recording of waves crashing into the Bay at Wayfoot.

Arne Nordheim's (1931-2010) Nordheim's *Solitaire* (1968),[10] and his other electroacoustic works from the same period such as *Pace* (1968) and *Colorazione* (1970), some of which were realised at the Polish Studio Eksperymentalne in Warsaw, have actually exerted a wider influence on the global form of *The Bay Faeries*, as they tend to move through a succession of pseudo-symphonic 'movements'. To a certain extent, this was how I envisaged the score for *The Bay Faeries*; as a kind of journey through electronic sound, a fantastic soundwalk in which many of the sonorities encountered would be derived from sources collected on-site. I began with the sea itself, bringing a 10-minute recording of the waves as they smashed against the cobblestones of the slipway into Metasynth's 'Spectrum Synth' room. Spectrum synthesis is one of Metasynth's most powerful features. It uses high-resolution frequency analysis to construct a series of spectrum events by analysing 'windows' of a recorded sound using Fast Fourier Transformation (FFT). Each spectrum event is depicted as a pattern of horizontal lines that represent the event's sinusoidal partials. The brightness of a line represents the amplitude of that

partial.[11] Partials can also be erased, and this is what I did with the recording of the sea's waves; I used the requisite tool to remove most of the higher partials from the recording, leaving a low drone. The pitch of this drone was further quantised in Metasynth's 'Image Synth' room, to yield an electronic timbre derived from a real sound source. I decided that this would become the basis of the piece. After some consideration, I decided that I would build the music around a single chord, as I did with *Eight-eighty*; I chose an Am^9, as I like the subjective melancholia and mystery of minor ninths. The register was determined by what I perceived to be a fundamental frequency corresponding to a concert-pitch 'A' in the initial drone.

Several of the other synthetic, pad-like textures heard during Part Six of *The Bay Faeries* were created from recordings of the sea using Metasynth's 'Image Synth Room'.[11] A 'pixel map' image of the original WAV file is generated using FFT. Metasynth then remaps pixel position to a predefined frequency chart, yielding an interesting 'hybrid' electronic texture which has the dynamic characteristics of the original sound file, yet which carries the timbre of whatever synthesizer (FM, Wavetable etc.) has been chosen from Metasynth's instrument palette. This facilitated the generation of many electronic textures.

A number of 'real' and 'virtual' instruments have been added to Parts Six and Seven. An Epiphone Casino was played with a glass bottleneck slide, high up on the strings near the pickups, with a gesture which involved moving the slide back towards the neck of the instrument, to produce swooping glissandi mimetic of seagull calls. The guitar can be heard at approximately 10:00. Spitfire Audio's 'Skaila Kanga' Orchestral Harp instrument for NI's Kontakt sampler, played via USB-MIDI using a 'bisbigliando' setting, has been added.[12] A simple monophonic melody spanning a single octave (A – B – C – E – A) is employed.

A harp was chosen as a sonic signifier. Many stories from human myth and folklore have alluded to connections between harps (or their ancestral lyres) and the sea. According to Finnish folklore, the first harp was constructed by the god Wainamoinen from the bones of a fish. The Norse god Odin was said to spend his nights deep in the oceans, playing a harp.[13] Apollonius Rhodius's third century BC text, the *Argonautica*, tells the story of how Orpheus played his lyre and sang to Sirens, confusing them and preventing the Argo and its crew from death by shipwreck.[13, 14, 15] Further examples of stringed instruments being used as 'tender traps' can be cited in visual art; the Pre-Raphaelite-influenced English painter John William Waterhouse (1849 – 1917) also depicted a Siren, lyre in hand, dispassionately staring down at a shipwrecked sailor in his 1900 canvas *The Siren*.[16]

I wanted Part Six, in particular, to convey the power, inscrutable profundity and mystery of the ocean. I found that the addition of four layers of analogue synthesizer-derived tones helped me to achieve this. Arturia's single-oscillator monophonic Minibrute was employed for the realization. I discovered that by selecting a randomly-stepping 'Sample and Hold' waveshape for the LFO, and setting it to a high cycling rate to modulate the cut-off point of the low-pass resonant filter, I could create restless, constantly-moving timbral shifts in a low-frequency sustained tone, a sonic ideogram of continuous oceanic flux (listening from 09:35 should help to clarify my intention). Interesting timbres could be derived from pushing the resonance control of the -12 db/octave filter to high levels, causing the filter to self-oscillate: when the cut-off point of the filter was manually raised periodically, sudden 'shrieks' emanated.

Part Seven represents a moving away from the ocean and a return to shore. Here I briefly introduce the sound of my own voice, using a falsetto 'head voice' technique, perhaps an unconscious move on my part to represent the sound of Sirens (13:38). This is immediately succeeded by the return of real bell tree sonorities (14:00) first introduced in Part Five, perhaps to suggest the kinetic action of gentle coastal breezes on wind chimes outside seaside cottages – a narrative element.

Finally, in Part Eight, the 'magical realism' section of the piece, I have used sounds derived from a music box, in an attempt to conjure a childlike sense of wonder (anecdotally, the sound of music boxes has been associated with childhood since they were introduced in the 1800s). Music boxes such as the Polyphone and the Symphonion were popular in the 19th century and mass-produced descendants continue to be popular today.[17,18] Inspiration also came from Rebecca Saunders site-specific composition *chroma* (2003-10) when I saw it performed by musikFabrik at Huddersfield Town Hall during the 2010 Huddersfield Contemporary Music Festival. *Chroma* makes use of many amassed music boxes to form a dense, pointillist 'sound surface' against which other aspects of the composition are juxtaposed.[19] I also count the 14-track EP by Colleen (Cécile Schott), *Colleen et les Boîtes à Musique* (2006) amongst my influences (13 of the EP's 14 tracks have been generated by electroacoustic manipulation of antique music boxes).[20] Manipulation of the music box timbres used in *The Bay Faeries* was achieved using Ircam's FTM extension suite for Max 5 (the untreated sound struck me as a little *too* twee, even for fairies).

I first heard Natasha Barrett's piece *Mobilis in Mobili* (2006) during an evening at Phipps Concert Hall, CeReNeM, November 24th 2010, at a hcmf// concert held to mark the 20th anniversary of the

foundation of Canadian label Empreintes Digitales.[21] *Mobilis in Mobili* takes its name from a chapter in Jules Verne's *Vingt mille lieues sous les mers* (1869), and the piece forms the central axis of a larger suite, Barrett's *Trade Winds* (2004–2006).[22] I found *Mobilis in Mobili* inspirational: crashing waves, harbour sounds, seagulls, the creaking of a ship's wooden hull, and fragments of sea shanties appear to be juxtaposed with more acousmatic microsounds exploring spectromorphological minutiae. Although it has not exerted a direct influence on *The Bay Faeries*, I feel that hearing *Mobilis in Mobili* has given me the confidence to realize a piece also based (albeit more loosely) on a maritime/nautical theme. The following statement in relation to *Trade Winds* can be found on Barrett's website:

'The ocean's physical nature, mystery, drama, mythology and concept have inspired art and culture throughout history and throughout the world…The music takes the listener on a journey from culture into nature, through storm, fables, ugliness and beauty in a way unheard before.'

-Archive from Natasha Barrett's official webpage, http://www.natashabarrett.org/tw.html

It was sentiments very similar to these that were at the forefront of my mind when I ventured to the Bay in November 2012.

Some Visual Considerations

A key intention with the images was for their use and treatment to mirror characteristics of the audio score. Part One of the piece features no electroacoustic audio post-processing (beyond basic editing), and so it was postulated that this section would work well if the images were presented in a relatively unadulterated, mostly figurative way. As the audio score became subject to more sophisticated DSP transformations in later sections, this shift in sonic strategy could be echoed by a gradual move away from the purely representational towards more abstract treatments in the visual domain.

The final piece adheres largely to this basic template. However, although Part One of the piece does (mostly) make use of purely representational photographs, some caveats need to be put in place. For the late essayist Susan Sontag (1933-2004), the simplest Polaroid snapshot photograph is in itself a 'Surreal' object. In her essay collection *On Photography* (1977),[23] she argues that, 'the photographers* who concentrated on interfering with the supposedly superficial realism of the photograph were those who most narrowly conveyed photography's surreal properties'.

*Sontag mentions the solarised treatments of Man Ray, *On Photography*, pp. 52.

For Sontag, every photograph is a surreal object because of its 'irrefutable pathos as a message from time past', and the camera 'makes everyone a tourist in other people's reality, and eventually in one's own'. There is some critique here of the Surrealist movement as a bourgeois affectation, an unnecessary layer of abstraction on top of what is already a Surrealist art form. Sontag points to the work of gentleman *flâneur* Eugène Atget (1857-1927), whose depictions of a twilight Paris – its shop windows, shabby street markets and prostitutes – were never intended to be 'art' but merely documents of a 'disappearing' city prior to extensive modernization. Sontag writes, 'in modern society, a discontent with reality expresses itself forcefully and most hauntingly with a desire to reproduce *this* [world]. As if only by looking at reality in the form of an object – through the fix of a photograph – is it really real, that is, surreal'.

If I agree with Sontag's views on the intrinsic, 'genuinely' surrealist quality of unadulterated still images – and, by and large, I do (incidentally, Sontag's ponderings seem equally relevant when applied to *saudade se286181.anomalies*)– then why, by the ninth minute of *The Bay Faeries*, have I even bothered to move towards greater abstraction, especially in my treatment of the organic, biotic forms depicted? I would refer the reader to the Stan Brakhage quote earlier regarding childhood as being the only time in our brief lives where we can 'see' clearly, before human-made laws of compositional logic have sprung the urge to categorically *classify*. For my infant self, seaweed did not yet fit into any human-made phylogenetic, cladistic lineage. I simply *saw* it, without attempting to divine its identity, because I had no externally-imposed need to. By photographing seaweed forms in macro, translucently superimposing several photographs, and then mirror-imaging the resulting forms, I am attempting to decategorize the things depicted as 'seaweed'. Mirror-imaging techniques seemed particularly effective in this regard, as seaweed exhibits little bilateral symmetry. The resulting forms seem alien, more like diatomic structures one would observe with a light microscope. It is in Part Six of the piece that I come closest to the 'Brakhagean' ideal:

'Imagine an eye unruled by man-made laws of perspective, an eye unprejudiced by compositional logic, and eye which does not respond to the name of everything but which must know each object encountered in life through an adventure of perception. How many colors are there in a field of grass to the crawling baby unaware of 'green'? How many rainbows can light create for the untutored eye? Imagine a world alive with incomprehensible objects, and shimmering with an endless variety of movement and innumerable gradations of color. Imagine a world before the "beginning was the word".'

 - Stan Brakhage, *From Metaphors on Vision*, 1963[24]

Many critics consider *Dog Star Man* (1961-64) to be Brakhage's masterpiece.[28] This was a breakthrough in that it saw Brakhage begin to experiment with techniques that have subsequently become part of the *lingua franca* of avant-garde cinema. Multiple superimpositions, jittery hand-held camera work, time-lapse film, use of monochromatic filters, anamorphic lens distortions, negatives, use of extremely dark or light exposures, extreme soft-focus, varispeed film, extreme close-ups, rapid cutting, extensive zoom shots, the insertion of tiny images into the filmstrip and the use of unusual POV camera angles can all be seen at work – indeed, often within the same shot. [25 - 30]

Brakhage's influence begins to be felt from Part Two onwards in *The Bay Faeries*. Simulated anamorphic lens distortions occur at 07:32, (top right hand corner), 08:08 (bottom right hand corner), 11:18 (right panel) and 11:33 (top middle panel). Multiple superimpositions are seen throughout. Jittery hand-held camera work is simulated at 6:42 (middle panel). An extreme close-up of seaweed, moving in its own three-dimensional virtual space, enters the frame between 10:45 and 11:17. A recursive, zooming shot of seabirds on water occurs at 11:47. Between 08:46 and 10:01, a very rapidly cut, high-exposure montage of the sea enters and illuminates the whole frame. Numerous colour-altering filters are obviously used throughout. Extensive use has been made of multiple inset micro-vignettes: many may be presented simultaneously. This has the effect of creating a sense that each micro-vignette is operating within its own discrete spatiotemporal domain. The simultaneous presentation of several makes it very difficult for the viewer to apprehend everything that might be occurring on a moment-to-moment basis, creating conditions for visual sensory overload.

Brakhage eventually rejected narrative altogether, and achieved this most eloquently through his use of 'cameraless film' techniques. In *The Garden of Earthly Delights* (1981), he collaged montane zone vegetation directly onto perforated tape the same width as 35mm film, from which projectable prints were made.[27] The film is a triptych – the background panel changes from black to white to black again – in homage to Hieronymous Bosch's (*circa* 1500) painting of the same name, although the piece is also an argument with Bosch; Brakhage felt that Bosch had rendered nature 'too puffy and sweet'.[31, 32] Seeing *The Garden of Earthly Delights* inspired me to focus on distortions of seaweed forms in Part Six of *The Bay Faeries*.

Brakhage eschewed the camera altogether, painting, drawing or scratching onto the celluloid directly, to approximate a cinematic representation of hypnagogic (closed-eye) vision, which is characterized by the appearance of phosphenes. It should be pointed out that 'cameraless film' techniques were not 'invented' by Brakhage – the Futurists, Man Ray, Harry Smith and Len Lye were all exploring similar

ideas before him. Contemporary practitioners Amy Granat, Ian Helliwell, Emmanuel Lefrant and Jennifer Reeves are all producing astonishing work in this field.[33]

It is the 'look' of Brakhage's hand-painted films – particularly *Delicacies of Molten Horror Synapse* (1991),[34] or *The Dante Quartet* (1987)[35] that I have intentionally echoed in a sequence that enters the frame at 09:42 (top middle panel). Here, I digitally attempt to re-create the 'brutal assaults on the nerve ends' that Brakhage referred to with respect to these films,[27] by rapidly cutting between ambiguous seaweed-derived forms. Occasionally, a recognizable element will emerge from the visceral mass, only to disappear before it can be fully processed.

Anyone familiar with Brakhage's work will spot an immediate paradox in citing him as an influence. Most of his work was silent; Brakhage felt that the addition of audio was a distraction from the internal visual rhythms of his work. *The Bay Faeries* is, in part, an experiment to ascertain whether Brakhagean imagery can be synergized with audio content successfully.

Late on in the project, I discovered the films of Jordan Belson (1926-2011).[36 - 41] One micro-vignette in *The Bay Faeries* resembles, to a certain extent, a figure in a Belson film: an incandescent tunnel which seems to be a pure study in shimmering light. It first appears at 10:17, in the top right-hand corner of the frame, and appears again, superimposed with itself, at 10:35. Inspiration for its creation came from viewing a short excerpt from Belson's *World* (1970), online.[37] The image was actually created from manipulations of still photographs of wet beach pebbles glinting in the evening sun.

Ironically, having talked at such length about non-narrative film as sources of inspiration, it was one of the earliest known narrative films that provided inspiration for the visual aesthetic of Part Eight. 2010 saw the re-release of George Méliès's iconic *Le Voyage dans la lune* (1902), almost certainly the first piece of cinema to bring fantastic theatricality to celluloid.[42] The restored film – originally silent – features a contemporary soundtrack by the 'new-progressive' French electronic/rock band AIR.[43]

What appeals to me about Méliès's films is the overt 'magic lantern' quality of his productions, achieved by juxtaposing real actors with mechanical props and cardboard hand-painted set pieces. The worlds Méliès created were intended to be hyper-real, like moving paintings imbued with the glamour of theatre. The hand-painted set pieces of *Le Voyage dans la lune* and an equally lavish successor, 1903's *Le royaume des fées* (The Kingdom Of Faries),[43] have an intentionally superimposed bas-relief quality. In

Part Eight of *The Bay Faeries*, in an attempt to create scenes evocative of childlike make-believe, I aimed to achieve a similar (if more lurid) aesthetic.

Finally: the owl question. Keen-eyed friends have spotted that both *Grandma's House* and *The Bay Faeries* end with depictions of owls. By happy accident, the owl acts as another node in my rhizome. In *Grandma's House*, the owl acts as a piece of symbolism (the folkloric wisdom of age). Stan Brakhage, an influence on *The Bay Faeries*, produced a film named after a Hieronymous Bosch painting, *The Garden of Earthly Delights*. The latter is a triptych, the middle panel of which is flanked by two…*owls*. Hopefully, over the course of these essays, I have demonstrated that my portfolio is full of such horizontal, rhizomatic connections between cultural memes or nodal intersection points.

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Concluding Remarks

This project has been rather broad in its remit, and several possible avenues of interest now present themselves as possible subjects for further investigation. In particular, I am keen to explore non-representational film forms, and possibly 'cameraless film' techniques. I have also begun researching experiments in electronic music in early 20th century Russia in more depth. It also occurs to me that the wider subject of hauntology has yet to be comprehensively explored in the academic domain. There is certainly no shortage of possible directions to take in the future.