Vowels in Retrograde: Exploring Physical and Non-Physical Environments through Extended Vocal Techniques

by

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School of Higher Education
Box Hill Institute

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Abstract

This research explores how physical and non-physical environments influence creative practice using *Extended Vocal Techniques* (EVT) and *Throat-Singing Techniques* (TST) and how they may be used to build surround sound sonic environments for performance. Building upon my ongoing exploration of EVT, I investigate the integration of technologies with throat-singing to expand the practice; the impact of location on performance, improvisation, and composition; and compose new works. Four long form works for live performance by EVT practitioners and 46 composition experiments exploring the impact of physical and non-physical locations on my creative practice are documented through audio-visual media, audio recordings, written journal, and discussion of this process. The main pieces were presented at a live performance called *Vowels in Retrograde*. They were staged in a ritualistic context as a multisensory experience in a quadrophonic environment. The works explored time, location, agency and control, ritual, and mental health. EVT go beyond the scope of Western classical singing aesthetics. They include reinforced overtone-singing and undertone-singing, Sprechstimme, and ingressive phonation among others (Edgerton, 2014).

Key words: throat-singing; extended vocal techniques; spatial music; vocal exploration; electroacoustic effects.

Acknowledgments

I would like to acknowledge the traditional owners of the land on which I have conducted this study and pay my respect to the Elders both past and present of the Great Kulin Nation and the peoples of the Wurrundjeri Woi Wurrong. Sovereignty was never ceded.

It takes a village to raise a child.

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Chapter 1
The Beginning

1 Introduction

Extended Vocal Techniques (EVT) are ways of using the voice that go beyond the aesthetics of Western classical voice use. Whilst EVT are rare in contemporary Western music, many techniques are part of our everyday voice use. These techniques are often used in combination with one another and may include inward phonation; ululation; scream; overtone-singing, undertone-singing – often called Tuvan throat-singing; growl; speak-singing; and vocal fry. Throat-singing, growl – often used in metal and rock genres (Sakakibara et al., 2004), and beat-boxing (Stowell and Plumbley, 2008) are the most well-known combinations of EVT. *Throat-singing* has become a catch-all term for different traditional singing styles. The term originates from the English translation of the Tuvan style, khoomei (Pegg, 2015). Other varieties include *Umngqokolo-Ngomqangi* – South Africa (Dargie, 1991); *A Tenore* – Sardinia (Henrich et al., 2006); *Katajjaq* – Canada (Nattiez, 1983); *Rekkukara* – Japan (Nattiez, 1999); and *Pic-eine'rkin* – Siberia (Nattiez, 1999), among others.

I explore how physical and non-physical environments affect the use of EVT and Throat-Singing Techniques (TST) in composition, performance, and improvisation. I use the term 'physical environment' to denote locations such as the beach, a small room, et cetera. 'Non-physical environment' is used to denote a space that is created or remembered and may not be tangible in a physical manner, that is, the past; a Digital Audio Workstation (DAW); use of electroacoustic effects to alter the sonic outcome, et cetera.

This research intends to add to the discourse on EVT, TST, spatial music, and composition. It hypothesises that EVT and TST are artistic skills that can be used to convey physical and metaphorical location for the singer and composer and that the use of electroacoustic effects can be used to alter, enhance, and reinterpret the way one uses one's voice. I explore this hypothesis by asking these questions:

- How can *Extended Vocal Techniques* and *Throat-Singing Techniques* be used to express physical and non-physical environments?
- How does technology shape and/or alter the use of *Extended Vocal Techniques* and *Throat-Singing Techniques* in my creative practice?

1.1 Scope and Limitations

I consider throat-singing use as a non-religious, contemporary Western singer. Through this process I use graphic and text-based notation, a series of 46 compositional experiments to test the effects of environment on the use of EVT and TST, a long-form performance of original compositions reflecting on a selection of the compositional experiments, and an exegesis documenting how physical location and electroacoustic effects may alter TST and EVT usage in the singer-composer.

Acknowledging that many modern traditional and contemporary practitioners include TST, I am not considering traditional use, spirituality or religion, or cultural style differences; New Age music made by Westerners (many Western performers focus their TST use on meditation or healing), or potential health benefits, unless pertinent to a specific discussion.

There are few original papers regarding TST and EVT in Western music that incorporate use of technology and personal experience (Aszodi, 2016; Vágnerová, 2016; Harlow, 2019; Quinley, 2019). I will be adding to the discussion on the topic. By making throat-singing more accessible, I hope to also help promote and preserve traditional music techniques and knowledge through introducing more people to the sounds. This research can have value for singers and other musicians, composers, and artists.

1.2 Personal Background

> *...for the Tuvan listeners, drone and overtones form an inseparable whole, and the timbre of the drone is crucial to producing a harmonically rich sound that extends over a wide frequency range. When you are in this kind of sound space, you hear not only overtones but undertones—you can hear sound at all audible frequencies. (Levin and Süzükei, 2006, p. 50)*

At thirteen, I was introduced to listening to the different frequencies that make up the human voice. By singing into a sound-reflective surface (the corner of a room, for example), while sustaining a comfortable pitch one may perceive the overtone series in the sound of one's voice. I continued listening with greater attention to sounds in this way, focussing on how I could be harmonious with them. Most frequently, this was the shower at my childhood home which made a particular whinge when the water temperature was just right. I would sing the notes that I could hear. Then, I would sing to the notes – drones, melodies, un-voiced sounds…

1.3 Methodology

Here I discuss my methodology, data analysis methods, and performative outcomes for this research. I use autoethnography and practice-based research. The outcomes of this research consist of four compositions with performance and scoring documentation, a series of 46 audio recordings created while examining the questions of how environment and technology shapes TST and EVT use, and this exegesis. The 46 compositional experiments[1] and accompanying journal are provided on the USB stick in A1 Composition Diary and Experiment Audio and may be found online at:

- https://sophierose.bandcamp.com/album/embodied-and-disembodied and
- https://sophierose.bandcamp.com/album/time-and-space

Documentation of the four main compositions is found on the USB stick provided, in the Hightail Cloud storage, and uploaded to:

- https://sophierose.bandcamp.com/album/vowels-in-retrograde-live audio only
- https://www.youtube.com/watch?v=K_mAP9vyCkk&feature=youtu.be stereo video

1.3.1 Practice-based Research and Autoethnography

I am taking a practice-based approach (Candy, 2006; Mäkelä, 2007; Smith and Dean, 2009; Sullivan, 2009) focusing on autoethnography (Holmes, 2016; Reed-Danahay, 1997). Due to the importance of the body and perceptions as integral components in the research I have used a somaesthetic, or body driven, conceptual framework (Forlizzi, 1997; Shusterman, 1999; Sullivan, 2010). Shusterman's argument for somaesthetics is that the mind and body are intimately intertwined, so we need to analyse the body's responses to fully understand our perceptions of reality. Furthermore, that 'somatic training forms the heart of ethics care of the self, a prerequisite to mental well-being and psychological self-mastery' (Shusterman, 1999, p. 304). Through a somaesthetic framework, the research may uncover other new areas to be explored that fall outside of current conceptual frameworks. I use a pragmatic approach (Smith and Dean, 2009), using the tools best suited to each task. Sullivan (2009) describe the process of knowing in the arts as a braid-like structure, where the strands must be continuously unwoven, sorted, and re-constructed through various existing practices and enquiries. Through this framework, I use autoethnography to lead my exploration of how environments affect EVT and TST. Autoethnography considers self-experience of the

[1] Except for tracks, '6A – The Burrow' and '16B – Drones'.

individual and holds individual experience up to larger societal politics, meanings, and understandings. I define sonic effects in accordance with Augoyard's (2014) *Sonic Experience: A Guide to Everyday Sounds*.

WEEK 4B		
Date/Week:	SUNDAY 24TH MARCH: THE BACK YARD	
What I did:	Musical:	Mostly overtones – singing very softly.
	Technique:	Being outside in the back yard. The suburban out-doors.
	Inspirations:	
	Score:	
What I used:	Equipment:	Zoom H1.
	Effects:	Airy Chroma-verb at 20%
Where I was:	Outside in the back yard underneath the birch tree.	
What happened:	When combining the above: Dry (with Reverb)	
	I felt dumb singing in the back yard like this. Very self-conscious. And too aware of my surroundings. It's windy today and I know that that was going to negatively affect the sound quality – I will buy a wind sock for the Zoom H1 now. At this stage I'm not a fan of the musical output – I think it would be better to try singing in headphones to a soundtrack and closing my eyes, quite frankly. Something to try later on, in any case. It neither positively nor negatively affected my singing.	
		
Physical state:	Run-down. Seminar week, currently on the 6th day straight of working 12+ hour days between work and study.	
Any problems or Unexpected Outcomes:	I felt surprisingly uncomfortable. I hunched. I did not get into this at all.	
Reflection (week post):	I can't listen to this dispassionately because of how much I disliked the experience. The best I can feel about anything that happens is "meh". I will try this again in a different location at a different, less stressed time.	

Figure 1. Sample of practice diary for aiding data analysis.

In developing the main compositions, I have performed a series of 46 experiments that explore the use of space and atmosphere (different sized rooms, outdoors, virtual spaces, et cetera) and effects or tools (distortions, filters, modulation, et cetera) on my creative practice. I call these physical and non-physical environments, respectively. I conducted one experiment of a physical environment and one non-physical environment each week for 23 weeks. These were then used to shape the four main compositions discussed in chapter 5. The compositional experiments are accompanied by a reflective journal. Each experiment has a reflection from that day, and another from after some time has elapsed. I conducted the secondary reflection to potentially negate the cringe factor that many artists feel immediately

after finishing a piece. The written journal contains my intuitions, perceptions, techniques used, analysis, documents the techniques used and my health-state[2] during recordings. Only the most pertinent experiments will be discussed in this exegesis due to word constraints. I workshopped and rehearsed the main compositions with an ensemble. My ensemble members were Sage Harlow (who performs as Sage Pbbbt), Troy Rainbow, Özlem Kesik, Cloud Unknowing, and myself.

1.4 Chapter Outlines

Chapter 2 reviews the necessary background literature about EVT use of technology in music, and relevant practitioners. Cognitive science and other literature will be addressed in line with the main text as applicable within the scope of this research.

Chapters 3 & 4 are short chapters. I have separated them to keep the environments discussed clear. The analysis of physical locations will be in Chapter 3 and non-physical locations in Chapter 4 to save from repeating these phrases countless times. The analysis of experiments will discuss how they led to the final works and any preliminary conclusions about the influence of space and time that might be addressed in future research.

Chapter 5 outlines the four compositions: '*Barren*', '*Ferns*', '*Smother*', and '*Chaos*'. It discusses the composition process, how physical and non-physical environments have been considered in their creation, and the how the pieces were presented.

Chapter 6 summarises the findings of this process and discusses my performance reflections including things I will change, what I feel worked well, emotive discussion of the artworks, and future work.

Composition experiments are marked with **bold font**. The four main compositions are marked in '*italics'* with quotation marks.

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[2] For example: I have hay fever and take antihistamines for 3-4 months per year. This affects my voice and general physical state as during that time I may feel as though I have influenza, or dehydrated in the throat, mouth, and nose.

Chapter 2
The Backstory

2 Literature Review

Here, I discuss the literature that has been important in forming the theoretical thought and artistic applications of this exegesis. Further literature, media, and practitioners will be discussed where applicable.

2.1 Extended Vocal Techniques & Technology

This literature discusses EVT with and without the use of technology by the performer(s). EVT are ways of using the voice that go beyond the aesthetics of Western classical voice use. Whilst EVT are rare in contemporary western music many techniques are part of our everyday voice use. These techniques are often used in combination with one another and may include inward phonation; ululation; scream; overtone-singing, undertone-singing – often called Tuvan throat-singing, and growl; speak-singing (sprechgesang or Sprechstimme); and vocal fry. Throat-singing, growl and beat-boxing are the most well-known combinations of EVTs.

The history of EVT in the West was initially driven by performance art vocalists such as Diamanda Galás (1986), Meredith Monk (1981), Joan La Barbara (2014), Laurie Anderson (Weber-Lucks, 2003), and Yoko Ono (2016). Galás and La Barbara were informed by and involved with the Extended Vocal Technique Ensemble, who created the first systematic listing and recording of EVT examples, called, *A Lexicon of Extended Vocal Techniques* (Burt et al., 1975). Kavasch from the Extended Vocal Technique Ensemble was Galás' first EVT teacher (Brown, 2017). EVT and throat-singing become tangled inextricably as many techniques overlap in different cultures. This overlap was nurtured by Fátima Miranda (2000), Demetrio Stratos (1978), Tran Quang Hai (2003), Trevor Wishart (Wishart, 1986), and Sainkho Namtchylak (Namtchylak, 1998). Awareness of Tuvan throat-singing became more prevalent with the release of *Tuva: Voices from the Centre of Asia* (Various Artists, 1987), *The Song of Harmonics* (Zemp, 1989), and the appearance of Paul Pena in the film *Genghis Blues* (Belic, 1999). Anaka (2006) and Brown (2018) examine the EVT use in artists and dissect how EVT translates into the emotional intent and art of the singer. Brown (2018) notes: 'Many young third-wave feminists of the 1990s looked to Ono as a vocalist who offered an alternative to normative, commercialized, feminine pop and rock vocalities'. This opened the way for others, including Meredith Monk and Diamanda Galas to begin using the

voice in ways considered unorthodox from a Western standpoint in the public arena. Michel Waisvisz's, *The Hands* (1984), manipulates the voice through hand movements and was potentially the first instance of this gestural voice-control technology (Krefeld and Waisvisz, 1990) and were created the year after MIDI was invented.

Artists that have been the most influential on my practice include Tanya Tagaq, Bobby McFerrin, Fátima Miranda, and Meredith Monk. Bobby McFerrin (2005) uses EVT and TST extensively in live jazz performance. Fátima Miranda (2000) uses overtone-singing in avant-garde music in multiple ways – for example, as lead and backing vocals. Tanya Tagaq (2016) uses Katajjaq and incorporates a Sygyt singer in rock. Meredith Monk (1981) uses EVT extensively, occasionally incorporating TST in a solo and group setting. Australian-based singers, Kusum Normalye, Sage Pbbbt, and Karina Utomo use more scream and growl. Pbbbt is also a ritual chaos magick practitioner who uses traditional styles for shamanic purposes. Utomo and Pbbbt have been featured in works by Cat Hope, such as *Speechless* (Hope, 2017). In real life, Sage Pbbbt (Harlow, 2019) and David Shea (2019) have influenced me as artists and thinkers. They have been a reminder of the positive influences of spirituality. As artists that I have had the opportunity to see live, they feed my musical self and show me how another might approach similar problems as a western individual that is enthusiastic about a variety of TST and EVT.

Several scholars (Bosma, 2013; Brown, 2018; Verstraete, 2012; Weber-Lucks, 2003) note that EVT are most commonly used by women. Anaka (2006) posits this may be to express their voices in opposition to the male-dominated culture in line with écriture feminine (Cixous et al., 1976). Scholars, such as Silverman (1988) and Chion (1999), discuss how the female voice and person in media is more likely to be placed in a weak position, whilst the male is expressed from positions of power. Anaka and Warren (2017) discuss the need for women writing about their experience as a method for empowering the women's voices. Weber-Lucks (2003) examines the role of gender, noting that women were less likely to have a unified banner and therefore produce a bigger variety of work. Hewitt (2010) built and performs with the e-mic controller which has allowed her to explore the use of 'masculine' microphone gestures in performance. Hewitt uses this information to alter the sound output of the microphone.

These artists use a variety of methods and approaches – different genres/instrumentation; harsh/soft use of TST & EVT; prominent or incidental use; and political/non-political song

topics. Merely having heard these artists, they will have some degree of influence. I am a sum of my life thus far and I will continue to be the sum of my experiences. As existing EVT literature is primarily dissections of other women's work, I take an autoethnographic view of my practice to describe a woman's motivations from the source. I have found using EVT places my voice in a different space to my Western singing. I am taken more seriously and have access to many more timbres and textures to use in performance.

2.2 Ethnomusicology & Throat-Singing

Here I consider some of the cultural background and traditional performers of TST that I will not address in the rest of this document. I am from New Zealand, a culture that does not have traditional TST (which use combinations of EVT). It is important that I acknowledge the peoples that discovered and used these techniques originally are spread globally and have a richly varied histories that led each culture to incorporate the techniques into their spiritual and secular lives. For a description of sonic characteristics of each of these Tuvan and Inuit styles of throat-singing (as well as several other prominent styles), see A2 Styles of Traditional Throat-Singing.

There are over 1000 research articles regarding ethnomusicological aspects of throat-singing, most focus on Tuvan varieties. Robert Beahrs (2014) summarises the 40 most prominent articles from Russian and English language sources for Tuvan throat-singing, noting that English studies tend to neglect influences of life-experience and Russian scholars downplay the role of the public on practitioners. Carole Pegg (1992) concentrates on the history and historical context, spirituality, and aural perception of Tuvan overtone-singing in the West. Video x-rays and MRI's (overtonesinging, 2016; Ruiz and Wilken, 2018; Zemp, 1989) provide imaging of the vocal tract showing tongue positions during throat-singing. This dynamic feedback expedites understanding for how anatomy behaves while overtone-singing. Levin & Edgerton (1999) approach throat-singing from ethnomusicology and composition specialities. They examine anatomical knowledge and Tuvan musical aesthetics, noting that Tuvans generally convey their musical feeling per phrase, rather than by verse or chorus structure. They also include the Tuvan spirituality in their analysis, stating, 'Tuvan pastoral music is intimately connected to an ancient tradition of animism, the belief that natural objects and phenomena have souls or are inhabited by spirits.' (Levin and Edgerton, 1999, p. 1)

Katajjaq, researchers Nattiez (1983, 1999), Nattiez & Ellis (1989), Beaudry (1978), and Charron (1978) transcribe Katajjaq for musical analysis, and outline its musical applications, structures, purposes, and contexts. Most interestingly for me is the wide variety of uses that the Katajjaq appears to have – it is for recreation, teambuilding, ritual, shamanism, lullabies, fitness/exercise, strengthening the breath of the sick, and more. Nattiez (1999) also researches Siberian throat-singing on the Chukchi Peninsula (Pic-eine'rkin).

Other academics in the field include Tran Quang Hai and Stuart Hinds. Hai (Hai, 2011, 2009; Zemp, 1989) has a long-standing association with TST. Hai holds workshops, writes papers, acts as a megaphone for the research of other academics, and promotes overtone-singing and instruments that use OST, for example Jew's Harp. Hinds (2017) writes exercises and songs for beginner to intermediate overtone-singers. Hinds applies overtone-singing to different genres in ascending difficulty. He notes that the 7th and 11th partials are outside western tuning and are traditionally avoided. Modern indigenous throat-singers include Olga Letykai Csonka (CanalAlpha, 2019), Alash (TEDxBaltimore, 2016), Huun-Huur Tu (2008), Riit (2017) , The Jerry Cans (2017), and Olena Uutai (Bullen, 2018). This is not an inclusive or exhaustive list.

This literature analyses sounds, cultures, and cultural music-making. These authors provide contexts for TST. Emulation in a modern context can supplement existing research by stimulating interest in non-academic audiences.

Chapter 3
In the Present

In this chapter I discuss the effect of physical spaces on my use of *Throat-Singing Techniques* (TST) and *Extended Vocal Techniques* (EVT), and how this contributed to the musical outcomes. The material I reflect on in this chapter is found in A1 Composition Diary and Experiment Audio. Physical spaces may include shaping or altering the space through sensory means, for example, using scent or candles to alter perception of the location. Due to word constraints, I discuss only experiments most relevant to the compositions in Chapter 5.

3 Physical Locations

My internal space is turbulent and cramped due to my history of trauma. This can affect the 'here and now' of physical locations. Throughout my life, I have felt freedom in sound. The desire to be heard has manifested and been realised through singing and music in general. In using my voice, I weave a more pleasant world for myself. My world unfolds through the vibrations of my vocal folds and resonant spaces. I am alone but connected to the world. I am me, and I am sound, in the way that, 'When you pour water into a jug, it becomes jug-shaped *and it is not the same water anymore*' (Pratchett, 2009, p. 258, emphasis original). I find freedom in sound whether that sound is: *mundane exercises* – feeling the shift between one note to another; *private* – singing in the shower, the car, the bush, et cetera, or; *performative* – where I step into a character. I cannot decide if in performance I am nothing or everything. I am either only me, with sound as a core aspect of the 'authentic' me or I don't exist at all and the sound is the only thing that matters. Psychological space and the self-concept is an intricate weave of shifting plates of self-awareness, self-esteem, self-knowledge, the social self, and self-concept (Harter, 1999; Oyserman et al., 2004). These affect our being and perceptions of physical locations and inter-personal relationships. In turn, we can change our space to alter outcomes. Avery Gilbert discusses Emily Dickinson's use of scent, '…Dickinson didn't inhale fragrance like a normal person – she drank it. In her poems, the scent of flowers is nourishment…' (Gilbert, 2008, pp. 138–139)

Dickinson used the fragrance of flowers and their form to transform her workspace-cum-bedroom. David Byrne (2012) discusses how locations shaped cultural music and the types of music we favour in his book *How Music Works*. Churches beget wafting music with slowly evolving harmony, outdoor locations allow for complex rhythm and harmonies through the lack of reverberation. I have sung, played, and created in a myriad of locations – on

horseback, the whining shower, the beach, the bush, and so on. I believe we shape our space consciously and unconsciously; often, through personal rituals. This chapter reflects on how and why these conscious and unconscious states have affected my creative processes.

3.1 Inside

My experiments from small rooms are **2A – BHI 107**, **7B – Shower**, **9A – Closet**, and **13B Instrumental Accompaniment (Piano)**. Small and medium sized rooms feel the most natural and comfortable for me. I attribute this to the frequency with which I sing in these spaces. The recordings were taken at my places of study, work, and home. Medium sized rooms examples are: **1A – Grand Piano**, **3A – CSC Koauau**[3], and **16A – Scent**. Large room experiments are: **18A – BHI Microphone Shoot-Out** and **12A – Studio A BHI**.

The shower (**7B**) is a famously preferred singing space. The water provided a pleasant, warm, humid environment and a background sound wash. The tiled walls reflected sound well. In this recording, I was exhausted, so there were a few vocal malfunctions. The tiles were unflattering on some overtones. It was flattering on subharmonic plus high overtone singing. The use of environmental percussive sounds cropped up here and can be seen used in *'Barren'* and *'Ferns'*. Room 107 at Box Hill Institute was my 'go-to' practice room. I returned to room 107 for **13B** to explore the influence of piano accompaniment. The extra instrumentation encouraged me to make adventurous[4] fundamental note choices. I tried to preserve a consistent recurrence of melodic ideas in a jazzier vein because of the structural Western influence of the piano. I reported feeling transported to the past by the sadness in the music. I used this idea of 'The Past' as a non-physical environment in *'Chaos'*.

3A was conducted in a work room around 4m*2.7m. I sang so that my voice travelled the longest line in the room. The bricks made the reflective properties of this room strong and provided a pleasing reverb. I sang through the koauau at some points which gave my voice a 'mooing' quality (14/03/19). This was interesting as I had expected more tube-like reverb, not cow-like. The musical output felt around 75% of being able to live as a finished entity.

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[3] The koauau is Māori flute, see A3 Māori Animism, Mythology, and My Link for more information.

[4] In most traditional TST styles the fundamental note is a drone. When it does change, it does so to a new drone no more than a third apart or shifts rhythmically in between the two notes as in Umngqokolo-Ngomqangi.

This experiment had a balance of sound density and interaction occurrences of larger intervals between fundamental notes.

Many experiments were recorded in my bedroom. The bedroom is a neutral space for me, so for **16A** I used a scented candle (from Serenity Candles), which is not part of my normal routine. I have also experimented with other scents as discussed in Chapter 5. The candle scent was pleasant but not remarkable. The comfortableness of the space felt like the greater influence. I felt I could concentrate better due to my familiarity with the space. The recording sounded far more Church-like than I had ever expected. I used many different reverbs which culminated in this sound. The scent may have had some impact on this, but I am uncertain. Reflecting on the recording did make me think of burning incense in an old wooden church with an old white man swinging an incense ball around, but this could be anamnesis (Augoyard, 2014), or remembering of one's past.

The reciprocal relationships in live performance, collaboration, composition, and improvisation alter the physical space. **6A – The Burrow**, **7A – MIUC** were improvisational performances. **6A** is free improvisation from me and the other musicians, with scripted spoken word. **7A** is a composition with performance direction but allows for much improvising. **4B**, **10B**, **15A**, and **18A** were exposed areas with accidental audience. **12A** influenced my choice in performance venue. The acoustics were so satisfying, and the room felt so open. 'The sound was so resonant and live… … In the room it felt like the over[tones] and undertones 'popped'.' (07/05/19) I keenly felt the presence of people in the general area during **4B** and **15A** where the audience was unintentional. In **18A**, staff wandered in during recording. The pressure to perform was disquieting considering the purpose was testing different microphone responses for recording EVT, not wowing people with performance. I discovered that I did not prefer expensive microphones over my Rode K2 valve microphone (heard in **18B**). I preferred the Neumann M49B in **18A**, noting, 'Nice overtones, especially nice on lower formants. Very pleasant to listen to' (18/06/19). **22A** involved creative direction given by a film composer. A gentler sound was requested so I only used overtones. The direction given was that it should communicate non-Western ideas to a Western audience. Using excessive undertones would have sounded too aggressive for mass media consumption and go against pop aesthetics of the female voice. Some false vocal fold techniques were used (for a raspy quality), as well as opening the throat and tilting my neck (tilting the cricoid cartilage) for a wailing sound.

3.2 Outside

Exposed outdoor locations experiments are **10B – The Urban Park** and **15A – Beach**. The enclosed outdoor areas that were **4B – The Back Yard** and an undercover carpark **8B – Carpark**. These locations made me think of David Byrne's (2012) remarks about how location shapes music. I used field recordings to convey places and shape space in '*Ferns'* and *'Smother'*.

My perception of noise is filtered by context. The carpark **(8B)** is enclosed on three sides, long, narrow, and concrete. I was swaddled up against the cold late autumn night. I had not realised how much ambient noise surrounded this location until pressing the record button. In this recording I used a Zoom H6 field recorder with a microphone input and built-in, removable microphone capsule on the device. The Sennheiser e945 microphone was not flattering on the EVT/TST. It has a flat response over all frequency ranges, which is why I use it for my jazz, blues, and soul singing which does not flatter TST like other microphones with a peaked dynamic response. The swish of the cars in the background conveys movement and the reverb is flattering as well as environmentally evocative.

The gravel crunched under my feet in **10B** and influenced my use of 'crunchier' TST techniques, in particular, Umngqokolo-Ngomqangi and the umrhube (mouth bow) that the Xhosa women use (see A2). I alternated feet, scraping each in semi-circles to document the crunchy outside-ness and open space atmosphere. This eventually made it difficult to cut the recording into a singular piece (28/04/19). The beach **(15A)** did not mirror the experiences of my younger days as I was expecting. Growing up I spent a lot of time at beaches, and a lot of time singing at beaches at all hours of the day. This beach felt *other*. Too cold, too windy, too close to inebriated people. I tried to use my chattering teeth as impetus. Listening back, I just hear a cold, shivering person (27/05/19). An unexpected similarity to my younger days was how song-like and almost 'pop' the musical output seemed.

I hated singing in my back yard. I would not have guessed that it would be a confrontational experience. The proximity of neighbours was starkly different to my experiences of singing outside on the farm. There I was, hating the wind. Hating this foreign, spikey grass. Hating the musical outcome (24/03/19). Resentment bubbling over and it fills me when I listen to the audio. My perspective is coloured by my past experiences and that effects my ability to hear the sound. It becomes more and more apparent that the emotion I feel when creating the original seed stays in my mind for a long period of time.

3.3 Simulating Environment

For these experiments, I used audio stimulation only to simulate either being in the named environment, trying to convey a specific space through sound, or responding to a pre-recorded environment. I considered virtual or augmented reality headsets to fully immerse myself in a virtual location. These headsets (even three-dimensional movies) make me nauseous, which meant I quickly discounted this notion as counterproductive. The experiments concerned with location simulation are: **5A – Simulated Outdoors**, **12B – Response to 15th Step**, **20A – Response to Tagaq**, **20B – Cat**, and **21B – I Am Nature**.

'Has even this simulated environment affected a change, or was it just the cynicism that I felt at the time?' (24/03/19) **5A** made me feel like a New Age phoney. I had anticipated that it might make me feel comforted and at home. I used tongue trills in this piece, which are unique to this experiment. It did not assist in the conceptualisation of '*Ferns*' as I thought that it might. However, other animal contrived experiences did. **20B** reflects the introduction of the furry being, Ladybug, into our home. Ladybug is a vocal cat. I imitated cat sounds to document this day. 'From the mournful miaows in the carrier on the way home, to chattering at the birds out of the window, to purring very loudly because she's all tuckered out from playing' (03/07/19). Ladybug reacted with interest both times that I played the final piece through studio monitors. Similarly, **21B**, was inspired by Ladybug. Her insistence on joining in made recording difficult for a time. I have learned to babysit the cat with bird videos on YouTube. I chose this to test my animal mimicking skills and test ideas for *'Ferns*'. The flora and elemental sounds were the most challenging because, 'I internally rebel against the idea of mimicking them from too many bad experiences with New Age 'woo'' (09/07/2019). The cat was convinced by my nature impersonations.

3.4 Conclusions

Physical locations do not affect me as overtly as I thought they might. My own turbulent inner space undoubtedly had the biggest effect on all of these outcomes as some spaces felt uncomfortable and thus presented aesthetically displeasing artworks to me. Small and medium rooms are my comfortable rooms for creative purposes, I attribute this to my familiarity with these spaces. Some spaces evoked unpleasant emotions which then transferred into my relationship with the art. Simulating external environments using audio stimulation produced variable results.

Chapter 4
Space and Time

In this chapter I explore the impact of non-physical locations on my creative processes. Locations explored include the past, mental states, audio modification pedals and tools, and Digital Audio Workstation (DAW) environments. First, I discuss my history in the field. Then, I discuss the physical tools, and soft, or virtual environments, and finally electroacoustic effects used in experimentations as found in appendix 1. Electroacoustic effects have been grouped under headings according to families of effects, for example, *'Distortion'* and *'Modulation'*. Due to word and time constraints, I will only address the most relevant experiments and a selection of effects have been tested.

4 Non-Physical Locations

Using electroacoustic effects to alter audio is commonplace. Pedals and plugins are obvious performance and creative tools, though I have been a reluctant convert due to their unpredictability in live situations. In my piece, '*Tāwhirimātea'* (Rose, 2018), I dove headlong into the world of electroacoustic effects. My partner and musical co-conspirator, Cloud Unknowing, built MIDI-controller data-gloves in 2018 for an experiment. Each performance has its own new problem. Technical issues gradually desensitise me to my fear of technology; by experiencing technical malfunctions during performance I see that these problems are inevitable – like death.

Figure 2. Still frame from the video recording of '*Tāwhirimātea'* (Rose, 2018)

4.1 Objects and New Technologies

I created or modified several instruments including the data-gloves, the koauau, a cello, and vocal synthesizer patches to investigate technology's influence. The experiments **7A – MIUC** and **10A – Vocal Synth** reflect these explorations. The koauau (*co-whoa-whoa*) is a Māori flute traditionally played with breath from the nose (see A3 Māori Animism, Mythology, and My Links). It is a simple flute with a straight bore. In close quarters the sound is piercing. With distance and/or reverb, it sounds mournful and haunting to me. I used the koauau in **3A – CSC Koauau**, **7A – MIUC**, and **22A – Film Score Task**. Singing into the koauau imbues a tube-like reverb to the voice. It mildly amplified some overtones and undertones, in conjunction with brick walls of the room involved. I used the koauau in **3A** to alter the aural quality of my voice. In **7A**, I sampled it for granular synthesis. In **22A**, I incorporated it as a mournful timbre as my design brief for the exercise was sorrow and mourning.

Figure 3. Data-gloves, second iteration.

The data-gloves connect to Ableton through MAX/MSP via serial ports accessed over Bluetooth. MAX/MSP monitored the movement of flex sensors and communicated this as MIDI to Ableton. The MIDI triggered samples and electroacoustic effects in Ableton on the audio of two microphones. The project was originally inspired by Imogen Heap's Mi.Mu gloves (2015) and Donna Hewitt's eMic Controller (2003). The process of making, developing, evaluating, and curating effects lead to *Tāwhirimātea* (Rose, 2018), which used the patches to create a re-imagining of a Māori legend instrumented by vocals and percussion. This performance prosthesis unequivocally affected my creative practice as a performer, composer, and improviser. The process forced a change in workflow by

refocusing my aesthetic choices to consider spatial music and creating immersive sound environments. The questions that my practice previously explored was, 'how does melody flow and develop?' It changed to, 'how far can I push this device?' and 'what are the limits of it and me?' Technical hiccoughs imposed limitations on rehearsal time. This encouraged specificity in performance ideas and using movement cues to conduct the piece instead of rigorous rehearsals. As I developed and altered the technology, my use of it was altered by its behaviour. The cycle continues in present experiments. In **7A**, we performed *Tāwhirimātea* at the Make It Up Club (Sophie Rose & the Manual Breathing, 2019). This experience felt tangibly pleasing. I enjoyed it and the audience enjoyed it. When using the gloves in performance I feel powerful, like a 'beautiful monster' (02/04/2019). The foldback was extremely loud and the thunder sample fed-back and glitched in Ableton[5]. I used the glitch as an improvisational tool for a time, singing around the rhythm. The glitch would not end. Ultimately, I called to Cloud to keep playing while I switched the audio off, and we concluded unamplified.

10A – Vocal Synth was uncomfortable. I feel voice-dysmorphia and cannot bear to hear my voice digitised in such a way. The effect that it has on my musicality is pronounced – I felt I could not do anything right. I had the opportunity to compare this against using other's voices (Adam Rudegair and Vishmi Kaveesha) earlier this year. I felt no discomfort manipulating their voices but manipulating or hearing my own played by another caused my brain to stop. This is not an isolated experience. For **10A**, Cloud Unknowing made an electric drum patch and played a drumbeat, which he used for his own composition. I vehemently dislike **10A** because of this uncanny valley sensation. Comments offered about the exercise to me by others have been much more positive. To play with this feeling I have created a drone out of my performers' voices for *'Smother'*.

4.2 Pedals and Digital

The affordances of new technologies such as effects pedals, loop stations, and MIDI-controllers provide singers with new ways to practice their craft. Singers have not had the same level of normalised electroacoustic manipulation (the obvious exception of Auto-Tune and reverb) as other instrumentalists, for example guitarists. I do not discuss reverb in this

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[5] This tendency for Ableton to glitch is apparently related to the refresh rate of my computer screen. An expensive fix.

section. Reverb levels are recorded the practice diary in appendix 1. The use of technology on my voice has altered my personal practice and my perceptions of aesthetic beauty and me. The following sections document my reflections on how electroacoustic pedals and plugins have altered my creative processes.

4.2.1 Distortion

Distortion effects increase the amplitude of a sound past the signal voltage limit of the circuit resulting in degradation of accuracy of reproduction of the audio (Augoyard, 2014). Fuzz is a simple distortion and because of its simplicity it is very reactive to the audio input. I use fuzz in my gloves (**7A**), and on tracks **17A – Fuzz**, **Scoring, Multi-effects**, and **17B – Analogue Delay, Scoring, Multi-effects**. I use a very heavy fuzz in my gloves, a setting that has remained consistent since the original iteration of the project. In A1 Composition Diary and Experiment Audio I note that fuzz made me feel powerful and 'like a beautiful monster' (02/04/19). I have a similar note in **17A**, calling it 'the most brutal mosquito ever' when combining fuzz and phaser effects (27/06/19). My increasing proclivity to use fuzz on my voice is in contrast to how likely I am to use it on the guitar. The psychological impact I get from using it gives me the power I feel has been stripped away from me as society tries to confine me to the feminine tick-box. This is different from guitar because I don't feel emotionally attached to the guitar in the same way.

> *Soon we learn that we can be sources of force ourselves; we learn to manipulate our environment and our bodies, to grab things, to pull ourselves through space. (Walser, 1991, p. 120)*

4.2.2 Filters

Filter effects change the spectrum of frequencies that may be heard from the audio (Augoyard, 2014). For example, a low/high cut subtracts the selected frequencies from the output. Some filters may have a shifting mechanism built in, for example the 'Wah-Wah' or 'Wah' pedal which filters frequencies in a similar way to the human mouth filters. Prolonged use of filters may make the listener feel unsettled, give the impression of being underwater (low-pass filter), or thin the sound (high-pass filter). I experimented with filtering audio on **11B – Post-Wah**, **15B – RC-30**, and **22B – Electronic Drones**. I used filters extensively in *'Smother'* and discuss filters more fully there.

4.2.3 Modulation

Modulation effects alter the signal strength of the audio. The modulation effects I used are chorus, phaser, flanger, and ring modulation. I used modulation effects in experiments **2B – Analogue Chorus**, **5B – Ring Modulator**, **6B – Dimension C**, **11A – Flanger**, **14B – Phaser**, and **15B – RC-30**. Chorus effects insert slight variations on pitch and rhythm to mimic the sound of a choir. I used analogue chorus (JOYO's MXR Carbon Copy clone) and the Line 6 MM4 which houses four well-known pedal clones. The analogue chorus (**2B**) chopped the audio in ways that I was not expecting and drew me to use rhythmic and breath sounds. I felt myself becoming aurally confused by the pitch fluctuations when adjusting the time settings. I irresistibly followed pitch changes of the pedal and sometimes could not discern which voice was 'me-in-the-now'. The Dimension C clone (**6B**) obscured the quantity of voice(s) heard and was wobbly, gurgling, and pulsing on ingressive vocal fry[6]. This register is a similar pitch range between males and females (Blomgren et al., 1997). The emphasis on use of rhythmic textures made the piece feel more consistent. Spaces cleared, allowing the piece to breathe. Modulation effects generally did not enhance TST.

4.2.4 Pitch & Time

Pitch shifting effects modify the audio's pitch. An Octaver transposes a sound down one octave (sometimes two). I used pitch effects on **14A – Octaver**, **17A**, **17B**, **20B – Cat**, **22A – Film Scoring Task**, and **22B – Electronic Drones**. I used the pitch shifting and vocal transforming plugins in Logic, meaning I could configure and transpose the sung pitches to whatever note up to two octaves up or down and adjust the formant (apparent size of the instrument). Time-based effects delay the signal to mimic echoes (as in delay pedals) in configurable ways. Signal may be delayed for longer periods of time to record phrases and played back with or without other effects, as in looping. Looping is a widely used performance tool for many modern musicians of experimental and popular genres. Delay and/or looping can be heard in **1B – Analogue Delay**, **3B – Tape Delay**, **7A - MIUC**, **9A - Ableton**, **16B – RC-30**, **17A – Fuzz**, **Delay, Scoring**, **17B – Analogue Delay, Fuzz, Scoring**, **22B – Electronic Drones**, **23A – SooperLooper**, and **23B – Ableton into Logic Pro X**.

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[6] Ingressive is the inward breath. Vocal fry is when a person produces a pitch so low that the individual vocal fold vibrations may be heard.

Most commonly I used pitch shifting for providing a base for the experiments. Doing so provided a feeling of solidity that a melody could sprawl out over and waft as in **14A**. **14A** was drifting, dreamy, and church-like. It reminds me of *Lux Aeterna* (Ligeti, 1966) with its slowly shifting, dissonant notes. In **17A** and **17B** I pitch-shifted two octaves and 24 formants down to produce a low, spooky drone. I have used this effect in *'Smother'*. **22A** contains pitch shifted in octaves and fifths. This blocked the sound, creating a cushion and ambiance for the melody. Octave shifting made subharmonics grumbly and some overtones more apparent. The vocal transformer plugin in Logic does not track slides well and places artefacts in the audio. This meant that I tried not to slide between pitches. The ability to alter formants to change the apparent size of my body was valuable and amusing. In **20B** I formant-shifted up, which made the recording sound more authentically catlike.

Delays were effective in mimicking the traditionally multi-person throat-singing style, Katajjaq. Analogue delay was distracting when manipulating the controls by hand while singing. It boosted the overtones dramatically and I enjoyed the noise elements that the pedal introduced. Using headphones while recording made it difficult to keep track of my voice, similar to the chorus effect. The 'ethereal canyon' delay in Ableton used in the data-gloves combines reverb with a pronounced delay and reverb. They combine to make the sound seem as though it is in canyon or a large cave. It makes me want to waft along wearing floaty dresses with a fan on.

4.3 Conclusions

Electroacoustic effects can enhance TST and EVT, but this is not consistent across all effect types. Some effects can aurally confuse the performer, making it difficult to differentiate the acoustic from the affected voice. Interfaces exert a pronounced influence on the way I interact with electroacoustic effects by making them feel more embodied. Disembodiment of the voice through sampling is particularly troubling for me. Delay, looping, pitch-shifting, filters, and fuzz (distortion) were the most useful for my purposes. Other effects have not been tested or mentioned in this exegesis due to word constraints. Additional effects are used in the '*Vowels in Retrograde'* include time-shifting, reversing, panning and spatial effects, multi-effects pre-sets in Ableton.

Chapter 5
Vowels in Retrograde

Here, I discuss the four compositions presented in '*Vowels in Retrograde*', my developmental process, scoring, and performance design. The works are discussed in order of their performance. The five-piece used Decibel ScorePlayer (Hope and Vickery, 2015), a networking score-reader, to playback scores during rehearsals and performance. Full score documentation, including high-resolution images, Decibel ScorePlayer files, and score documentation are found in appendices A4 *Barren* Documentation, A5 *Ferns* Documentation, A6 *Smother* Documentation, and A7 *Chaos* Documentation. Through developing these pieces, I sought to reverse engineer the process of exploring the environmental effects on my composition process as explored in chapters three and four. They are filtered through my own experiences, political leanings, and worldview (feminist, left-wing, and pragmatic realist). '*Barren*' is a sand dune, both ancient and immovable and constantly shifting. '*Ferns*' is nature, whimsy, and forest. '*Smother*' is the weight of the city rat-race. '*Chaos*' is confusion, rage, and despair. It is set in the past. The works explore concepts of anonymity, autonomy versus control in performance, and ritual. The title came from my experience teaching myself to throat-sing. My Western music style of vocal production minimised vowel changes[7]. Throat-singing exploited these changes in a way that felt like I was reverse engineering my Western singing. It also hints towards my fascination with the occult.

5 Four Compositions

I endeavour to work from as many creative impetuses as possible to broaden my palette, inspirations, and ways of understanding music. For several years, I have been exploring the use of the human voice without language to probe how expression is conveyed by utterances without comprehensible lyrics. Testing whether, 'the voice reveals itself as sound, as language.' (Storolli, 2011, p. 1122). This is antithetical to David Byrne's method of singing nonsense syllables and deriving cosmic meaning from them (2012, pp. 199–200). This

[7] The way we are (generally) taught. To see this in action, say virtually any word very slowly (as in slow-motion) to hear the variety of vowel changes that may become perceptible when singing a word over an extended note. This *can* make words unintelligible, although a famous exploitation of this is Whitney Houston singing, *'I Will Always Love You'* (Houston, 1992). For example, 'Ah-ee-ahh-ee ah-ee-yeh, will always lahve yü-oh-ü-oh-ü-ah-ohh'.

exploration was driven by my rebellion at the calculated hyper-authentic marketing decisions of the modern folk music scene. Wishart (1996) discusses the popular singer's burden of embodying a character authentically in song because the audience wills the singer to draw their expression from personal experience. Seeking notational methods for EVT and TST, I investigated Edgerton's and Wishart's EVT notation. Edgerton's piece *Anaphora* (2001) notates '56 classes of vocal multiphonics that explore voiced & voiced; voiced & unvoiced; unvoiced & unvoiced, and; three or more sources.' The explanations on pages 11-12 are indispensable for understanding this score, as are the performance examples on Edgerton's YouTube channel. Edgerton guides vocalists through the performance of this piece and mixes traditional and non-traditional scoring techniques. Wishart's *On Sonic Art* (Wishart and Emmerson, 1996) and *Sound Composition* (2012) are explanatory texts containing graphic scores for EVT, instructions, motivations and context for his compositions, including *Red Bird* (1992), and *Vox 5* (Wishart, 1986, p. 5). Wishart describes the way he associates utterances with notation in as,

> *...the linking of these phonemes with objects and activities in the real world is to a great extent kinaesthetic, i.e. we feel the formations inside the mouth and thereby associate them with activities or the shapes of objects in the external world. (Wishart and Emmerson, 1996, p. 296)*

Wishart's diagrams for consonants feel deeply linked to an understanding of language, sound, anatomy, and communication. The flow and disruption of a breath when phonating consonants is intrinsically logical to me. Another example of this notation is *Shading* (1984) by Catherine Schieve. *Shading* may be read backwards, forwards, or upside down and focuses on breath use over pitch.

The process of exploring physical and non-physical locations[8] provided the mental space, practical experience, sonic database, and seedlings for the four compositions in '*Vowels in Retrograde*'. First, I used locations and effects in isolation (as much as possible), then I explored combinations. The four pieces explore affordances of voice and technology working together to demonstrate the many available timbres. *'Barren'* explores a more traditional interpretation of throat-singing and EVT with long drones and few effects on the voice until solo improvisation sections. *'Ferns'* explores the animistic roots of many different traditional

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[8] See Chapter 3: Physical Locations, Chapter 4: Non-Physical Locations, and Appendix 1: Practice Diary and Composition Experiments.

contexts of EVT for our modern climate and setting. *'Smother'* similarly expresses our modern-day environment, living in the city with the weight of the urban lifestyle bearing down on us all. It rapidly lifts to provide a brief moment of respite. *'Chaos'* expresses inner turmoil and is set in my past. Through this piece I aim to transfer the mental anguish of this experience to an audience. Though my work explores anamnesis, it is easy to draw parallels between *'Chaos'* and mental health. The audience is likely to interpret the malicious whisperings as the negative voices in one's head, or how information becomes jumbled when an individual is under extreme stress.

5.1 Barren

The piece explores desolate textures and environments and how they may be expressed by the human voice and percussion. The ambiance is that of a sand dune[9] – a surprising amount of activity, a lot of small, fine movements – but the overall mass appears to remain the same, as though it has not moved in aeons. The duration is 15 minutes and is written for three voices using extended vocal techniques and technology and one percussionist using a drumkit, cymbals, and a Korg Wavedrum. Players were instructed that the piece should flow directly into '*Ferns'* by transitioning from the sounds of '*Barren'* into impressionistic sounds of wind, water, and insect and bird noises. The number of players may change to suit the performance as long as the integrity of the piece remains the same. The score is a three-dimensional graphic score[10] using black and white acrylic paint on Perspex. Its dimensions are 91cm(L) by 7.6cm(W). The documentation instructs players to touch the score to fully understand the textures and the flow of the score in conjunction with the guides. Each player is assigned a separate key for reading colours and textures. Within the plane of each time location on the score, the player may read vertically, as long as the flow and ambiance is retained. The score may be read from any vertical point on a horizonal axis. The four black raised sections are to be read by only the soloist and the percussionist. During solo sections performers deviate from the drone pitches and may use electroacoustic effects, such as: fuzz, delay, panning, time stretching and manipulation, and looping. The texture of the drones

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[9] My initial concept idea was the desert as portrayed by David Attenborough in nature documentaries, both desolate and immensely rich

[10] I created several three-dimensional scores and works throughout the year, one of which is used in composition experiments **17A** and **17B**. That score is the album art for *Embodied and Disembodied* (Rose and Unknowing, 2019).

changes slowly over the piece, as does interaction between the players. The percussion takes its own path with slowly shifting textures with the focus on smaller or swelling sounds. The atmosphere is meditative – a consequence of the extended drones and shifting timbres. Rhythmic patterns used are inconsistent, shifting from odd to even feel as the characters must do on the sand in Frank Herbert's *Dune* (2005) to avoid detection by the worms.

The voices drone on D in any octave for two minutes. One player then adds the fifth (A), and the second (E) is added at around three minutes. Around 10 minutes, two voices duet and one voice continues the D drone, gradually becoming three voices and the percussion interacting with each other in unscripted pairs. I used a three-dimensional score to accentuate the sense of texture in the sounds the performers might use, it was also a result of the desire to create pieces that might be read by sight-impaired individuals. This piece is performed in a quadrophonic arrangement so that the live sound feels all-encompassing and immerses the audience in a space. The audience was also given the opportunity to touch the score.

Figure 4. '*Barren*' panorama.

5.2 Ferns

This piece is a lighter moment in the program. The duration of this piece is 10 minutes and 53 seconds. When played in the full programme, the piece should flow from *'Barren'* without pausing. This piece is written for three voices, spatialised field recordings, percussion and drums. The compositional experiments **20B** and **21B** were the seedling examples of this work. This piece is intentionally whimsical and occasionally humorous, particularly in reference to the bird calls and types of sounds that I have chosen for the performers. Melody exists through replication and pre-recorded bird, insect, and amphibian noises. Players mix accurate mimicking and impressionistic representation in performance. Each performer has a separate list of animal calls and noises to draw from, including the availability to use physical sources for elemental sounds (dirt, water, wind). Three field recordings play underneath the live performers and are spatialised around a quadrophonic audio set-up. Each field recording and player is sent out of two speakers in the set up and are aurally spaced in thirds by panning each track one third of the way around a horizontal plane.

'Ferns' is inspired by the animism that underpins many cultures throat-singing practices. I incorporate animal sounds (particularly birds) from New Zealand, Tasmania, Victoria, and Western Australia. This is based around my ensemble's home states and/or countries. Olga Letykai Csonka, an inspiration this piece, discusses her transformative experience in performance,

> *"No, I am a bird!" she laughed. "I forget who I am when I am singing," she said. … … "I see something from here go …" her voice trailed off as her hand floated away from her face. (Schwing, 2014)*

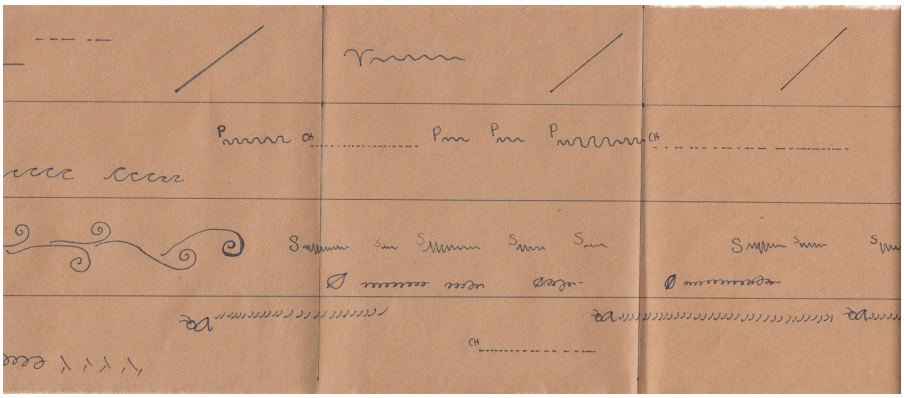

Figure 5. Excerpt of '*Ferns*'.

I developed this score from a table and then arranged the score on butcher's paper that I normally use for clothing pattern drafting. I scanned the full score and assembled the sections as a panorama for use in Decibel ScorePlayer. This juxtaposes the use of technology in life due to the combination of simple (pencil, paper) and complex technology (scanning, WIFI networking apps). In keeping with this mixture of high and low technology I mixed field recordings with live audio. The field recordings were taken at the Blue Lake at the Plenty Gorge in Plenty, VIC. One recording was from beside the Blue Lake, one beside a tree in the bush, and one from a narrow, shallow part of the Plenty River through the reserve. This layered the audio sounds and meant that I had a chance to create a full sound experience for the listener.

5.3 Smother

'*Smother*' is inspired by the weight of modern urban living. Some people find space to breathe. For many it weighs them down almost imperceptibly until the pressure is finally relieved. Challenges in life fade in and out of focus and as our focus shifts, life shifts from underneath us.

This piece lasts around 20 minutes and is written for four performers controlling a drone built from their voice in addition to vocalising, one percussionist, and seven panned field recordings shaped with filters, volumes, and performance actions. The score is text-based. Players are labelled by name for this performance, but parts may be assigned to other vocalists in further performances. The piece begins with a recording of a person leaving a house, the audible frequencies and volume then compress to the edge of hearing for each sound source and gradually open up. The volume and frequencies spread slowly, becoming a cacophonic mass of noise. The drones begin to move around the room by the players panning the audio around a quadrophonic arrangement, providing a sense of inertia. This expresses how the clutter of life builds up and wears a person down, becoming unbearable. I pre-programmed high and low frequency cuts in performer's drones. At the same time, they will be making live vocal utterances which are repeated for minutes at a time and reflect the changes in volume and frequency spread similarly to the shape of the frequency filters on the pre-prepared audio. The live vocal sounds are corrupted interpretations of urban ambient sounds, such as crowd noise, rattling, and low hums. Performers control their voice as external to their body, morphing it, and spatializing their voice around a quadrophonic set-up. The player's control of their own voice explores feminist ideas by giving each person agency over their own voice. Being cloaked and the difficulty in discerning which drone belonged to what player explores anonymity in a crowd of people and unity that we are all the same. Four field recordings have been modified through volume and frequency filtering. They play out of individual speakers. The final two recordings play out of all speakers and are placed centrally. They mark the start and end of the piece. The candles lit during the performance are scented with fragrance oil from Wax & Wicks in Melbourne, in the scents 'Campfire Smoke', and 'Embers'. These fragrance oils smell like a lit bonfire and like hot wood embers, respectively. I chose these fragrances due to their fire, smoke, and burnt scents. These scents become oppressive and cling to the body. They are evocative of happy times for many people, but for many Australians, it might be more likely to remind them of bushfires.

5.4 Chaos

This piece is grounded in a personal experience from 2009. The environment that I recreate is the past and the effect I explore is anamnesis (Augoyard, 2014) to invoke the past. The inspiration is the feeling of confusion, rage, and despair at the conduct of a person (whom I had regarded as one of my best friends) and her fiancé in the days following a family

catastrophe. They have been dubbed 'Narcissisa' in the Māori translation. The full text and Māori translation[11] are available in A7 Chaos Documentation.

Figure 6. Self-modified cello.

'Chaos' is written for three voices with looping, percussion, cello, pre-recorded audio, and koauau. It is 7 minutes and 45 seconds long. The score is text-based. Players have up to two staves to read at once. There are three movements: *Internal*, *Te Tangihana*, and *Closure Is What You Make It*.

Internal uses susurration and looping. The prevalence of high frequencies in whispers is used to confuse the discernibility of the words after the second loop begins. *Te Tangihanga*[12] is a lament, with crying and chanting sounds. *Closure Is What You Make It* revisits the whispering and lamenting, reiterating anguish and overwhelming confusion. The koauau begins in this section and closes the piece with its sorrowful sound. I have used font style to represent changes in whisper timbre in *Internal*. Translations of words and parts of words are included in the documentation for sections two and three. The performers may read verbatim to the score text, or if they desire, add their own interpretation by building up their own

[11] This text has been translated by PACTRANZ New Zealand.

[12] The Funeral Rites.

sentences using parts of words. This is inspired by the use of morphemes to story-tell in Katajjaq (see A2 Styles of Traditional Throat-Singing).

The translated narrative and traditionally Western sounding string audio are played into the speaker mounted in the side of the cello body. The samples are imbued with the sonic characteristics of the cello space, which is then amplified by a microphone and then sent to the four main speakers. Considering spatial music led to the modifications of the cello for *'Chaos'*. I wanted the sound to be present, but slightly distanced when compared to the rest of the instrumentation. Testing of the cello modification can be viewed here: https://www.instagram.com/p/B0LUFnvgaWq/

5.5 Performance Design

Here I discuss the staging and dramaturgy, rehearsal process, costuming and stage design, lighting and sound design, and the thematic concepts expressed in the performance. Themes that I have explored are space, environment recreation, chaos, destruction, ritual, feminism, agency, anonymity, and unity. I am also interested in trance-like performance atmospheres, where the narrative of time does not flow in the expected order. This has been a reoccurring theme in the narrative seeds and works that I enjoy, such as, *Thief of Time* (Pratchett, 2009), *Cloud Atlas* (Mitchell, 2004), and *Limen* (Poosthorn, 2019).

5.5.1 Sound

The ensemble consisted of Özlem Kesik on cello, Cloud Unknowing on percussion and drums, Troy Rainbow and Sage Pbbbt (Harlow) on vocals and electronics, and me on koauau, vocals, and electronics. Looping techniques built sonic complexity and implied the presence of many voices. There were two sound arrangements, one for live sound where the performers can mix and monitor in the performance space, and one sent to the Studio A recording desk. Each performer sent four-channel audio from Ableton to a summing box. The summing box sent the relevant channel from each performer to the correct speaker. Four speakers were placed in the corners of the room outside of the audience's circle. This quadrophonic audio arrangement immersed audience members in their own location-specific sonic story by acting as a horizonal Ambisonic plane[13]. The use of this spatial audio allowed

[13] Quadrophonic is the least amount of speakers necessary to create a horizontal, Ambisonic plane effect (Noisternig et al., 2003).

me to exploit sound position to infer a more thoughtful narrative by exploiting the human proficiency to precisely locate sounds.

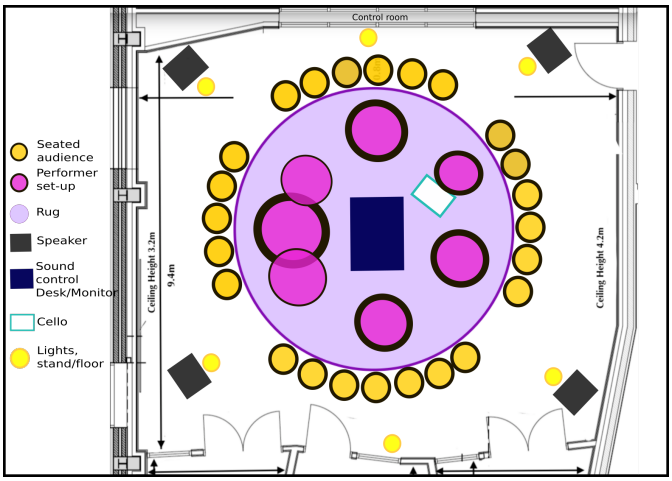

Figure 7. Stage plot for performance in Studio A, BHI.

5.5.2 Visuals

The audience was asked to refrain from clapping until the end of the performance. I did not want uncertain or pre-emptive clapping in *'Chaos'*, which had 10-15 second breaks between movements. It provided a solemnity to the performance in keeping with the ritual atmosphere and enveloped the spaces between works in the whole. It provided a space for (albeit brief) reflection before the story moved onwards. The audience was seated in a circle around the circle of performers. Performers faced inwards to retain eye contact during the performance. This positioning is useful for the purposes of experiencing the spatial audio without letting the audience roam freely. This concentric circle configuration implies an occultist interpretation of rituals, as in, magic circles (Luhrmann, 1991). Additionally, it focusses all attention towards the centre of the room where the candles are placed. Candles *en masse* have a popular ritual or ceremonial connotation. The candles were in glass votive containers and were reminiscent of older, more religious times.

Lights were affixed to the four speaker stands with two others set in the middle of the longest length of the room. The lighting was pre-programmed in LightKey (Monospace UG, 2019). There was a simple progression of gradual colour shifts themed to each work. The lighting programming began with a bright white for the audience entry and then dimmed to a red to cue the performers to move to their seats from their waiting positions by the speakers. The lights gradually turned through reds and oranges during *'Barren'*. The moved through reds to purple and yellow, then to green, blue, and turquoise for *'Ferns'*. The transition then went

through a mix of green and violet to dim blue lighting. Finally, they faded to a dim red and oranges for *'Smother'*. *'Chaos's* lighting changes were programmed to change by section, moving from amber/orange, to pink/orange/red, to a deep red which faded to black for 45 seconds before returning to the house lights to signal that the performance is over.

The costume design was based around masking sound sources, gender and identity of the performer, and insinuating a ritual context. The costume's outer layer is a floor-length, red velvet, hooded cloak secured with a brooch. Underneath, each player wears plain black clothing. These cloaks anonymised the musicians by obscuring faces and body shapes, and presented a more ominous, or ritual-like impression for the audience. Underneath light, the red velvet appears soft, heavy, and independently wealthy in the fashion that opulent churches seek to emulate. This is also the aesthetic of choice for many occultist practitioners. During the performance, the musicians were predominantly stationary. This added to the anonymization, making it difficult to discern the voice source. My ensembles gender distribution was equal. A misogynistic complaint of Arctic Circle and South African guttural throat-singing styles where women are the main practitioners is that they '*can't tell what gender*' the performer is. It is usually used as a way of saying that they are not 'feminine' (that is, pretty, meek, and ornamental) enough for their tastes. Physiological difference in the size or style of one's voice or anatomy does not mean that one voice type is better, worse, or more versatile.

Figure 8. Concept sketch for costuming showing outer layer of costume.

A circular canvas mat marked a visual boundary between audience and performers and presented a fourth circle. It also acted as a barrier for the venue floor in case of water or wax spillages. The performer's tables and central table were covered with black fabric. The

central candle table hid the mixing desk and held the candles up to a better height for the audience's viewing. By placing the candles so that the performers had to kneel to light them, it added to the ritual dramaturgy. There was one large and six small candles, one lighter, and one snuffer per performer. The candles were scented with a smoke scent. The candles in *'Smother'* became part of the scripted movement, giving just enough ceremony and change to let the rest of the sound speak as an atmosphere and build its own internal world. My interest in scent came out of wanting to make a sensorially 360º performance experience. By touching the score, the audience can feel, then we have the lighting and staging for vision, and music as hearing. The final frontiers of performance, for me, being taste and smell.

5.6 Conclusions

These four compositions and the staging explore different facets of life and politics. These include, time, physical space, emotional space, agency, and ritual. They were performed within a ritual environment and I designed a multisensory performance experience using the Aristotelian senses of sight, touch, hearing, and smell. Through exploring sensorial stimulation, I used many different vocal textures that may be performed by the acoustic and the digitally augmented human voice in a surround-sound immersive sonic environment.

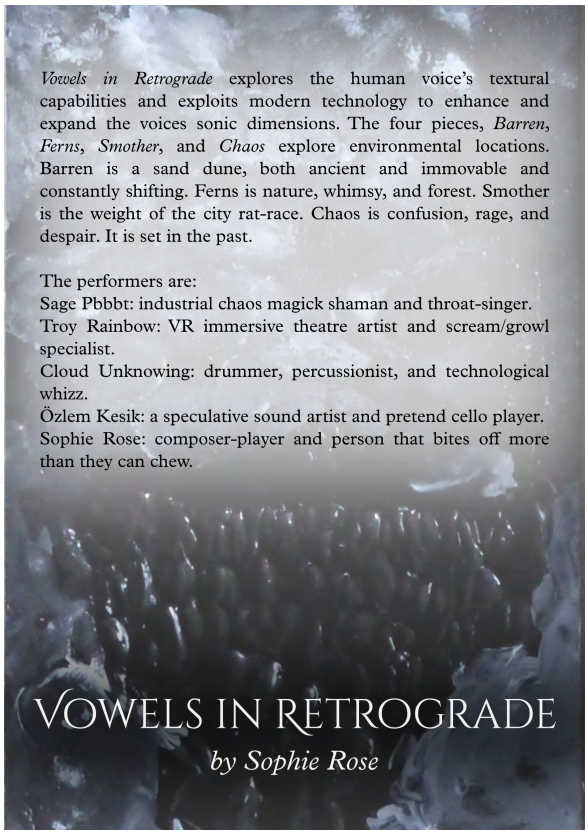

Figure 9. *Vowels in Retrograde* programme notes.

Chapter 6
Aftermath

6 Final Reflections

Vowels in Retrograde was a complex sonic journey. Through the works I demonstrated the versatility and complexity of the human voice and created a fully realised sonic environment. By incorporating effects on a large scale, I diversified the textures that could be produced by the voice in order to construct a varied but unified series of works. The sonic narrative was multi-faceted. It had beauty and peace, humour, oppression, and the voices of negativity. The staging and costumes aided in supporting a ritualistic environment. Concentric circles focussed the energy inward to become a protective barrier against the external world and focussed the audience into the performers – who focussed on each other. The velvet cloaks, dim lighting, candles, scent, and snuffers provided metadiegetic ritual signifiers. My personal ethos that gender should not matter in art prompted the decision to cloak the performers, thus anonymising us by hiding our faces and bodies. By placing the audience in a surround sound environment, I housed them where I most feel safe – enveloped by curated sound.

The four final works were expansions upon triggers created by earlier composition experiments. The 46 composition experiments explored how my practice using EVT was altered by physical and non-physical environments. The biggest influences on my practice were electroacoustic effects and mental space affecting the physical space. Physical locations, in their own right, did not affect my compositional or performative output strongly. Ordinary rooms with ordinary surfaces (for example, brick rooms, bathrooms) yielded predictable results for my practice. Some physical location experiments accidentally recreated past or emotional environments in ways that were uncomfortable. This agony persisted in the creative output for me. Electroacoustic effects produced more noticeable changes and some substantially altered my use of EVT, for example, BitCrusher. An unforeseen side effect of this exploration was that I have reconciled using reverb on my voice, when previously I vehemently disliked it. Through the broader context of this work, I developed and built a set of data-gloves for sound manipulation in live performance. I incidentally compared alternate interfaces when using electroacoustic effects, for example: the gloves, pedals, MIDI-controllers, and turning my voice into a playable instrument. When I performed or composed with an embodied interface, such as the gloves, uncomfortable feelings were not prevalent. When I sampled my voice for using as an instrument, I was tormented and felt that I wanted to erase myself.

The musicians were given autonomy within parameters. This inevitably inserts concepts of agency and control. Each of my performers are creative beings in their own right. I wrote these pieces with the intention to have them executed by any performers, and chose each performer based on who and what I know them for artistically. Their aesthetic sensibilities fulfilled my desired roles, meaning there were few points where I requested changes to their style of production or use of effects. Initially, I gave each a list of effects or sounds they might like to consider, but the curation was up to them. An experienced musician knows how they want to sound and what works best with their instrument (Mackintosh, 2013).

The cello was added last-minute to *'Barren'*. I used it to ground the drone pitch, instructing the cellist to play a D drone with long bow strokes for the entire piece. This follows the instructions for the flat reflective and matte plastic of Troy's guidelines. For subsequent performances, the cello will be retained with the addition of an Octaver effects pedal so the cellist may change octaves below physical constraints. Despite the stereotypical aggressiveness of many of the sounds used by the performers it became meditative. The interaction and blending of all of the voices during the piece set the tone for the remainder of the performance. One accidental detriment to this piece was initially rehearsing with a table of instructions before the score and rules were finalised. The consequence was that the performers adhered the table more than the score, which slightly altered the timing of events, for example, the final duet section.

During Troy's corella imitation in *'Ferns'*, I had to bite my lip to keep from laughing. Several audience members stifled chuckles multiple times during the performance, particularly when Sage began her Australian raven imitation. This piece was the most fun for all performers to play and rehearse because the work is light-hearted. I felt that this piece had some echoes of Wishart and Edgerton alongside its animistic theoretical underpinning.

During *'Smother'* the candle wicks were difficult to light as they had been submerged in the wax during rehearsal to reduce the amount of smoke emitted when extinguishing the candles. This was a condition of the venue. I was trapped between by my aesthetic goals and the conditions of the venue. Additionally, the scent did not carry to the audience in time. I was unable to test this aspect prior to the performance. The performers needed to be spaced further apart to avoid congestion when extinguishing their candles. Matches might have been more aesthetically consistent compared to the BIC lighters used, but the lighters reinforce the mundanity of everyday life. For a similar performance of '*Smother'*, I will add a cello part

and light the custom scented candles much earlier and include an oil diffuser. The cellist would run their nails and fingers along the strings. I like this piece; I just want *more*[14].

Figure 10. A snuffer, the cloak, and a brooch used in the performance.

'Chaos' had a few small errors in the performance, all of which are trivial and were not a detriment. This piece is my favourite. There is absurdity[15] in serious content. For me, this makes it more realistic as an everyday experience. If there were only bad times, we would not stay in toxic relationships. An outside audience would likely read this piece as being about mental health, which it does due to its derivation from a close relationship with an

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[14] I will re-work *'Smother'* into a 30-45 minute work that includes more theatrical directions. At this point, what I envision is that he progression of sound will remain the same, however the volume swell will be more gradual. There will be more candles and the performers will be spaced further apart. A sixth player – would be used as the 'priest' of a misplaced ritual. The piece will begin with the 'priest' lighting several candles laced with scent (such as bush, or salt), then stand with arms raised. This cues the beginning of the other sounds. The door closes. The drones start. The 'priest' lowers their arms to prayer and bows their head. After 15-20 minutes, the 'priest' lights a censer filled smoke and myrrh incense and begins slowly walking barefoot around the room, circling the players and people. Around 20-25 minutes, they return to the centre and grind flint and disperse the flint over the candles so that the air crackles. They stand still with arms raised. This cues fog to gently fill the floor. As the live audio and drones become fortissimo in the piece, the 'priest' resumes swinging the censer, this time shouting unintelligible obscenities, as may be heard on the city street. The players join the shouting. There is 1-1.5 minutes of a wall of noise. As the volume begins to decrescendo, the 'priest' walks out of the room, still swinging the censer. The players fade the volume over one minute and then follow out of the room chiming small, high-pitched bells. The frequencies swell and the recorded person re-enters the house. The piece ends.

[15] One of the spoken lines is, 'I've never seen so many wangs!'.

emotionally abusive person. Much of the text in *Internal* is from snippets of email or text conversations, in-jokes, or things that were said to me during the traumatic incident described earlier. By placing them around the aural sphere, they become the malignant self-talk voices many of us live with. A full description of this event, in English and Māori, can be found in A7 *Chaos* Documentation. The Māori text is played through the speaker mounted in the side of the cello.

'Ferns' was entirely literal in its interpretation of location, whilst *'Barren'* and *'Smother'* were a mixture of literal and impressionistic expressions of places. I involved the emotions more heavily in these two to represent many different contexts of EVT origins and settings, whilst paying tribute to some of my own lived experiences. *'Barren'* phases in and out of droning, a durable foundation of sound. *'Smother'* is the weight of urban living and the rituals of our daily lives making us unaware of the pressure or stress building to internal cacophony. *'Chaos'* is influenced, emotionally, by my least preferred composition experiments. In conducting the composition experiments I experienced being plucked from my current life (experiments **4B**, **5A**, and **10A**). This brought up a range of emotions from unnerved, incredulity, and reliving a flashback. The feedback I received from audience members who came in without prior knowledge of the performance's contents was consistently in line with my aims. Whilst there are changes that I will make for future performances, this was a successful initial performance and I am satisfied with the works as they stand whilst perceiving areas that I will refine.

6.1 Future Work

Several of my works from this thesis have been broadcast on radio. *Vowels in Retrograde* has the potential to be taken through a show season. I will apply for Dark MOFO, or to perform at MONA in Tasmania, Australia. Throughout this process I have been working on my EVT skills, technical skills in multiple directions, ability to successfully organise larger scale performances and works, graphic notation, and research skills. I hope to continue this research at a doctorate level focusing on soma design for embodied human-technology interaction for voice use in performance. The work of exploring the voice's role in expressing physical and non-physical has led me to consider approaches to spatializing the voice and how this may alter cognitive perceptions of sound in composition and performance.

Bibliography

Anaka, N.E., 2006. Women on the verge, sounds from beyond: extended vocal technique and visions of womanhood in the vocal theatre of Meredith Monk, Diamanda Galás, and Pauline Oliveros (Master of Arts). University of Victoria, Canada.

Aszodi, J., 2016. Voicing subjectivity: Artistic research in the realization of new Vocal Music (Doctoral). Griffith University, Australia.

Augoyard, J.-F., 2014. Sonic Experience: A Guide to Everyday Sounds. McGill-Queen's Press - MQUP.

Beahrs, R.O., 2014. Post-Soviet Tuvan Throat-Singing (Xöömei) and the Circulation of Nomadic Sensibility (PhD Music Thesis). University of California, Berkley, USA.

Beaudry, N., 1978. Toward Transcription and Analysis of Inuit Throat-Games: Macro-Structure. Ethnomusicology 22, 261–273. https://doi.org/10.2307/851490

Belic, R., 1999. Genghis Blues. Wadi Rum Productions.

Blomgren, M., Chen, Y., Ng, M., R. Gilbert, H., 1997. Acoustic, aerodynamic, and physiological characteristics of modal and vocal fry registers. J. Acoust. Soc. Am. 101, 2649–2658. https://doi.org/10.1121/1.419157

Bosma, H., 2013. The Electronic Cry: Voice and Gender in Electroacoustic Music (Doctoral). University of Amsterdam, The Netherlands.

Brown, H., 2017. Diamanda Galás on the Personal and Political Impulses That Define Her Singular Career. Redbull Music Axademy.

Brown, S.L., 2018. Yoko Ono's Experimental Vocality as Matrixial Borderspace: Theorizing Yoko Ono's Extended Vocal Technique and her Contributions to the Development of Underground and Popular Vocal Repertoires, 1968 - Present (PhD Music Thesis). UCLA, California; USA.

Bullen, J., 2018. Olena Uutai Audition. Br. Got Talent.

Burnett, R., 1999. Kongar-ol Ondar on the David Letterman Show. Late Show David Lett.

Burt, W., Chase, A., Harkins, E., Kavasch, D., Larson, P., Vickerman, L., 1975. A Lexicon of Extended Vocal Techniques, Centre for Music Experiment. CME, University of California at San Diego, San Diego, USA.

Byrne, D., 2012. How Music Works. Canongate Books Ltd, USA.

CanalAlpha, 2019. La culture tchouktche racontée par Olga Letykai | Canal Alpha. CanalAlpha, Switzerland.

Candy, L., 2006. Practice Based Research: A Guide (CCS No. 2006- V1.0 November), Creativity & Cognition Studios. University of Technology, Sydney, AU.

Charron, C., 1978. Toward Transcription and Analysis of Inuit Throat-Games: Micro-Structure. Ethnomusicology 22, 245–259. https://doi.org/10.2307/851489

Chion, M., Gorbman, C., 1999. The Voice in Cinema, English Translation. ed. Columbia University Press, New York.

Cixous, H., Cohen, K., Cohen, P., 1976. The Laugh of the Medusa. Signs 1, 875–893.

Cosi, P., Tisato, G., 2003. On the Magic of Overtone Singing, in: Voce Canto Parlato. Studi in Onore Di Franco Ferrero. Unipress, Padova, Italy, pp. 83–100.

Culture Project, 2011. Interview with the Ngqoko Cultural Group. Culture Project, South Africa.

Dargie, D., 1991. Umngqokolo: Xhosa Overtone Singing and the Song Nondel'ekhaya. Afr. Music J. Int. Libr. Afr. Music 7, 33–47. https://doi.org/10.21504/amj.v7i1.1928

Dickie, M., 2014. Tanya Tagaq Grabs the World by the Throat. Music. Mag.

Dimitriou, E., 1978. Cantare la Voce. Cramps Records, Italy.

Edgerton, M.E., 2014. The Extra-Normal Voice, in: The Oxford Handbook of Singing. Oxford University Press, Oxford, UK, p. 27.

Edgerton, M.E., 2001. Anaphora.

eyesearth, 2008. Olga Letykai Csonka "La danse du feu" - YouTube. YouTube.

Farber, Y., 2008. Molora. Oberon Books, UK.

Forlizzi, J.L., 1997. An Approach to Human-centered Design (Master of Design). Carnegie Mellon University, Pennsylvania; USA.

Galás, D., 1986. The Litines of Satan - Diamanda Galás. Intravenal Sound Operations – none, Target Video – none, Spain.

Gerrit Rietveld Academie, 2014. JOAN LA BARBARA: Circular Song, Solitary Journeys of the Mind and Windows. De Brakke Grond, Amsterdam, Netherlands.

Gilbert, A., 2008. What the Nose Knows: The Science of Scent in Everyday Life. Crown Publishers New York /Archetype, USA.

Hai, T.Q., 2011. Duo de Tran Quang Hai et Florent au Musée de la Musique, 30.12.2011. Musée de la Musique.

Hai, T.Q., 2009. Lesson proposed by TRAN QUANG HAI for learning throat singing.

Hai, T.Q., 2003. POLYPHONY IN ONE THROAT, in: The First International Symposium on Traditional Polyphony Proceedings. Presented at the The First International Symposium on Traditional Polyphony, Tbilisi State Conservatoire International Research Centre for Traditional Polyphony, Tbilisi, GEORGIA, pp. 274–282.

Harlow, S.J., 2019. Giving voice to the extra-normal self with the extra-normal voice: Improvised exploration through the realms of shamanic chaos magick, insight meditation and gender performance (Doctoral). WAAPA, Australia.

Harter, S., 1999. The construction of the self: A developmental perspective, The construction of the self: A developmental perspective. Guilford Press, New York, NY, US.

Henrich, N., Lortat-Jacob, B., Castellengo, M., Bailly, L., Pelorson, X., 2006. Period-doubling occurrences in singing: the "bassu" case in traditional Sardinian "A Tenore" singing., in: International Conference on Voice Physiology and Biomechanics. Presented at the International Conference on Voice Physiology and Biomechanics, Tokyo, Japan, p. 3.

Herbert, F., 2005. Dune. Ace Books.

Hewitt, D., 2010. Donna Hewitt - "Idol." YouTube.

Hewitt, D., Stevenson, I., 2003. E-mic: Extended Mic-stand Interface Controller, in: Proceedings of the 2003 Conference on New Interfaces for Musical Expression, NIME '03. National University of Singapore, Singapore, Singapore, pp. 122–128.

Hinds, S., 2017. Making Music with Overtone Singing. Self-Published.

Holmes, S., 2016. Autoethnography and voicework. Voice Speech Rev. 10, 190–202. https://doi.org/10.1080/23268263.2016.1337552

Hope, C., 2017. Speechless.

Hope, C., Vickery, L., 2015. The Decibel ScorePlayer - A Digital Tool For Reading Graphic Notation. ECU Publ. Post 2013.

Houston, W., 1992. I Will Always Love You. BMG, USA.

Huun-Huur-Tu, 2008. Huun-Huur-Tu - Live at Fantasy Studios. Fantasy Studios, California; USA.

Krefeld, V., Waisvisz, M., 1990. The Hand in the Web: An Interview with Michel Waisvisz. Comput. Music J. 14, 28–33. https://doi.org/10.2307/3679709

Levin, T.C., Edgerton, M.E., 1999. The Throat Singers of Tuva. Sci. Am. 281, 80–87. https://doi.org/10.1038/scientificamerican0999-80

Levin, T.C., Süzükei, V., 2006. Where Rivers and Mountains Sing: Sound, Music, and Nomadism in Tuva and Beyond. Indiana University Press.

Ligeti, G., 1966. Lux Aeterna.

Luhrmann, T.M., 1991. Persuasions of the Witch's Craft: Ritual Magic in Contemporary England. Harvard University Press.

Mackintosh, H., 2013. Steve Albini on his gear and recording know-how. MusicRadar.

Mäkelä, M., 2007. Knowing Through Making: The Role of the Artefact in Practice-led Research. Knowl. Technol. Policy 20, 157–163. https://doi.org/10.1007/s12130-007-9028-2

McFerrin, B., 2005. Bobby McFerrin: Live in Montreal. Montreal; Canada.

Mi.Mu Gloves LTD, 2015. The Gloves Project [WWW Document]. MiMu Dev-Blog. URL http://dev-blog.mimugloves.com/ (accessed 9.29.18).

Miranda, F., 2000. Artesonado, Performed by Fátima Miranda. El Europeo Música, Spain.

Mitchell, D., 2004. Cloud Atlas. Sceptre, UK.

Monk, M., 1981. Dolmen Music. ECM New Series, USA.

Monospace UG, 2019. Lightkey. Germany.

Namtchylak, S., 1998. Naked Spirit. Amiata Records, Italy.

Nattiez, J.-J., 1999. Inuit Throat-Games and Siberian Throat Singing: A Comparative, Historical, and Semiological Approach. Ethnomusicology 43, 399–418. https://doi.org/10.2307/852555

Nattiez, J.-J., 1983. Some Aspects of Inuit Vocal Games. Ethnomusicology 27, 457–475. https://doi.org/10.2307/850655

Nattiez, J.-J., Ellis, K., 1989. Reflections on the Development of Semiology in Music. Music Anal. 8, 21. https://doi.org/10.2307/854326

Noisternig, M., Musil, T., Sontacchi, A., Holdrich, R., 2003. 3D binaural sound reproduction using a virtual ambisonic approach, in: IEEE International Symposium on Virtual Environments, Human-Computer Interfaces and Measurement Systems, 2003. VECIMS ’03. 2003. Presented at the IEEE International Symposium on Virtual Environments, Human-Computer Interfaces and Measurement Systems, 2003. VECIMS ’03. 2003, pp. 174–178. https://doi.org/10.1109/VECIMS.2003.1227050

Ono, Y., 2016. Yoko Ono on Twitter: “Dear Friends, I would like to share this message with you as my response to @realDonaldTrump love, yoko https://t.co/s1BqfUgfLr” / Twitter. Twitter.

overtonesinging, 2016. Beethoven “Ode to Joy” with Overtone Singing (MRI) - see what happens inside the mouth. YouTube.

Oyserman, D., Bybee, D., Terry, K., Hart-Johnson, T., 2004. Possible selves as roadmaps. J. Res. Personal. 38, 130–149. https://doi.org/10.1016/S0092-6566(03)00057-6

Pegg, C., 2015. Throat-singing | music [WWW Document]. Encycl. Br. URL https://www.britannica.com/art/throat-singing (accessed 10.28.18).

Pegg, C., 1992. Mongolian conceptualizations of overtone singing (xöömii). Br. J. Ethnomusicol. 1, 31–54. https://doi.org/10.1080/09681229208567199

Poosthorn, M., 2019. Limen.

Pratchett, T., 2009. Thief of Time: A Novel of Discworld. Harper Collins e-books.

Quinley, S.J., 2019. Giving voice to an embodied self: a heuristic inquiry into experiences of healing through vocal creativity.

Reed-Danahay, D.E., 1997. Auto/Ethnography: Rewriting the Self and the Social, Explorations in Anthropology. Oxford, New York; USA.

Riit, 2017. Imiqtaq ft. Viivi. Aakuluk Music, in association with Six Shooter Records, Toronto, Canada.

Rose, S., 2018. Sophie Rose "Tāwhirimātea" 2018.

Rose, S., Unknowing, C., 2019. Embodied and Disembodied, Vowels in Retrograde. Heartbeat Music, Melbourne; Australia.

RTS Radio Télevision Suisse, 2002. Interview de Olga Letykai-Csonka, qui participera à la dernière soirée d'hommage à l'écrivain voyageur Nicolas Bouvier - Vidéo [WWW Document]. Play RTS. URL https://www.rts.ch/play/tv/12h45/video/interview-de-olga-letykai-csonka-qui-participera-a-la-derniere-soiree-dhommage-a-lecrivain-voyageur-nicolas-bouvier?id=549148 (accessed 8.17.19).

Ruiz, M.J., Wilken, D., 2018. Tuvan throat singing and harmonics. Phys. Educ. 53, 035011. https://doi.org/10.1088/1361-6552/aaa921

Sakakibara, K.-I., Fuks, L., Imagawa, H., Tayama, N., 2004. Growl Voice in Ethnic and Pop Styles, in: International Symposium on Musical Acoustics, March 31st - April 3rd. Presented at the International Symposium on Musical Acoustics, Musical Acoustics Research Group, Nara, Japan, p. 4.

Schieve, C.F., 1984. Shading: a music/graphic composition. University of California, San Diego, San Diego.

Schwing, E., 2014. A voice that fascinates humans and lures creatures from the sea [WWW Document]. Aljazeera Am. URL http://america.aljazeera.com/articles/2014/9/14/a-voice-that-fascinateshumansandlurescreaturesfromthesea.html (accessed 10.30.18).

Shea, D., 2019. Performance at the Valentine House.

Shusterman, R., 1999. Somaesthetics: A Disciplinary Proposal. J. Aesthet. Art Crit. 57, 299–313. https://doi.org/10.2307/432196

Silverman, K., 1988. The acoustic mirror: the female voice in psychoanalysis and cinema, Theories of representation and difference. Indiana University Press, Bloomington.

Sklar, S., 2005. Types of Throat Singing, with Tips [WWW Document]. Khoomei.com. URL http://khoomei.com/types.htm (accessed 10.28.18).

Smith, H., Dean, R.T., 2009. Practice-led Research, Research-led Practice in the Creative Arts. Edinburgh University Press.

Sophie Rose & the Manual Breathing, 2019. Make It Up Club: 020419 Narcoleptor/Taylor & Knight/Rose & Manual Breathing.

Storolli, W.M.A., 2011. Performative Voices: acting in the border areas, in: Performa '11 – Encontros de Investigação Em Performanc. Presented at the Universidade de Aveiro, Universidade de São Paulo, Brazil, p. 9.

Stowell, D., Plumbley, M.D., 2008. Characteristics of the beatboxing vocal style (Technical). University of London, Centre for Digital Music.

Sullivan, G., 2010. Art Practice as Research: Inquiry in Visual Arts, 2nd ed. SAGE Publications, Inc., USA.

Sullivan, G.L., 2009. Making space: The purpose and place of practice-led research. Pract.-Led Res. Res.-Led Pract. Creat. Arts 41–65.

Tagaq, T., 2016. Retribution. Six Shooter Records, Toronto, Canada.

Tagaq, T., 2014. Animism, Performed by Tanya Tagaq. Six Shooter Records, Toronto, Canada.

TEDxBaltimore, 2016. Tuvan Throat Singing | Alash |. TED, Baltimore; USA.

The Creation Song, n.d.

The Jerry Cans, 2017. Inuusiq/Life. Not On Label, Toronto, Canada.

UNESCO, 2008. Canto a tenore, Sardinian Pastoral Songs - YouTube. UNESCO, Italy.

Vágnerová, L., 2016. Sirens/Cyborgs: Sound Technologies and the Musical Body. Columbia University. https://doi.org/10.7916/D81V5F1P

Various Artists, 1987. Tuva: Voices from the Center of Asia. Russia.

Verstraete, P., 2012. Interactive Music: Social Considerations of Gesture & Vocality, in: Konnecting Gestures. Presented at the International Conference-Workshop on Performance and Sound Technologies, Brunel University, London; UK, p. 11.

VPRO Vrije Geluiden, 2012. Tyva Kyzy - Aylanmaa Damyran (trad. - Arr. Tumat Choduraa). YouTube, The Netherlands.

Waisvisz, M., 1984. The Hands.

Walser, R., 1991. The Body in the Music: Epistemology and Musical Semiotics. Coll. Music Symp. 31, 117–126.

Warren, K., 2017. Show More/Show Less: Extended Voice, Technology, and Presence. University of Virginia. https://doi.org/10.18130/v3kw8k

Weber-Lucks, T., 2003. Electroacoustic voices in vocal performance art - a gender issue? Organised Sound 8, 61–69. https://doi.org/10.1017/S1355771803001079

Wishart, T., 2012. Sound Composition. Orpheus the Pantomime.

Wishart, T., 1992. Trevor Wishart - Red Bird: A Political Prisoner's Dream.

Wishart, T., 1986. Vox 5.

Wishart, T., Emmerson, S., 1996. On sonic art, New and rev. ed. ed, Contemporary music studies. Harwood Academic Publishers, Amsterdam.

Zemp, H., 1989. Song of Harmonics. CNRS & Musée de l'Homme-Etudes ethnomusicologie.

Телеканал Звезда, 2015. The Birth of Chukotka. Новая Звезда.

Appendices

7 Appendices

7.1 A1 Composition Diary and Experiment Audio

This appendix is found on the USB stick provided in folder 'A1…'. It contains the practice diary with self-reporting data that accompanied the composition experiments discussed in this exegesis, a reduction of some of the most pertinent audio examples, and one experiment that was unable to be shared on BandCamp. The full experiment audio can be found at:

- https://sophierose.bandcamp.com/album/embodied-and-disembodied and
- https://sophierose.bandcamp.com/album/time-and-space

7.2 A2 Styles of Traditional Throat-Singing

7.2.1 North-East Asia

There are seven Tuvan overtone-singing styles, not including sub-variations. Khoomei, Sygyt, and Kargyraa are the most common. Tuvan throat-singers may specialise in one style, but normally sing multiple styles. Tuvan overtone-singing is historically performed by men and was taboo for women. The taboo has been lifting and women now overtone-sing in Tuva. Sainkho Namtchylak (Namtchylak, 1998; *The Creation Song*, n.d.) is a prominent indigenous Tuvan female artist that uses throat-singing in Western music. Other indigenous performers include Tyva Kyzy (VPRO Vrije Geluiden, 2012), Alash (TEDxBaltimore, 2016), Huun-Huur-Tu (Huun-Huur-Tu, 2008), and Kongar-ol Ondar (Burnett, 1999) who passed in 2013. Piero Cosi & Graziano Tisato (2003) and Steve Sklar (2005) provide detailed analysis of each style. Below is a brief introduction to the sonic characteristics of each style and their cultural use.

The three main styles are Khoomei, Sygyt, and Kargyraa. Khoomei is characterised by a low, soft drone, plus one or two perceivable formants above the fundamental pitch. It may also be spelled as spelled Xoomii, Xöömei, Xöömej, or Khöömei. Khoomei means throat in Tuvan (Pegg, 1992). The sound of khoomei is the wind swirling in the rocks. Kargyraa uses overtone-singing with a subharmonic, fundamental and overtone. The subharmonic is created by period-doubling the fundamental pitch. The subharmonic allows much higher partials to be controllable by the singer. The subharmonic is strong and makes the sound growly. It is perceptually similar to the Sardinian bassu from the A Tenore style of singing from Sardinia and Tibetan Buddhist chant. Kargyraa has two subtypes: Dag (mountain) and Xovu (steppe).

Dag is lower pitched and more resonant. Xovu is raspier and higher pitched. Sygyt is characterised by a mid-range fundamental with a strong, whistle-like overtone. Sygyt translates to ‘whistling’. Sygyt may be used to imitate the sounds of birdsong and gentle summer breezes.

Four other substyles include Borbangnadyr, Chylandyk, Dumchuktaar, and Ezingileer. Borbangnadyr is perceptually similar to Kargyraa, but with higher fundamental pitches. The lips of the practitioner may quiver during performance. The tongue moves rapidly to create a trilling sound. This is reminiscent of birds and running brooks. Chylandyk is a mix of Kargyraa and Sygyt styles simultaneously. This style has sounds similar to chirping crickets. It may also be further subdivided into Dag and Xovu Chylandyk. Dumchuktaar is soft, largely uses the nasal passage (the mouth may be opened or closed) to create a similar sound to Sygyt. Dumchuk translates as to sing through the nose. Ezengileer is pulsating, high metallic overtones mimic the sound of metal on metal/metal on leather from the sounds of horse riding. Ezengi is the Tuvan word for stirrup (the place where one puts a foot on a saddle).

7.2.2 Canada

Katajjaq is a guttural throat-singing style. Singers use inward and outward breath and phonation to create rhythms and melody. Katajjaq, Rekkukara, and Pic-eine’rkin are perceptually similar styles of throat-singing. Katajjaq uses morphemes to build stories within songs, and often, singular snippets of words are used repetitively before being changed for a new morpheme by the person leading the game. They are all performed primarily by women in pairs or in groups. All three styles take influences from animal and environment noises (wind, geese, dogs, et cetera). Modern practitioners include Tanya Tagaq (Dickie, 2014; Tagaq, 2016, 2014), Riit (Riit, 2017), and The Jerry Cans (The Jerry Cans, 2017).

7.2.3 Siberia

Pic-eine’rkin: This style is from the Chukchi Peninsula in Siberia. It is primarily performed by women, in groups or solo, for ritual and leisure purposes. Women may use a mixture of standard singing, guttural sounds (similar to Katajjaq), and animal mimicking. It may also be accompanied by dance. Some modern practitioners include Veronica Usholik (Телеканал Звезда, 2015), a contemporary user, and Olga Letykai Csonka (CanalAlpha, 2019; eyesearth, 2008; RTS Radio Télévision Suisse, 2002; Schwing, 2014), a traditional singer.

7.2.4 Japan

Rekkukara is a now extinct form for throat-singing performed by the Ainu. The last practitioner died in 1976. It is perceptually similar to Katajjaq with more emphasis on the imitations of animals, specifically bears. To perform, two women sit facing each other joining their hands to form a tube which blends their voices. This style was performed for the Bear festival, where a bear would be slaughtered.

7.2.5 South Africa

Umngqokolo-Ngomqangi: This style comes from the Xhosa women of the Lumko District in South Africa. It is perceptually similar to Kargyraa but historically performed by women. Umngqokolo is the name for the singing style in the Lumko district. Ngomqangi is the name of a beetle in the district (Dargie, 1991). The women of the Lumko district claim the style originated from the imitation of the beetle. The style is practiced largely for ceremony, enjoyment, and group singing. The Ngqoko Cultural Group, which began in 1983, (Culture Project, 2011) use this style. The group featured in *Molora* (Farber, 2008), and adaptation of Aeschylsus's Oresteia Trilogy.

7.2.6 Europe

A Tenore originates from Sardinia in the Mediterranean. It is sung by male quartets with the lowest voice using period-doubling (growl) to produce a subharmonic (Henrich et al., 2006), similar to Kargyraa. It is often used for pastoral and folk songs. In Canto a Tenore, four singers act as a chorus, each with their distinct role. The bassu alone incorporates subharmonics. The four singers stand in a close circle (UNESCO, 2008) and traditionally perform in mostly intimate environments or traditional ceremonies.

7.3 A3 Māori Animism, Mythology, and My Link

Māori mythology is a Polynesian-based polytheistic animist religion. Māori, prior to the colonial occupation, had an oral tradition of recording and transmitting information. Stories were told through art, music, poetry, dance, storytelling, tattooing and carving. Genealogy was an important aspect of the religion and myths generally start by outlining who each person was and to whom they were related. In Māori mythology, Tangaroa is the God of the Sea. He is one of the children of Ranginui and Papatūānuku. Their abbreviated names are Rangi and Papa. In my piece *Tāwhirimātea* (Rose, 2018), I use the story of Maui, Haumia-tiketike, Rongo, Tāne Mahuta, Tūmatauenga, (other children of Rangi and Papa) and

Tangaroa forcibly separating Rangi and Papa. Rangi and Papa's other children (Tāwhirimātea, Raumoko, and Urutengangana) are distraught and Tāwhirimātea (God of wind, forest, and storms) attacks Tangaroa for his part in the act.

As a seafaring and farming family, the land and sea were intimately important to us. We would each give our first fish back to Tangaroa as an offering to say that we meant to take only what we needed of his children to feed out family and those we knew. My Dad, in particular, used it as a way of instilling conservationist behaviours into all of his children. My parents also practiced *koha*, the act of trading gifts and generosity with services in lieu of money. The connotations of *koha* are that the acts are reciprocal. As an adult, I went on a spiritual pilgrimage to Cape Reinga, the northern most point of New Zealand. The Tasman Sea and Pacific Ocean meet at Cape Reinga. It is a striking location and one of my favourite places in New Zealand. According to mythology, it is where your spirit travels through the country and climbs down to the water on the Pohutakawa's roots into the ocean and swims back to Hawaiki. I wanted to know the way when the inevitable comes.

A Māori instrument that I have always adored is the koauau. It is traditionally played through the nose. Breath from the nose is considered *tapu* (sacred) as the mouth is able to lie, the nose cannot. In 2018, I made a series of koauau's and a Pūtōrino (curved and tapered version). I have used the clay koauau that I made in this batch for all performances involving the koauau this year (2019).

7.4 A4 *Barren* Documentation

Found on the USB stick provided in folder 'A4 *Barren* Documentation'.

7.5 A5 *Ferns* Documentation

Found on the USB stick provided in folder 'A4 *Ferns* Documentation'.

7.6 A6 *Smother* Documentation

Found on the USB stick provided in folder 'A4 *Smother* Documentation'.

7.7 A7 *Chaos* Documentation

Found on the USB stick provided in folder 'A4 *Chaos* Documentation'.

APPENDIX 1:

PRACTICE DIARY FOR COMPOSITION EXPERIMENTS 2019

SOPHIE ROSE

The contents of this document represent the 46 composition, improvisation, and performance experiments that I conducted in 2019 and are analysed and discussed in chapters 3 and 4 of this master's thesis. In this practice diary I state:

- *What I used as influence material,*
- *What equipment (hard and soft) was used,*
- *Physical and mental state (where relevant),*
- *Photographs of the location (except when it is a repeat location),*
- *What happened at the time of recording and editing, and,*
- *An analysis of the recordings made after a gap between constructing the experiments (so that I would have 'cool-off' time to reflect with better clarity).*

I have presented these as two albums, named for the past working titles or chapter names for the exegesis. A compilation of this audio is included on the USB stick and the Hightail drive, labelled 'A1 Ch. 3 Reduction' and 'A1 Ch. 4 Reduction'. The full album audio for these experiments (except for 'Week 6A – The Burrow' and 'Week 16B Drones') may be found at:

https://sophierose.bandcamp.com/album/embodied-and-disembodied

and

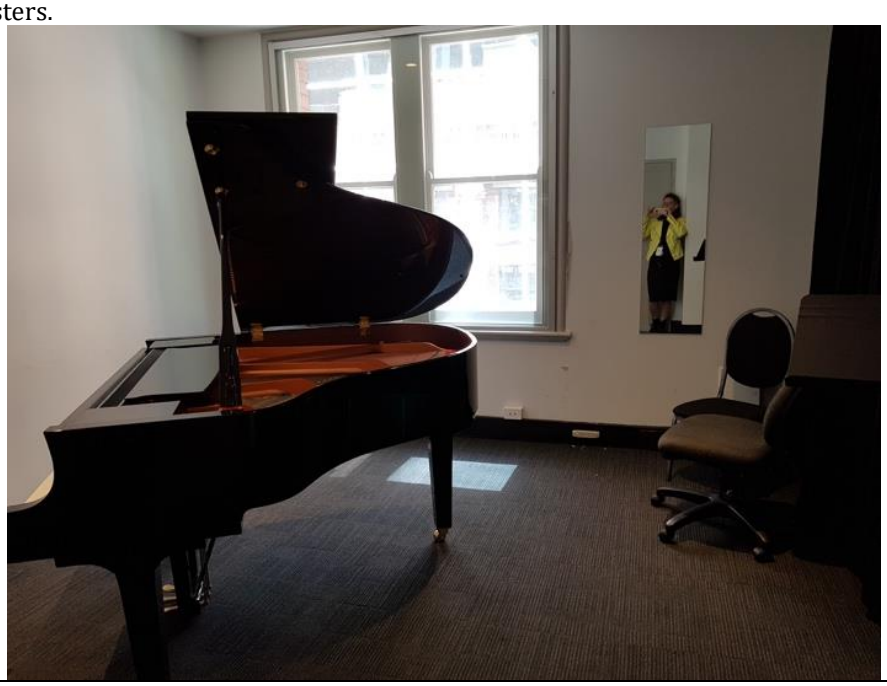
https://sophierose.bandcamp.com/album/time-and-space

'Week 6A – The Burrow' was a live performance with multiple participants, I took this recording in a 'bootleg' audio quality and do not want this published.

'Week 16B – Drones' has six channel output and is not compatible with Bandcamp's requirements. It is available on the USB stick and HighTail folder that contains the documentation for this thesis.

TABLE OF CONTENTS

WEEK 1A

Date/Week:	MONDAY 25TH FEBRUARY: GRAND PIANO	
What I did:	Musical:	Improvising.
	Technique:	Register shifting and singing into the belly of the piano for dry.
	Inspirations:	Marlui Miranda (most recent listening).
	Score:	
What I used:	Equipment:	Zoom H1 & Grand Piano
	Effects:	Reverb.
Where I was:	~3.7m2 room with a grand piano and on wall covered with a curtain single mirror. Australian Institute of Music, Melbourne CBD, VIC, 3000.	
What happened:	When combining the above: Dry (with Reverb)	
	Reduced and scratchy range. A lot more register shifting in the take. Sore and tired voice. Trying to tell a musical story whilst improvising. When I'm tired/sore I tend to do a lot of more intentional voice breaking/shifting registers. 	
Physical state:	Sick – difficulty breathing, sore throat, headache.	
Any problems or Unexpected Outcomes:	When processing the improvisations into a song I found that I was singing in mostly western tuning at the correct pitches despite not having played any keys on the piano during or preceding the improvisation. The same note tended to be sharp or flat to Western tuning when listening back to the audio.	
Reflection (week post):	The room is really ring-y. I'm not a fan of the size/shape of the room reverb. Some overtones are really pronounced. A little church-y. Ruminative. I hear some echoes of the Marlui Miranda recordings. Each one of these that I have completed (even if I'm not analysing these, I know that they exist) seems like it could unfold a lot more slowly. The low note sounds like someone walked in from outside of the room and just decided to join in, rather than a cohesive player.	

WEEK 1B

Date/Week:	SUNDAY 3RD MARCH: ANALOGUE DELAY	
What I did:	Musical:	Playing with rhythms, some use of 'qimmiq' – puppy in Inuktitut. Improvising.
	Technique:	Katajjaq, overtone and some undertone.
	Inspirations:	Play with the JOYO pedal.
	Score:	Took a video diary. Improvising.
What I used:	Equipment:	BCB Boss Pedal board, Edirol FA-101, Sennheiser HD202 headphones.
	Effects:	C3 Boss Compressor, Fender '59 Bassman Pedal, Fender '63 Reverb Pedal, JOYO AnalogDelay Pedal,
Where I was:	In my room, with no fan on, 45% humidity, HOT.	
What happened:	When combining the above: Modified	
	Just trying to get through without further damaging myself. I felt some throat irritation which was not normal, so I used the harder techniques sparingly. Changing the effects levels on the analogue delay was much more distracting than I thought it was going to be. I found it hard to concentrate, twiddle knobs, and sing. My pitch slid around sometimes in response to my adjustments. 	
Physical state:	Asthma induced by hay fever. Coming out of a successful diagnosis – so a lot more relaxed. I haven't been able to breathe properly for about three weeks and my breath control is coming back where air was previously pouring out. I still have tender vocal folds from all of the extra air friction, coughing, and general dry throat from meds and air-conditioning at work.	
Any problems or Unexpected Outcomes:	The analogue delay boosted the overtones more than I was expecting and ended up assisting in strengthening them – which was useful for me as I was wearing headphones to record direct into the computer through the effect pedals. The pitch bending was very distracting, but I think worked for the final product – it hides whether is it the performer or the equipment doing the pitch changes. I didn't want to add layers at all, but I didn't want to make it too long – I compromised by interjecting the different parts and keeping multilayer parts infrequent.	
Reflection (week post):	I was worried that it would be too similar to later effected recordings. I don't necessarily enjoy the ring-y top frequencies when listening back through headphones. I apparently don't get tired of panning tricks. This might be how I could exploit a circular performance stage. I like the 'noise' aspects of the recording. It cuts through what is otherwise a fairly serene and dreamy excerpt. I think I already need to explore some more EVT textures – but I am realistic that given my health state at the time of recording, I did my best.	

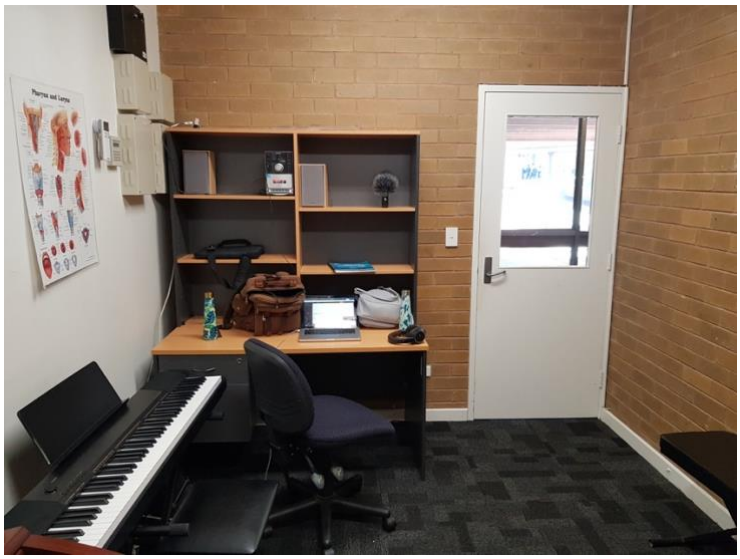
WEEK 2A

Date/Week:		TUESDAY 5TH MARCH BHI: 107
What I did:	Musical:	Thinking more relaxed melodies and phrases. Improvising.
	Technique:	Trying more nasal port assisted styles to bump up higher partials and
	Inspirations:	
	Score:	Long, gentle notes, thinking of being very gentle to my voice and taking the intensity slowly.
What I used:	Equipment:	Upright piano – Yamaha, Phone recorder and laptop recorder.
	Effects:	Some pressing of the sustain pedal. Limiter.
Where I was:	Room 107, Nelson Campus, BHI.	
What happened:	When combining the above: Dry (with Reverb)	
	The piano strings were much more responsive than the grand piano – probably because I could depress the pedal and sing into the piano easier. Phonation was surprisingly comfortable overall, some tension on subharmonic passages due to flaring out the throat (which is very tired of coughing).	
Physical state:	Still coming out of the hay fever/asthma combo. Throat is dry but improving. Had an attack on the way home yesterday which prevented me from singing/speaking/breathing. Did 20mins yoga before I left the house and had a neck and shoulder massage at Max Therapy (20mins) prior to starting this work. Feeling much improved, but tender. The war ups were extremely gentle – starting from a lying down position and transitioning into scales while sitting over ¾ of my total range. 	
Any problems or Unexpected Outcomes:	I really liked singing into the piano and I may end up taking a piano string reverb impulse to use in the final product. My subharmonic + overtone style was the best it's sounded. I'm not sure why – I remember it being when I was practicing keeping the nasal port open which seems to make the higher overtones more accessible. There were people talking in the background at some points because I was recording in room 107 at BHI during the daytime and there was a lot of corridor traffic.	
Reflection (week post):	I think having a mic with artificial reverb is easier to control especially with regards to the volume. I'm neither satisfied nor dissatisfied with the musical outcome. It's a little dull, but it's pleasant enough. I think it sounds like I'm tired more than anything. The sound of weariness.	

WEEK 2B

Date/Week:	SATURDAY 9TH MARCH: ANALOGUE CHORUS	
What I did:	Musical:	Trying to switch in between time signatures with vocal percussion.
	Technique:	Ingressive and egressive phonation.
	Inspirations:	Improvising.
	Score:	
What I used:	Equipment:	Edirol FA-101, Sennheiser HD202 headphones.
	Effects:	Line 6 MM4 Modulation Modeler, Echo Delay, ChromaVerb, Limiter,
Where I was:	In my room – hiding from the DnD game. 40% humidity.	
What happened:	When combining the above: Modified	
	I used three different settings and tried half rhythmic, half melodic (by rhythmically split by the shifting chorus effects). I used all four settings on each modulation and turned the dials to taste. Analogue: I like the speed and Depth but would turn the mix down for live performance. Dimension C: Has the most change – makes me laugh. The pulsing wobbly sound is particularly humorous. It made me make odd vowel sounds compared to my normal modes of speaking/singing. Inward fry was very bubbly and gurgly. Ring Modulator: I will try a different type of ring modulator. I'm not a fan of this one. I think the combination with the chorus dials is what is putting me off. None of these effects seem to have any overall positive effect on the prominence of overtones, do not change the undertones, and I remain unconvinced regarding the use of chorus. 	
Physical state:	Lungs: 90% Voice: 70%, still tired and cranky from drying of antihistamine tablets and inhaler. Body/brain: dead tired. Mildly stressed. Wishing for a beach holiday.	
Any problems or Unexpected Outcomes:	This week on "Sophie Has Lost Her Mind…" I don't know whether I hate this or think that it's hilarious. I feel like I'm taking the mickey out of everything. Doubling up the original percussion line was absolutely the right move.	
Reflection (week post):	I surprisingly like the effect of the heavy chorus effect on the breath sounds. It really influenced me to play with the rhythms more than the dry or reverb-y end.	

WEEK 3A

Date/Week:	THURS 14TH MARCH: CSC KOAUAU	
What I did:	Musical:	Sung through the koauau.
	Technique:	
	Inspirations:	
	Score:	
What I used:	Equipment:	Koauau
	Effects:	Brick wall room reverb, ChromaVerb 50%.
Where I was:	Small brick room, oblong shape, ~4m*2.7m. Craigieburn Secondary College, VIC.	
What happened:	When combining the above: Dry (with Reverb)	
	The effect ***felt*** rather dramatic. I think this was assisted by the hard walls. The shift into the koauau added an unsurprisingly tube-like sound. It sounds like a cow's moo. I pushed myself to do more overtone-singing with rhythmic goals and melodies with more and larger intervals in the melody. The musical outcome has a lot more space in it – I think it works really nicely as a 'song'. It had some natural progressions and conclusions. If I were I to go through and tidy up the parts I would be happy to circulate it as a 'thing'. 	
Physical state:	I feel dried out like a prune from antihistamines and the inhaler – but I like being able to breathe.	
Any problems or Unexpected Outcomes:	It sounded really effective in the room. I'm looking forward to seeing the recording. It bolstered some of the lower notes. I'm so tired I just wanted it to be over.	
Reflection (week post):	That one harmonic is very strident. I need to learn some engineering tricks on this. Church-like. I think that there's not enough flow in this arrangement. Listening to this one-week post – I think I will be switching up my methods so that even improvised things have a structural basis to work from. It does make it more traditionally song like, but I think it may improve the musical/theatrical flow and outcomes. The koauau is an interesting prop that could be easily used in performance. The tube reverb is sufficiently interesting and positively affects EVT/TST.	

WEEK 3B

Date/Week:	TUESDAY 12TH MARCH: TAPE DELAY	
What I did:	Musical:	Trying to be consistently >50% more rhythmic.
	Technique:	Post-processing, instead of modifying the effect at the time of performance
	Inspirations:	
	Score:	
What I used:	Equipment:	Zoom H1 into Logic Pro X
	Effects:	Post processed Tape Delay, Pitch Shift (octave below) Chroma-verb (bloomy),
Where I was:	BHI Room 107, Nelson Campus	
What happened:	When combining the above: Modified	
	It was weird not being able to hear the effects and tweak them. I was not a fan of the process but listening back to the raw stuff – it seems okay/workable. Listening to it on logic pro with the loop feature turned on – it was slightly hypnotic. I didn't realise that it had looped because it changes so frequently. Has a blessing in that I can split things down to minute sections to change the effect, but that doesn't help for designing a performance necessarily. 	
Physical state:	Lungs 90% Throat 70%	
Any problems or Unexpected Outcomes:	I much prefer having only room reverb and effects to prerecording material and shaping it after. I feel more in control of the artistic outcome. It could still come out okay once I break it down and use different effects on it, but as a raw I **am** dissatisfied.	
Reflection (week post):	Tape delay on the Katajjaq styles is very effective and mimics the original style as a soloist. How will this work with multiple people? It requires a lot of co-ordination. I enjoy a rhythmic element. I think when I was originally planning out the performance in my head, I was thinking "tribal" as a way of expressing a driving rhythm. Cloud will be able to play off this really well given guidance. I think that all of the people in my head would work well to this. Assuming a baseline of Troy, Cloud, and myself – this is spiking me to think of instrumentation and staging more and more.	

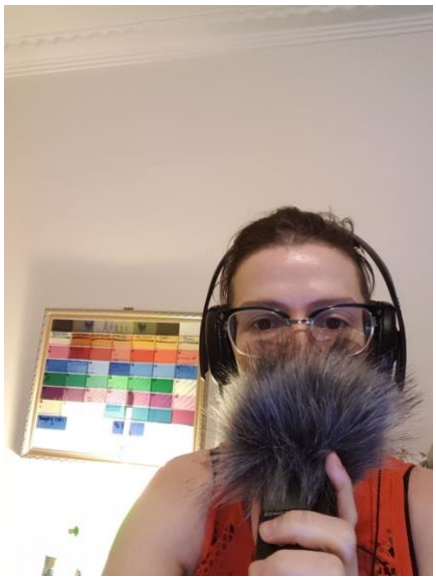
WEEK 4A

Date/Week:	SATURDAY 23RD MARCH: BIT CRUSH	
What I did:	Musical:	A lot of squeals and screams.
	Technique:	
	Inspirations:	
	Score:	
What I used:	Equipment:	Zoom H1, Cloud's windsock, Logic Pro X, Laptop
	Effects:	Bit-crusher in Logic Pro X, with software monitoring turned on.
Where I was:	In my room.	
What happened:	When combining the above: Modified	
	I found myself using more 'noise' based sounds and exploiting the software, rather than doing too much throat-singing. A lot of vocal percussion. I then assembled the song 'dry' and added in effects and tweaked each layer to be slightly different. I changed how the bit-crusher was reacting as I was singing. I wish I could have captured that movement – but still we learn. 	
Physical state:	Run-down. Seminar week, currently on the 6th day straight of working 12+ hour days between work and study. Post collage, relaxed mental state. Maybe I should try a cosy atmosphere next week. Planning an external weekend trip in the holiday break.	
Any problems or Unexpected Outcomes:	I very much used my voice differently whilst singing with this effect – a lot more scream-y high noise. Very little TST because the bit-crusher seems to obliterate it.	
Reflection (week post):	I always start with a single voice-line. I will mix this up. I think that the singing underneath is more interesting than the bit-crusher effect. I think I should try a live patch with the gloves and a bit-crusher, rather than as an affect. Sounds very video-gamey.	

WEEK 4B

Date/Week:	SUNDAY 24TH MARCH: THE BACK YARD	
What I did:	Musical:	Mostly overtones – singing very softly.
	Technique:	Being outside in the back yard. The suburban out-doors.
	Inspirations:	
	Score:	
What I used:	Equipment:	Zoom H1.
	Effects:	Airy Chroma-verb at 20%
Where I was:	Outside in the back yard underneath the birch tree.	
What happened:	When combining the above: Dry (with Reverb)	
	I felt dumb singing in the back yard like this. Very self-conscious. And too aware of my surroundings. It's windy today and I know that that was going to negatively affect the sound quality – I will buy a windsock for the Zoom H1 now. At this stage I'm not a fan of the musical output – I think it would be better to try singing in headphones to a soundtrack and closing my eyes, quite frankly. Something to try later on, in any case. It neither positively nor negatively affected my singing. 	
Physical state:	Run-down. Seminar week, currently on the 6th day straight of working 12+ hour days between work and study.	
Any problems or Unexpected Outcomes:	I felt surprisingly uncomfortable. I hunched. I did not get into this at all.	
Reflection (week post):	I can't listen to this dispassionately because of how much I disliked the experience. The best I can feel about anything that happens is "meh". I will try this again in a different location at a different, less stressed time.	

WEEK 5A

Date/Week:	SUNDAY MARCH 24TH: SIMULATED OUTDOORS	
What I did:	Musical:	NZ Nature sounds from: https://www.youtube.com/watch?v=j1yAj11-8g8
	Technique:	
	Inspirations:	
	Score:	
What I used:	Equipment:	Laptop, YouTube, Logic Pro X.
	Effects:	None.
Where I was:	In my room listening to the soundtrack with my eyes closed.	
What happened:	When combining the above: Dry (no Reverb)	
	No. This was not an effective thing for me to do. I thought it might spark something in me – but it's too divorced from my NZ experiences. The times I would sing out loud would be in the farm near birds and water, but most frequently while walking or on the horse. Other times I would be at the beach, with or without a guitar. 	
Physical state:	Run-down. Seminar week, currently on the 6th day straight of working 12+ hour days between work and study. Post collage, relaxed mental state. Maybe I should try a cosy atmosphere next week. Planning an external weekend trip in the holiday break.	
Any problems or Unexpected Outcomes:	I'm surprised at how authentic the nature sounds – which is silly because it is literally a sound capture of the New Zealand bush. OMG the duck surprised me… again.	
Reflection (week post):	I may try this with the same soundtrack, through headphones, but ACTUALLY outside in a more remote area. Listening back to the .mp3 I'm far more interested in the birdsong. The tongue trills are unique to this piece. Has even this simulated environment affected a change, or was it just the cynicism that I felt at the time? I have bought the pop filter for the Zoom. I hope it gets here soon. Play with sparse-ness and barrenness. I have critiqued it recently in someone else's playing but I want some sparseness and low sound density areas in the final project – so I should actively try this soon.	

WEEK 5B

Date/Week:	SATURDAY 9TH MARCH: RING MODULATOR	
What I did:	Musical:	Trying to switch in between time signatures with vocal percussion.
	Technique:	Ingressive and egressive phonation.
	Inspirations:	Improvising.
	Score:	
What I used:	Equipment:	Edirol FA-101, Sennheiser HD202 headphones.
	Effects:	Line 6 MM4 Modulation Modeler – Ring Modulator, ChromaVerb.
Where I was:	In my room – hiding from the DnD game. 40% humidity.	
What happened:	When combining the above: Modified	
	I used three different settings and tried half rhythmic, half melodic (by rhythmically split by the shifting chorus effects). I used all four settings on each modulation and turned the dials to taste. Ring Modulator: I will try a different type of ring modulator. I'm not a fan of this one. I think the combination with the chorus dials is what is putting me off. None of these effects seem to have any overall positive effect on the prominence of overtones, do not change the undertones, and I remain unconvinced regarding the use of chorus. 	
Physical state:	**At time of recording**: Lungs: 90% Voice: 70%, still tired and cranky from drying of antihistamine tablets and inhaler. Body/brain: dead tired. Mildly stressed. **This week:** Had a short lapse in everything working due to some mental health issues. Using pre-recorded material in order to minimise extra stress this week.	
Any problems or Unexpected Outcomes:	e.g. equipment caught fire, screamed too hard: result -lost voice,	
Reflection (week post):	Why do these effects excite me so much? I get a little bit excited each time. I giggle internally about the sounds that come out. I feel like the outcome is consistently a little more playful. Initially I was sceptical (surprisingly) that the effects would change the way that I truly engage with the sounds. They do. Currently, I see less of a change in the environmental setting.	

WEEK 6A

Date/Week:	SUNDAY 31ST MARCH: THE BURROW	
What I did:	Musical:	Post-processing, instead of modifying the effect at the time of performance Collage – live avant-garde improvisation.
	Technique:	
	Inspirations:	
	Score:	
What I used:	Equipment:	Roland Street Cube EX, Sennheiser e945 microphone, Zoom H1.
	Effects:	Boss-RC 30, Compressor.
Where I was:	The Burrow, 83 Brunswick St, Fitzroy, VIC.	
What happened:	When combining the above: Dry (with Reverb)	
	A lot happened. I actually wish that I'd recorded the previous week's recording because we played so much with texture and softness And I thought that that was so effective. Kylie is WAY too loud and too close on the microphone. Not enough balance between all of the parts. Some really nice density shifts. I felt very disconnected at the time. I felt like a lonely little island that wasn't able to get through to anyone. In Collage I always try to make use of as many techniques as I can – from body percussion, loop, OS, Katajjaq, TST, EVT, screams occasionally, growls, breath, using bottles, shoes…. The shoe zips work better when it's quiet so that the mic picks it up. My thermos drink bottle is how I would have used my shoes.  *Figure 1. Photo by Kylie Supski.*	
Physical state:	My feeling of disconnectedness was really unusual for how comfortable I've been with this group (since the last 2 months anyway).	
Any problems or Unexpected Outcomes:	Audience member thought that Eiichi was conducting at first with his light drawings.	
Reflection (week post):	Listening to this is making me a little Nostalgic. Performers: Stefanie Petrik (ReVerse Butcher), Kylie Supski, Roger Alsop, Eiichi Tosaki, Özlem Kesik. This was our last Collage before everyone went off for the autumn/winter. Oz brought this softness to what we were doing by nearly refusing to be miked up. It made the sound so delicate and concentrated. Flowing, gently ebbing and swelling.	

WEEK 6B

Date/Week:	SATURDAY 9TH MARCH: DIMENSION C	
What I did:	Musical:	Trying to switch in between time signatures with vocal percussion.
	Technique:	Ingressive and egressive phonation.
	Inspirations:	Improvising.
	Score:	
What I used:	Equipment:	Edirol FA-101, Sennheiser HD202 headphones.
	Effects:	Line 6 MM4 Modulation Modeler – Dimension C
Where I was:	In my room – hiding from the DnD game. 40% humidity.	
What happened:	When combining the above: Modified	
	I used three different settings and tried half rhythmic, half melodic (by rhythmically split by the shifting chorus effects). I used all four settings on each modulation and turned the dials to taste. Dimension C: Has the most change – makes me laugh. The pulsing wobbly sound is particularly humorous. It made me make odd vowel sounds compared to my normal modes of speaking/singing. Inward fry was very bubbly and gurgly. None of these effects seem to have any overall positive effect on the prominence of overtones, do not change the undertones, and I remain unconvinced regarding the use of chorus. 	
Physical state:	**At time of recording**: Lungs: 90% Voice: 70%, still tired and cranky from drying of antihistamine tablets and inhaler. Body/brain: dead tired. Mildly stressed. **This week:** Had a short lapse in everything working due to some mental health issues. Using pre-recorded material in order to minimise extra stress this week.	
Any problems or Unexpected Outcomes:	e.g. equipment caught fire, screamed too hard: result -lost voice,	
Reflection (week post):	I couldn't tell if it was one or more starting the piece until the distinct second voice came in. Interesting. I think that the flow of this is more cohesive because I have left little spaces and joining pieces – or hinted at things to come more consistently. I also feel like the effect becomes more pronounced over time with potentially helps this flow. Playing with the gradual build of the voice could help, a la Coppice (Storring 2014) using gradual deterioration (except for this is a gradual building, or amplifying of the effect).	

WEEK 7A

Date/Week:	TUESDAY 2ND APRIL: MIUC	
What I did:	Musical:	Post-processing, instead of modifying the effect at the time of performance
	Technique:	Avant-garde improvisation performance at the Make It Up Club.
	Inspirations:	
	Score:	Same Ableton patch as (Rose 2018), very different outcome.
What I used:	Equipment:	Ableton, Data gloves, Sennheiser e945, Rode M2, Koauau, drum kit, bow, samples, MAX/MSP.
	Effects:	Fuzz, Distortion, Reverb, 'ethereal canyon' delay, pitch fuzz echo delay, Echo Delay, 'Laundry' & 'Gagalon' (chorus), Granulator II, Rubber Flooring (Auto Filter).
Where I was:	Bar Open – Make It Up Club. Brunswick St, Fitzroy, VIC.	
What happened:	When combining the above: Modified	
	I used the same effects and set up (drums and etc) as in Tāwhirimātea, it came out very differently, but we did start the same. The extremely loud foldback fed into the microphone set up and caused a few problems that I tried to work to our advantage. *I felt so powerful. I feel like a beautiful monster. I felt all of my teenage angst and bitterness about my experiences bleed out of me. I felt giddy*.  	
Physical state:	Disconnected. Post meltdown… trying to scramble my way back to sanity.	
Any problems or Unexpected Outcomes:	That Ableton glitch is still there. GAH!!! The thunder clip fed-back into the microphone and created a loop that I had to manage whilst trying to finish off our set.	
Reflection (week post):	That glitch. I think overall it was nice, the recording fidelity is too low. I'm happy with how we coped with the glitches. I don't know why Ableton is doing me dirty like that. I like how the glitch sounded but it needs to be controllable. Cloud wants to change the beaters around to get better flams. This is making me feel more and more that equipment will be set up and performers will rotate through the sections and instruments.	

WEEK 7B

Date/Week:	FRIDAY 5TH APRIL: SHOWER	
What I did:	Musical:	Anything low impact on my voice.
	Technique:	Cold, hot, water.
	Inspirations:	
	Score:	
What I used:	Equipment:	Hot water, Bathroom, Zoom H1.
	Effects:	Nada.
Where I was:	My shower. Mostly tiled small room approx. 2.5x2.5m. Shower running, shower not running.	
What happened:	When combining the above: Dry (with Reverb)	
	I like the reverb of the bathroom – the cliché that we sound better singing in the shower seems true. I've spent so much of my life singing in the shower that it's like my safe space. Even though I was tired, I was comfortable, and I was multi-tasking which was making me feel a little more relaxed about catching up on my workload this week. 	
Physical state:	Very, very tired voice – marathon week.	
Any problems or Unexpected Outcomes:	A few unexpected things popped out whilst singing because of my vocal fatigue. I like the sound of water and making the rhythm with the pouring water. I was surprised that the water didn't annihilate the TST. It makes me need to pee.	
Reflection (week post):	Using water as percussion. I really like the water noise. For the last section? I like the 'harsher' reverb/more immediate reverb. I felt the most comfortable which was beneficial for my physical state.	

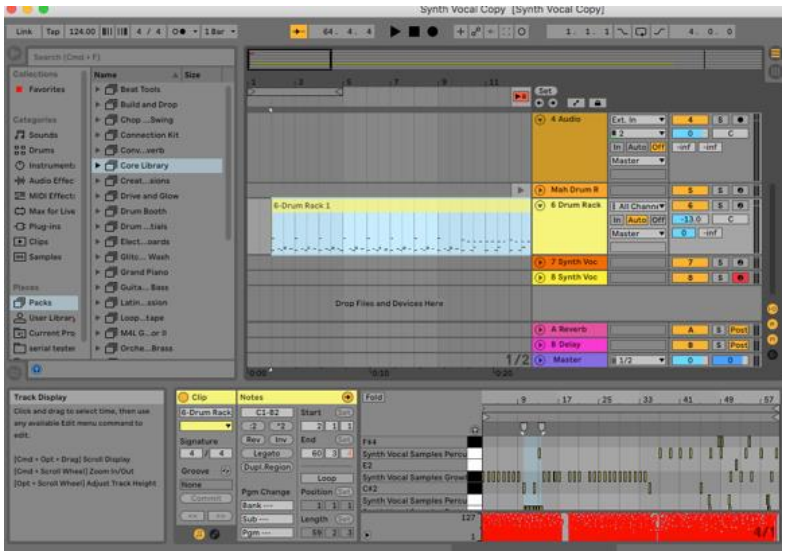
WEEK 8A

Date/Week:	THURSDAY 11TH APRIL: HAIRDRYER	
What I did:	Musical:	Covering the singing noise through the sound of a hairdryer.
	Technique:	
	Inspirations:	
	Score:	
What I used:	Equipment:	Remington Hairdryer, assorted things around my room. Zoom H1.
	Effects:	ChromaVerb (Digital, Strange Room)
Where I was:	My room.	
What happened:	When combining the above: Dry	
	I'm leaving this uncut because I feel that it's an interesting improvisation. Pedestrian. I'm really into the 'small sounds' thing and quiet concentration at the moment. I guess I've been surrounded by loud things and I just want small noises and manageable, bite-sized everything. Used the button clicking of the hairdryer. 	
Physical state:	Very, very tired voice – marathon day on Monday singing 10am 'til midnight.	
Any problems or Unexpected Outcomes:	I unexpectedly like just the plain 8m33s mp3.	
Reflection (week post):	The repeated inward phonation is a little bit hiccough-y. Ruminative. Jazzier, for some reason. Like the end bit with no hairdryer – an interesting transition. I seem to default to ruminative singing when tired, sore, sick, or stressed.	

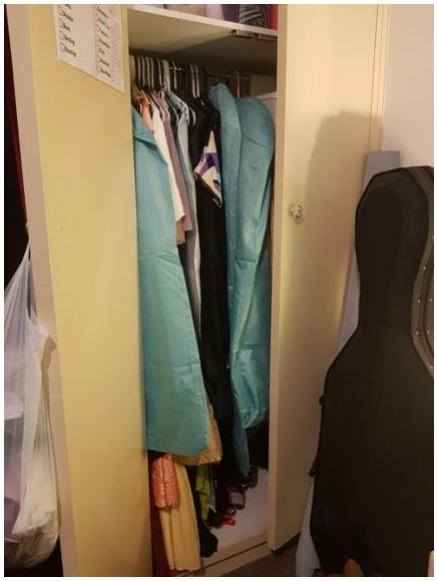
WEEK 8B

Date/Week:	SATURDAY 13TH APRIL: CARPARK	
What I did:	Musical:	Publicly exposed location at a quiet time (night). Brick and concrete (open cube to the road). Environmental.
	Technique:	
	Inspirations:	
	Score:	
What I used:	Equipment:	Zoom H6, Sennheiser e945, Cloud to stand ~4m away with the zoom.
	Effects:	Mid-side decoder, Limiter, Fuzz-Wah.
Where I was:	Carpark at 136-140 Gaffney St, Coburg North, VIC, 3058	
What happened:	When combining the above: Dry (with Reverb)	
	This location is one that I walk past frequently. Often, in passing, Cloud and/or myself will go under the carpark roof and make "pew" noises or clap. It's got a lot of reverb. The cars passing were lightly too noisy at times. I think they made it more difficult to get good source material (when considering the digital distribution medium). The H6, however, is a major game changer and I see why it is so popular. The e945 is not the best mic for capturing overtones because the response is so flat – the reason that I have it for my regular singing material. I did not use the Rode M2 because of the phantom power issue when away from a computer/desk. 	
Physical state:	Cold. Winter is coming and I am unhappy with that fact.	
Any problems or Unexpected Outcomes:	When there was traffic, it's a bit junk – when there's small sections of no traffic the sound is REALLY nice.	
Reflection (week post):	I like the swish of the cars in the background. The reverb sound is nice from this space – but to get just the reverb you'd have to go at 2AM and record in spurts. It was between 9PM and 11:30PM when I took this recording and we are near the industrial area.	

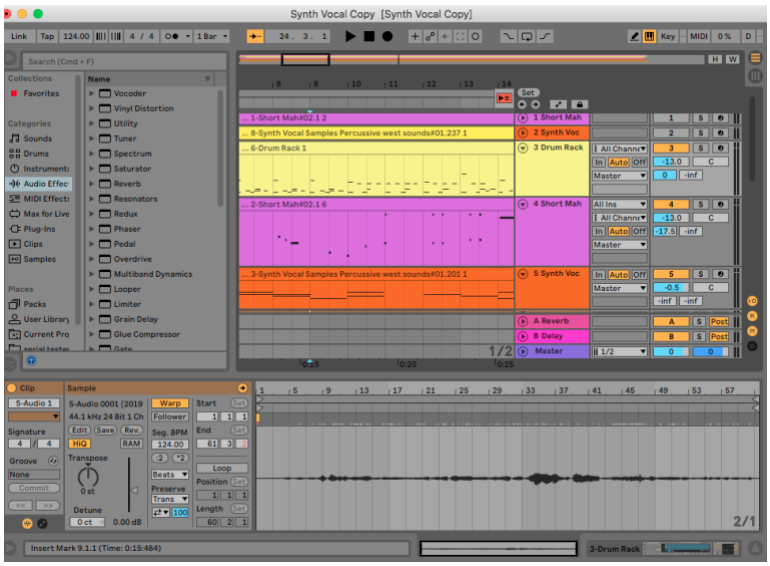
WEEK 9A (H1)

Date/Week:	21st APRIL: ABLETON	
What I did:	Musical:	Post-processing, instead of modifying the effect at the time of performance
	Technique:	
	Inspirations:	
	Score:	
What I used:	Equipment:	Zoom H1, $3 wind shield, Ableton Live 10.0.6
	Effects:	Post processed Tape Delay
Where I was:	My room.	
What happened:	When combining the above: Modified	
	I was far more inclined to use predominantly breath sounds and 'alternative' noises, e.g. ruffling my new wind filter for the Zoom H1. Playing straight into the DAW, I was also more likely to use the omni-directional microphone to record voices. I do not know how to use Ableton very well (is how I'm feeling right now). 	
Physical state:	Fatigued. Didn't go out to the bush. Chilled.	
Any problems or Unexpected Outcomes:	No problems with Ableton…. Quelle surprise!	
Reflection (week post):	One section primarily breath in the final piece. Effective – but could be a much slower moving more sprawling piece.	

WEEK 9A (H1)

Date/Week:	SUNDAY 14TH APRIL: CLOSET	
What I did:	Musical:	Used English lyrics.
	Technique:	Post-processing, instead of modifying the effect at the time of performance
	Inspirations:	
	Score:	
What I used:	Equipment:	Zoom H1.
	Effects:	Nothing.
Where I was:	1m*.5m closet	
What happened:	When combining the above: Dry (with Reverb)	
	I used a laugh in it from where I couldn't get into the closet (because it's full of performance-wear). I looped it. I like how it provided a constant rhythm that wasn't standard. Created a Katajjaq-like rhythm mid-way. Used a lot more dissonance that I normally would. Left two English phrases in because it captured two interesting things that I found about getting into the closet. "This is… this reminds me of high school" (I used to climb on top of wardrobes to hide away in a nook and read. Similarly, I would hide in the hot water closet with books and a torch when I was a small child). and "okay, my positioning is not that great and I'm too tall to stand up in this room…". 	
Physical state:	Sick/not sick etc.	
Any problems or Unexpected Outcomes:	e.g. equipment caught fire, screamed too hard: result -lost voice,	
Reflection (week post):	Using the laugh as a sample = A+. I keep laughing at the use of English. It makes me wonder if I can seriously consider it at all – or if there'll be a certain amount of cultural cringe. 'my closet is dusty' …. 'in my closet'	

WEEK 10A (H2)

Date/Week:	THURSDAY 25TH APRIL: VOCAL SYNTH	
What I did:	Musical:	Cloud's drum line beat.
	Technique:	Playing my voice
	Inspirations:	Created a series of vocal synthesizers and patchers with Cloud Unknowing.
	Score:	
What I used:	Equipment:	Ableton, Rode K2, Edirol FA-101, Novation Launch-Key 25.
	Effects:	Post processed Tape Delay
Where I was:	My room – on the desktop.	
What happened:	When combining the above: Modified	
	Don't let me near a computer unattended is how I feel. Cloud's drum line is really cool. I hear myself and I shudder. It's the uncanny valley for my voice. Can you have voice dysphoria?  	
Physical state:	Sick/not sick etc.	
Any problems or Unexpected Outcomes:	e.g. equipment caught fire, screamed too hard: result -lost voice,	
Reflection (week post):	I feel really uneasy about everything in this still. I hate this and I hate this experience. I don't like the sounds. It makes me want to leave the room. Cloud said he enjoyed it and that it is playful.	

WEEK 10B (H2)

Date/Week:	SUNDAY 28TH APRIL: THE URBAN PARK	
What I did:	Musical:	Foot scraping to keep a beat – in keeping with Umngqokolo-Ngomqangi's rhythmic umrhube (mouth bow).
	Technique:	Post-processing, instead of modifying the effect at the time of performance. Recording while manipulating the audio – straight takes and overdubbing.
	Inspirations:	
	Score:	
What I used:	Equipment:	Zoom H6, Sennheiser e945, Cloud.
	Effects:	Mid-side decoder, Limiter.
Where I was:	Harmony Park, Coburg, VIC, 3058. At night.	
What happened:	When combining the above: Dry (with Reverb)	
	The scraping noise with my feet felt right at the time but made it a little more difficult to cut together and limited my post-performance recording. It may have been better (again, technical considerations for the digital medium) to record a specific 'foot noise' section and have the other singing. I had wanted to use it as a musical impetus. I felt the need to cut together a song (for time consideration), rather than leave it as a single performance, but I think this may have been better served by a single, unbroken line. 	
Physical state:	Cold. I hate winter.	
Any problems or Unexpected Outcomes:	My impetus became my bane.	
Reflection (week post):	I really like the gravel. I like the movement that it creates. I like the melody line from about 1m15m to the end.	

WEEK 11A

Date/Week:	WEDNESDAY 1ST MAY: FLANGER	
What I did:	Musical:	Katajjaq, subharmonics, overtones.
	Technique:	Recording while manipulating the audio – straight takes and overdubbing.
	Inspirations:	
	Score:	
What I used:	Equipment:	Boss BCB Pedal Board, Edirol FA-101, Sennheiser e945
	Effects:	Boss Flanger, Dark Room Reverb, C3 Boss Compressor, Fender '59 Bassman Pedal, Fender '63 Reverb Pedal.
Where I was:	In my room.	
What happened:	When combining the above: Modified	
	I chose to go straight in with this recording with only about 30 seconds preparations/fiddling with the Flanger. Last recording, I played with drones. This time I played with a denser texture. I wanted to start sketching for the more chaotic/melodic transition sequence. It sounds like someone turned up the psychedelia and the UFO knobs. Listening through headphones, I thought it flattered the overtones a little more – now it just feels a bit messy. Will try it combined. At the moment I'm feeling like I'll be using relatively little effects – or in a round, effects on one/two voice(s) and the other one is the voice "in focus". 	
Physical state:	Sick/not sick etc.	
Any problems or Unexpected Outcomes:	e.g. equipment caught fire, screamed too hard: result -lost voice,	
Reflection (week post):	I really like the more extreme effects. I think they are way more playful. I think the flanger phases the TST in and out while creating its own overtones at times. I like the saw affect from the last 30s.	

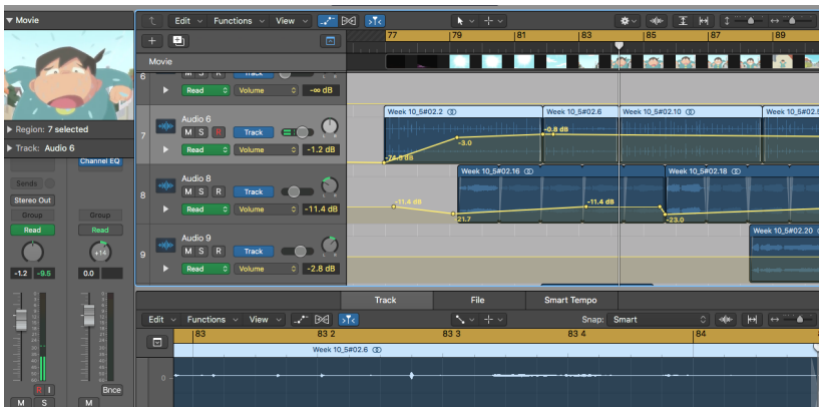
WEEK 11B

Date/Week:	WEDNESDAY 1ST MAY: POST-WAH	
What I did:	Musical:	Using drone of ~ F3 taken as 'body pitch', I.e. something that felt moderate to low in my voice with the ability for more overtones + undertones.
	Technique:	
	Inspirations:	Post-processing
	Score:	Drone – beginning to think on the "desert" sequence.
What I used:	Equipment:	Zoom H1, windsock, Logic Pro X
	Effects:	Auto-Wah (fixed pitch), Compressor, Limiter, Chromaverb (20% on drones, 40% on main voice).
Where I was:	In my room.	
What happened:	When combining the above: Modified	
	I couldn't get the physical Wah pedal (George Benson Wah) working with a microphone – not sure if the pedal is dead again. Tried with auto-wah, so I had to use a post-effect in Logic. I'm not preferring this option – as a post processing thing but I'm a lot slower in Ableton and I need to get these done quickly so that I can fulfil other obligations today. When I was playing around with the wah settings, I noticed that at certain points it accentuated or obliterated the overtone. I kept the drones with a lower filter and the 'lead' with a higher filter. I also added some reverb. 	
Physical state:	Morning!	
Any problems or Unexpected Outcomes:	I couldn't get the original wah pedal working. I don't feel like this is a conclusive test of the wah.	
Reflection (week post):	Still disappointed that the pedal didn't work. I don't think the effect is characteristic enough of the pedal. The overtones are absolutely slamming. But I'm sure that that's due to the filtering nature of the wah over anything else.	

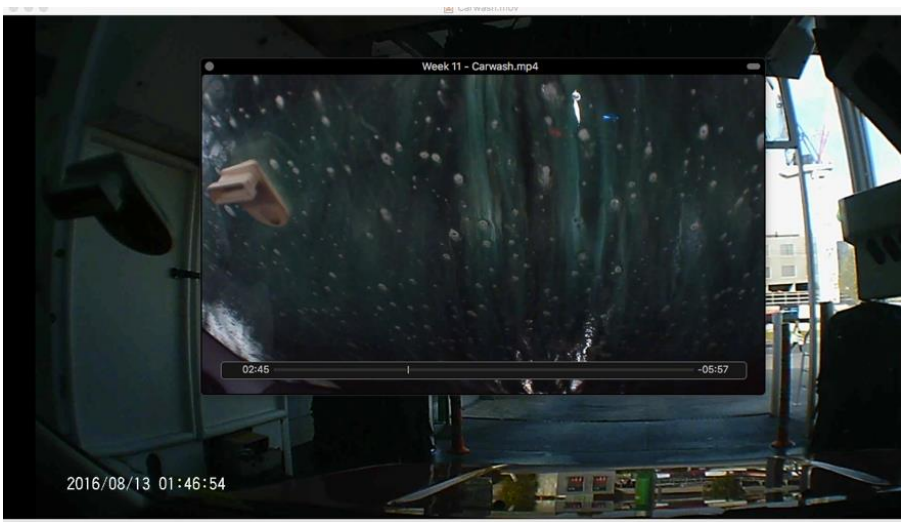
WEEK 12A

Date/Week:	TUESDAY 7TH MAY: STUDIO A, BHI	
What I did:	Musical:	Reinforced overtones. Some subharmonics +overtone
	Technique:	
	Inspirations:	
	Score:	
What I used:	Equipment:	Zoom H1.
	Effects:	EQ, taking 2K out – resonant frequency of the recorder? ChromaVerb (Bloomy & Room).
Where I was:	How big is studio A? Studio A, Box Hill Institute, Nelson Campus.	
What happened:	When combining the above: Dry (with Reverb)	
	I took a brief opportunity to record in Studio A after helping pack up post-recording session for the Australian Girls' Choir. Singing in that room is pleasurable. An absolute joy. It looks nice, it sounds nice. The sound was so resonant and live, it makes me think of changing venues. In the room it felt like the over and undertones 'popped'. I would like to try this room again. 	
Physical state:	Sick/not sick etc.	
Any problems or Unexpected Outcomes:	e.g. equipment caught fire, screamed too hard: result -lost voice,	
Reflection (week post):	It sounds smaller than I remember. I'm still glad I've chosen this space for the performance. The resonant frequency of the laptop speakers and the H1 is more apparent in this recording to me. I like the use of physical space for the recording (distance from the microphones, etc.)	

WEEK 12B

Date/Week:	SATURDAY 10TH MAY: RESPONSE TO 15TH STEP	
What I did:	Musical:	Playing 'The 15th Step' by Radiohead and singing to it.
	Technique:	Mouth percussion, Katajjaq, overtones.
	Inspirations:	Thom Yorke and Radiohead.
	Score:	https://www.youtube.com/watch?v=xpqk9MD6vLM
What I used:	Equipment:	YouTube, Logic, H1
	Effects:	Reverbs at 20% - just to add the room back in. EQ taking out the resonant frequency in the recorder (I assume).
Where I was:	In my room.	
What happened:	When combining the above: Dry (with Reverb)	
	I used some English lyrics. I used tongue clicks and katajjaq to be a percussive element – this song is very percussive to me and I wanted to reflect that. The overtones worked best on the long vowels – not surprising. I'm not in love with the musical output on its own and I found the percussion difficult to achieve in the 15/8 time signature. I kept making a few mistakes and messing up my timing. I like the odd time signature though and I would potentially be interested in putting it in my final piece – or something else. 	
Physical state:	Sick/not sick etc.	
Any problems or Unexpected Outcomes:	e.g. equipment caught fire, screamed too hard: result -lost voice,	
Reflection (week post):	I LOVE the tongue clicks. 'The cat gets your tongue' is still apparent. It's not readily apparent that I'm using the song. There're little bits that peak through. I use a bit of dissonance which I like.	

WEEK 13A

Date/Week:	TUESDAY 14TH MAY: IN THE CAR WASH, YEAH!	
What I did:	Musical:	Car wash atmospherics
	Technique:	
	Inspirations:	
	Score:	
What I used:	Equipment:	Dashcam (video and audio), Zoom H1.
	Effects:	Limiter, Compressor, EQ
Where I was:	In my car. A tiny 1994 Nissan Pulsar Solaire. Box Hill BP car wash.	
What happened:	When combining the above: Dry (with Reverb)	
	Mostly standard. Used the seatbelt fastener, quick and slow TST. It felt more natural than the last time I attempted this test. Audio quality on the dashcam is… certainly there. Being in the car wash is a strangely joyful experience.  	
Physical state:	Sick/not sick etc.	
Any problems or Unexpected Outcomes:	e.g. equipment caught fire, screamed too hard: result -lost voice,	
Reflection (week post):	I thought the car wash was heavy rain at first. The carwash noises were misleadingly factory like until the handbrake was engaged. You can hear the dashcam turning back on (because I accidentally turned the car power off). It's too noisy to get the vocals when the carwash is really going for it. The footage from the dashcam has the wrong date because we never bothered to set the date when I got it – something that I should probably remedy in case of an accident. I enjoy the ambient noises and space. I used to sing daily in the car on the way to work (Napier St, Fitzroy), now I only get the chance when I'm going to/from Craigieburn or Box Hill Institute. The overtones are not very good in these recordings, I think they are showing the low-quality recording apparatuses. 'Whoops! Sorry, car!' Had me giggling.	

WEEK 13B

Date/Week:	TUESDAY 14TH MAY: INSTRUMENTAL ACCOMPANIMENT (PIANO)	
What I did:	Musical:	Playing and improvising with the piano, moving between different modalities in my head.
	Technique:	Overtone, some undertone, trying to revisit melodic ideas as in a more structured song.
	Inspirations:	
	Score:	Playing with the piano.
What I used:	Equipment:	H1, lapel mic.
	Effects:	Chromaverb (room) reverb, EQ, limiter, compression
Where I was:	BHI, room 107.	
What happened:	When combining the above: Dry (with Reverb)	
	Mostly standard overtones and smaller sections with subharmonics. Used a lapel mic and the Zoom H1. I few uncertain note leaps. Very peaceful. I can feel my sadness today. More emerging and disappearing overtones. I really enjoy this test and I think it could be a piece pretty easily – maybe a plucked instrument, piano, and a second voice. I feel like my personal proclivities stand out a lot more in this one. 	
Physical state:	Fragile – mentally. Overwhelmed, over-worked, and overly hard on myself.	
Any problems or Unexpected Outcomes:	The lapel mic could have been better. I wanted to have the H1 and a lapel mic to compare quality (and as a backup). It's average, has a different profile to the Zoom. Less buzzy in the 2K zone than the Zoom.	
Reflection (week post):	This room is too small for my voice. Too bouncy. I still remember this feeling of doing this recording. I remember having a blast – it really takes me back. It also makes me wish I owned my own acoustic upright or grand piano. I think it's a bit moody and wistful. I start wanting to sing along with it. I like the shifting feels and rhythms/harmony. I wish the space was bigger and that I had better recording equipment for this one.	

WEEK 14A

Date/Week:	MONDAY 27TH MAY: OCTAVER	
What I did:	Musical:	Subharmonics and reinforced overtone-singing. Rapid takes, sub one minute. Effects on in monitoring.
	Technique:	
	Inspirations:	
	Score:	
What I used:	Equipment:	Logic Pro X, Desktop (i7), Rode K2 mic, SE vocal booth (portable).
	Effects:	Stereo Octaver and Chromaverb (Room, Dark Room, Bloomy). Logic Pro X. panning, EQ, Limiter
Where I was:	Dans ma chamber.	
What happened:	When combining the above: Modified	
	It took a while to figure out where the heck the effects during playback was, AGAIN. I drift towards these things that feel like I could sprawl them out for 15minutes. Drifting. Slightly dreamy and church-y. A little bit discordant – reminds me of Lux Aeterna, which has been on my mind recently too. Sort of flatters some TST/EVT. Makes subharmonics *very* grumbly. Let's some overtones pop, probably through being doubled. 	
Physical state:	Aftermath of bad cold. Had very little voice left to sing with after 6hours teaching. Very tired. Not thinking terribly well.	
Any problems or Unexpected Outcomes:	How quick this was to get an effective outcome. How blended it felt.	
Reflection (week post):	It doesn't track slides very well. It gets a little bit artefact-y. It needs to go for longer and develop. Note to self for the future. It's definitely a mood. In the words of kids today.	

WEEK 14B

Date/Week:	MONDAY 27TH MAY: PHASER	
What I did:	Musical:	Subharmonics and reinforced overtone-singing. Rapid takes, sub one minute. Inward phonation. Effects on in monitoring.
	Technique:	
	Inspirations:	
	Score:	
What I used:	Equipment:	Logic Pro X, Desktop (i7), Rode K2 mic, SE vocal booth (portable).
	Effects:	Stereo-phaser, Chromaverb reverb (Strange Room, Dense Room, Room. Panning. Logic Pro X, EQ, Limiter.
Where I was:	Dans ma chambre encore.	
What happened:	When combining the above: Modified	
	A little less drifty than the Octaver. I was trying to focus on the percussion and keeping that line going without cracking up. Sort of flatters some TST/EVT. Let's some overtones pop, but it takes them away on the phase. I set the phasing from 20Hz to the maximum (13K?). That one overtone is really still quite strident, but this is the fault of the laptop speakers, as it is not the same when played through my Sennheiser HD202 headphones, Plantronics Bluetooth headphones, or KRK Rokit 5"'s. This feels a lot more like three people in a room. 	
Physical state:	Aftermath of bad cold. Had very little voice left to sing with after 6hours teaching. Very tired. Not thinking terribly well.	
Any problems or Unexpected Outcomes:	How quick this was to get an effective outcome. How blended it felt.	
Reflection (week post):	I listened to this straight after the Octaver one and I'm disappointed that it's not the Octaver one. The phaser helps some TST, some of the time. It's a little patchy. I like the warp.	

WEEK 15A (H3)

Date/Week:	MONDAY 27TH MAY: BEACH	
What I did:	Musical:	Tried thinking of the way the song way going to go and recording each bit as it came up. Reinforced overtones, subharmonics
	Technique:	
	Inspirations:	
	Score:	
What I used:	Equipment:	Zoom H1
	Effects:	20% Reverb
Where I was:	330 Beaconsfield Parade, St Kilda West, VIC	
What happened:	When combining the above: Dry (with Reverb)	
	I feel like I just come out with something similar – very song-y now. Consistently doing these tests has made me hone-in one some things that I reliably choose to use – even when I'm trying to step away from Habit. I find that the locations haven't really influenced me as much as how they have impacted my comfort level. Thus far, I have had the most FUN using effects to modify performance because it is novel. I am still learning to trust myself and my instincts. I'm still getting used to this improvisational thing too. Occasionally I have been letting large sections stand as one entity without modification. It's very interesting for me to see these 'solid' sections continue to 'pop out'. 	
Physical state:	Really, really cold. Still a bit sick.	
Any problems or Unexpected Outcomes:	Too windy. Too cold. Couldn't sing without chattering and shivering.	
Reflection (week post):	Too windy. I much prefer singing on the empty, small-town beaches of my youth. This felt too close and too un-beachy. Too cold. I can hear myself shivering. I think it's funny that I've tried to use them almost as an emphasis. Because of the shivering and chattering it ***feels*** cold. Funnily enough, it doesn't feel remotely or sound remotely beach-like for me.	

WEEK 15B (H3)

Date/Week:	FRIDAY 31ST MAY: RC-30 LOOP PEDAL	
What I did:	Musical:	A little of a lot. Inward phonation, overtones, subharmonics.
	Technique:	Looping and using the effects in the pedal
	Inspirations:	
	Score:	
What I used:	Equipment:	Boss RC-30, Rode M2 Microphone, Logic PRO X, Chromaverb (Bloomy, 20%), Normal Edirol/tower set-up.
	Effects:	Bend Down, Step Phaser, Sweep Filter, Tempo Delay, Low-Fi, Reverb, Loop pedal.
Where I was:	In my room.	
What happened:	When combining the above: Modified	
	I don't know how to put it to myself… but I had fun with the small(er) loop pedal. When I got my first loop pedal – I pre-ordered the Boss RC-300. I got the RC-30 for instrumental looping and I've been trying it in live situations for about 9 months for vocals. I haven't really enjoyed using it in live improvisation until tonight – so if nothing else, that's a break-through. I really enjoyed playing with the effects on and off the looping function. I tried to play a lot with density in the second section. 	
Physical state:	Still a bit sick. Cold, Tired. Voice is Dying from having to do so much singing whilst I'm still sick.	
Any problems or Unexpected Outcomes:	I haven't enjoyed this loop pedal very much in the past. Tonight was a first.	
Reflection (week post):	I like the slow build. The slow layering. The little effects glitching in and out too! It ***sounds*** fun. This also feels the most 'me' so far, alongside the piano one from Week 13b. The stepped filter around 6m one is ***awesome***. I like the effects; I like the pinging. I like how it sounds instrumental whilst just being me and a pedal.	

WEEK 16A (H4)

Date/Week:	WEDNESDAY 3RD JULY: SCENT	
What I did: Delayed due to illness.	Musical:	Scent from candles.
	Technique:	
	Inspirations:	
	Score:	
What I used:	Equipment:	Candles, Essential oil, Rode K2
	Effects:	ChromaVerb (Bloomy, Concert Hall, Vocal Hall, Chamber, Room), Limiter.
Where I was:	In my room.	
What happened: Delayed due to injury/Illness.	When combining the above: Dry (with Reverb)	
	What does scent mean to me? Scent builds but is consistent. I currently have a miscellaneous scent by Serenity Candles on. This was a Christmas gift from a friend. Scent can be a memory aid. Scent can be pleasant through to foul. I have been thinking about using scent in the performance. But I don't know how I want it to go. I think actual burners might be better – or burning the herbs, with drop sheets down at least. This scent is soft and fuzzy.  	
Physical state:	Really, really cold. Still a bit sick.	
Any problems or Unexpected Outcomes:	e.g. equipment caught fire, screamed too hard: result -lost voice,	
Reflection (week post):	Church-tastic. I can smell the incense. Oh. In smother, we could break down into a church bit, although church repression is a bit of an old-hat topic.	

WEEK 16B (H4)

Date/Week:	WEDNESDAY 3RD JULY: DRONES	
What I did:	Musical:	Apple loops drones. Doubling of the voice. Using of alternative instruments for scraping sounds.
	Technique:	Cup scraping. Mostly overtones, some subharmonics.
	Inspirations:	Created Apple-Loops drone sections.
	Score:	
What I used:	Equipment:	Rode M2, Sennheiser HD202, Edirol FA101
	Effects:	Reverb 30%
Where I was:	In my room with the cat.	
What happened:	When combining the above: Dry (with Reverb)	
Delayed due to injury/Illness.	I was really feeling something with the candle drones, and I wanted to try something with a similar focus. I used a darker 'airier' drone palette that I've been considering for 'Smother'. I had been considering an industrial drone backing for 'Smother'. La Monte Young's piece 'Composition 1960 #7' was also at the forefront of my mind. I had a single note drone but keep feeling the pull to make it more harmonically complex. I wonder if trying single note drones with the 4th and 7th (most dissonant and non-western) overtones would be interesting. 	
Physical state:	Really, really cold. Still a bit sick.	
Any problems or Unexpected Outcomes:	e.g. equipment caught fire, screamed too hard: result -lost voice,	
Reflection (week post):	Not as useful for smother? I like the spacing and the effects use. That false vocal fold use in the middle was sounding really good. I can't remember what I was scraping on the desk to get the shkkkkhhh sounds underneath. A cup, maybe?	

WEEK 17A (H5)

Date/Week:	FRIDAY 27TH JUNE: FUZZ, SCORING, MULTI-EFFECTS	
What I did:	Musical:	Graphic Score #2, attempt 2
	Technique:	Post
	Inspirations:	
	Score:	
What I used:	Equipment:	Edirol, Sennheiser HD202 headphones, Sennheiser e945, Boss Pedalboard, Graphic score.
	Effects:	C3 Boss Compressor, Fender '59 Bassman Pedal, Fender '63 Reverb Pedal, JOYO AnalogDelay Pedal, Boss Phaser, Logic Pro X effects: Vocal transformer (24 down on pitch and formant), fuzz-wah (fuzz and compressor), reverb 30%, Limiter, compressor, phase distortion.
Where I was:	In my room.	
What happened:	When combining the above: Modified	
Delayed due to injury/Illness.	I have a suspicion that I have no chill right now with this binaural panning. The phase distortion makes my voice sound like a mosquito – so I leaned into this. The phase distortion seems to highlight ONLY the dominant overtone. I prefer the standard fuzz and the pitch shift 2 octaves down with 2 octaves down formant shifting. The fuzz with the compressor second in the chain is very different to having it the other way around. It changes how brutal the fuzz is. I tried a much darker sound for this fuzz. 	
Physical state:	Sick/not sick etc.	
Any problems or Unexpected Outcomes:	e.g. equipment caught fire, screamed too hard: result -lost voice,	
Reflection (week post):	That distortion/fuzz is brutal. It sounds like the most brutal mosquito ever. And I can't focus on anything else.	

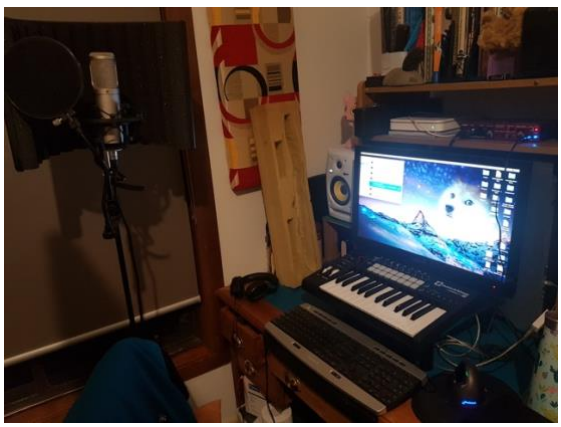
WEEK 17B (H5)

Date/Week:	FRIDAY 27TH JUNE: ANALOGUE DELAY, SCORING, MULTI-EFFECTS	
What I did:	Musical:	Graphic score #2
	Technique:	Post-processing, live effects, binaural panning.
	Inspirations:	
	Score:	
What I used:	Equipment:	Edirol, Sennheiser HD202 headphones, Sennheiser e945, Boss Pedalboard
	Effects:	C3 Boss Compressor, Fender '59 Bassman Pedal, Fender '63 Reverb Pedal, JOYO AnalogDelay Pedal, Boss Phaser, Logic Pro X effects: Vocal transformer (24 down on pitch and formant), fuzz-wah (fuzz only), reverb 30%, Limiter, compressor, Ring Modulator.
Where I was:	In my room, with no one here beside me… In my room, I walk with him 'til morning.	
What happened:	When combining the above: Modified	
Delayed due to injury/Illness.	Well, goodness gracious. I really like the pitch. I think that will make a very good low, 'spooky', drone. I think I went a bit overboard with the binaural panning, to be honest. I still find it a bit too exciting. I really like it, but I also think it's hilarious. I tried to use the small painted graphic score as my inspiration. I felt like a twat. I can't take it seriously when I'm on my own – even with a rule set. I need the people around me to stick to my goals. I think this is still part of my aversion to certain things. 	
Physical state:	Sick/not sick etc.	
Any problems or Unexpected Outcomes:	e.g. equipment caught fire, screamed too hard: result -lost voice,	
Reflection (week post):	A lot less like an angry mosquito in this one. I think it's amusing; I don't dislike it. I don't think it's useful for the big project this year.	

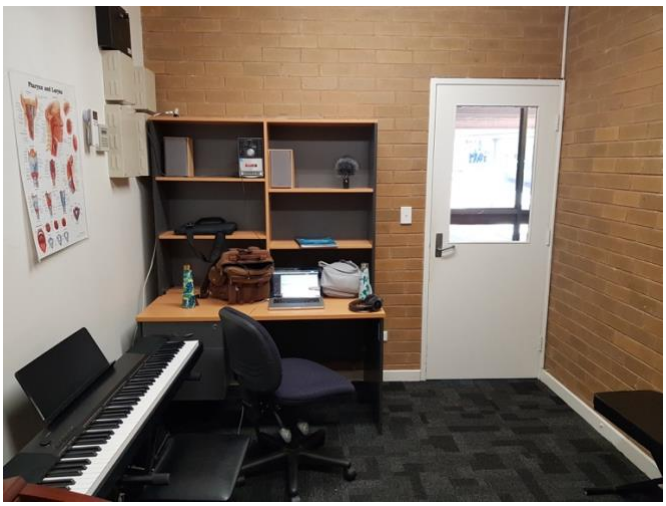
WEEK 18A (H6)

Date/Week:	TUESDAY 18TH JUNE: BHI MICROPHONE SHOOT-OUT	
What I did:	Musical:	Trying out different Microphones (not normally available to me) to see if microphones make large difference and what are the better microphones for TST/EVT on MY voice.
	Technique:	
	Inspirations:	
	Score:	
What I used:	Equipment:	AEA, C414, Coles, M498, Russian Ribbon Microphone (Cloud's), TLM103, Vocal Hall Reverb (Chromaverb, 20%). Cloud Unknowing as recording engineer.
	Effects:	ChromaVerb (Vocal Hall 22%), Limiter.
Where I was:	Studio B, Box Hill Institute, Nelson Campus, main room	
What happened:	When combining the above: Dry (with Reverb)	
	AEA: Nice, smooth overall, not very forgiving on undertone centric singing. C414: Quite balanced, a little metallic overall. Neither Coles 01: not very pronounced on overtones. Soft. M49B: Nice overtones, especially nice on lower formants. Very pleasant to listen to. Russian Ribbon Microphone: okay. Neither here nor there in terms of positively/negatively affecting the sound. TLM103: It sounds so flat and dead. Only any "good" with the nasal port open when singing.  *Figure 2. Photo by Cloud Unknowing.*	
Physical state:	Recently assaulted, sore maxillary area on right side that was aggravated by singing. Kept samples to 2minutes each to reduce time singing.	
Any problems or Unexpected Outcomes:	My face hurt. Singing in such a nice space was really nice, and kind of a relief from the gruelling schedule of the past five months. It was also nice to not have to worry about the set-up of equipment, as well as nice having company.	
Reflection (week post):	AEA: no change. C4: no change. Coles: meh. M49B: still kind of the winner-winner, chicken dinner. Russian Ribbon: it's okay. No actually, some of those higher overtones are nice. TLM103: meh.	

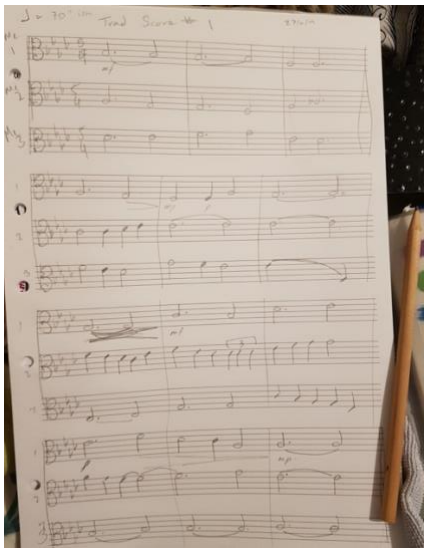
WEEK 18B (H6)

Date/Week:	FRIDAY 27TH JUNE: HOME MICROPHONE SHOOT-OUT	
What I did:	Musical:	Trying out the microphones I have access to at home.
	Technique:	
	Inspirations:	
	Score:	
What I used:	Equipment:	Edirol, Sennheiser HD202 headphones, Sennheiser e945, Rode: M2, N1, K2, Shure: SM58, 57, WH20
	Effects:	ChromaVerb (Vocal Hall 22%), Limiter.
Where I was:	In my room.	
What happened:	When combining the two above for: Modified	
Delayed due to injury/Illness.	Sennheiser e945: too smooth up in the high frequencies, no lift, like other dynamic microphones of this price range. This is my preferred mic as a contemporary singer – but isn't as useful for the more 'delicate' response for overtone-singing. Rode M2: Solid – I purchased this microphone as a good TST live microphone, so no surprises there. Rode K2 Valve: Solid – more sensitive than the M2 (of course). Warm, smooth, all round nice response. Rode N1: nowhere near as good as the other two Rodes, not necessarily any better than the e945. Not great considering it's a condenser mic. Shure WH20: Surprisingly really great – I also think I've gotten a lot better at activating different folds for TST. Much gentler sound – I've been trying to get this reliable for about 2 weeks. SM57: It's okay. Similar problem to all the Shure mics is that I think there's better out there for the body of my voice. SM58: It's okay. I just don't like these that much on my voice. It's more favourable to the overtones, BUT it makes me like the quality of the voice underneath a lot less. 	
Physical state:	Face no longer hurts. Sinus infection so sinuses are not properly open.	
Any problems or Unexpected Outcomes:	I did these two microphone shoot-outs on the request of my supervisor and the BHI panel of supervisors.	
Reflection (week post):	K2: NICE. M2: still okay. Solid. e945: better than I usually think it is. Still not great. Good on the false vocal fold (FVF) action. N1: it's pretty average. WH20: sparkles on the top. Fundamental is not as nice. That FVF is sounding nice. SM57: Prefer the M2. SM58: Prefer the M2. I kind of knew the results before I did the home microphone shoot-out and I'm not unhappy with my condenser microphone vs. the school's.	

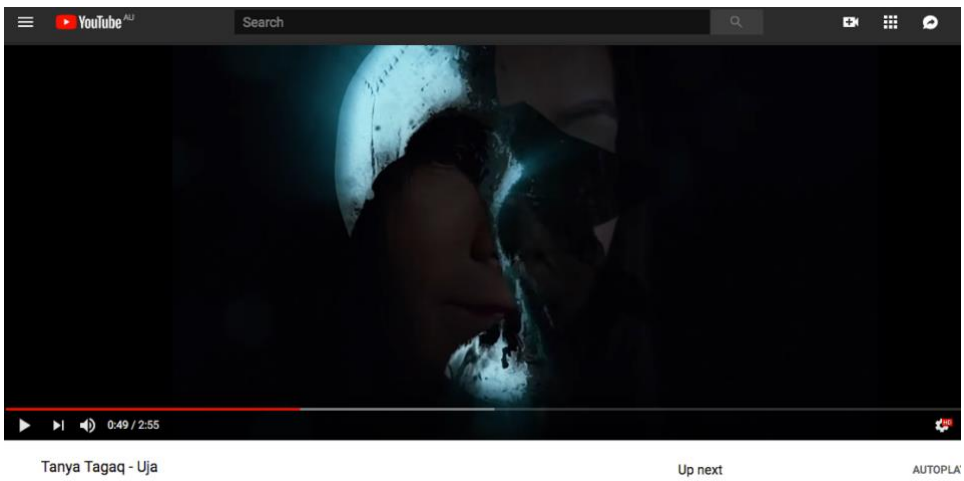
WEEK 19A (H7)

Date/Week:	THURSDAY 26TH JUNE: BRICKS AND MOVEMENT	
What I did:	Musical:	Using proximity and location effects in the field recorder.
	Technique:	
	Inspirations:	
	Score:	
What I used:	Equipment:	Zoom H1
	Effects:	ChromaVerb (Reflective Hall 24%), EQ, Limiter.
Where I was:	Craigieburn Secondary College – Instrumental music room.	
What happened:	When combining the above: Dry (with Reverb)	
	I'm using the false vocal folds a lot more to try and get a less hardcore subharmonic. I used distance from the recorder and orientation around the recorder to create locational effects – not super effective. The distance was more obvious. Locational orientation to the zoom: it's only effective when the zoom is much closer to my face, vs walking around it. With proper binaural recording, this would of course be different. 	
Physical state:	First week back after being assaulted.	
Any problems or Unexpected Outcomes:	I feel resentful of the school just listening to this room.	
Reflection (week post):	The space doesn't come out as well in this recording, unlike the Studio A recording – Week 12a. The overtones sound pretty okay. The musical output has some bits that I don't feel like I've been using before – I think AIM's (2nd workplace) student tech work has been seeping into my practice. Nice. I know that I've started using the double harmonic in the last few weeks (mid-July onwards).	

WEEK 19B (H7)

Date/Week:	SATURDAY 28TH JUNE: TRADITIONAL SCORING	
What I did:	Musical:	Over & undertones
	Technique:	Traditional score with improvised overtones.
	Inspirations:	
	Score:	
What I used:	Equipment:	Edirol FA101, Sennheiser HD202, Rode M2
	Effects:	ChromaVerb (Reflective Hall 24%), Limiter.
Where I was:	In my room.	
What happened:	When combining the above: Dry (with Reverb)	
	Lacks rehearsal. VERY, VERY different to my normal outcomes. It's also the most "normal" my traditional scoring has ever sounded. Some of the characteristic oddities are still there, but no way near as extreme. Nice textures and it makes the drones really interesting – I'm glad because this is something I wanted to use in the final pieces, but I was afraid that it would be, and get, too boring. 	
Physical state:	Tired, but medicated.	
Any problems or Unexpected Outcomes:	e.g. equipment caught fire, screamed too hard: result -lost voice,	
Reflection (week post):	Too fast, under-rehearsed (sight singing the whole piece). A little unbalanced in the mixing department, too. I still like the overall sound/aesthetic of it though…	

WEEK 20A (H8)

Date/Week:	WEDNESDAY 3RD JULY: RESPONDING TO TAGAQ	
What I did:	Musical:	Tanya Tagaq – 'Uja' from 'Animism' album
	Technique:	
	Inspirations:	
	Score:	
What I used:	Equipment:	Edirol FA101, Sennheiser HD202, Rode M2
	Effects:	Chromaverb Reverb – Chamber 30%, standard panning
Where I was:	In my room.	
What happened:	When combining the above: Dry (with Reverb)	
	More uncomfortable than what I would have thought. I really admire Tagaq's work and musical sense. But I don't think I'm really in her zone, musically speaking. The true test is how I feel about the outcome after a break – but I think maybe I just didn't quite latch on to her style from that very busy track. 	
Physical state:	Tired, but medicated. I feel like I've been sick for so long.	
Any problems or Unexpected Outcomes:	e.g. equipment caught fire, screamed too hard: result -lost voice,	
Reflection (week post):	I heard my influence straight away. I think I should have kept it far barer than I made it in that middle section.	

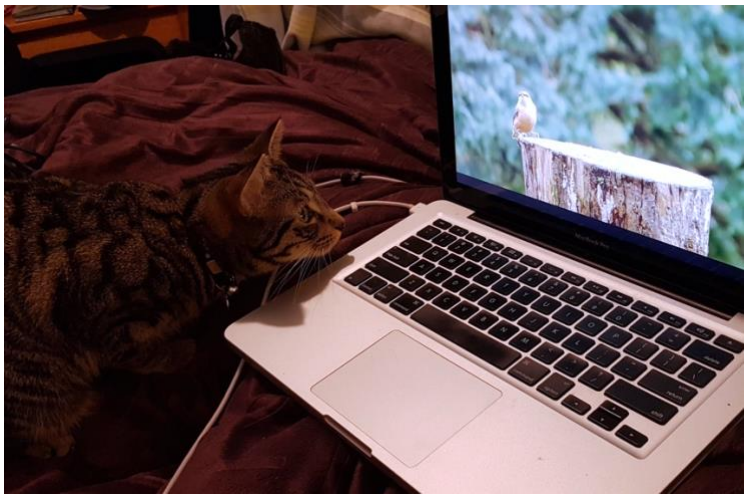
WEEK 20B (H8)

Date/Week:	WEDNESDAY 3RD JULY: CAT	
What I did:	Musical:	We got a cat yesterday. We kept her 'prison' name, Ladybug.
	Technique:	
	Inspirations:	
	Score:	
What I used:	Equipment:	Edirol FA101, Sennheiser HD202, Rode M2
	Effects:	Binaural Panning, Chromaverb reverb – Chamber 13%, Vocal transform +10 formant shift, +1 pitch.
Where I was:	In my room with the cat on the chair.	
What happened:	When combining the above: Dry (with Reverb)	
	Miaowing like a cat is one of the easy ways that I know to find overtones. We got a cat yesterday. She's been talking a reasonable amount. From the mournful miaows in the carrier on the way home, to chattering at the birds out of the window, to purring very loudly because she's all tuckered out from playing... Happy post-adoption day, Ladybug. She seemed confused as to what all the fuss was about but not interested enough to leave the furry chair. 	
Physical state:	Sinus problems still, but greatly improving I think?	
Any problems or Unexpected Outcomes:	e.g. equipment caught fire, screamed too hard: result -lost voice,	
Reflection (week post):	Effective the second time around too. Ladybug's ears have perked up and she is staring at me quizzically. Fun. Very, very, fun.	

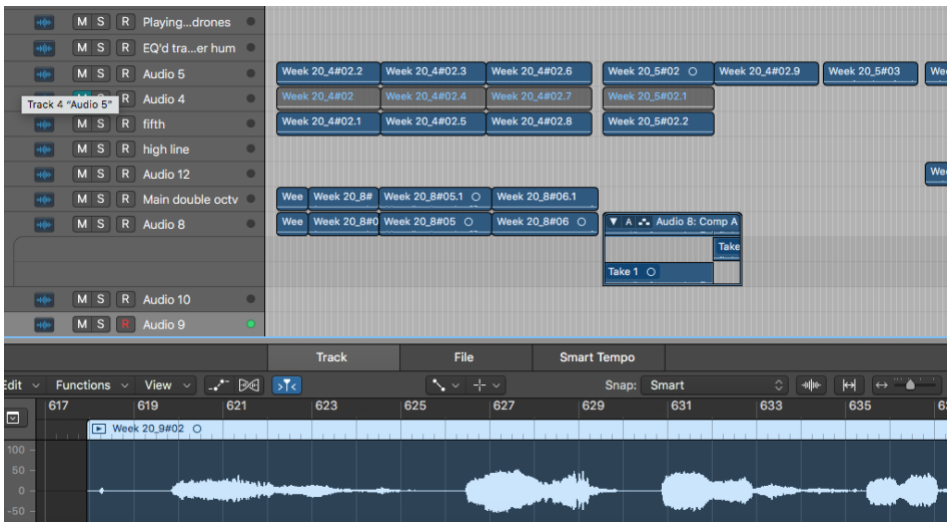
WEEK 21A (H9)

Date/Week:	TUESDAY 9TH JULY: INSTRUMENTAL ACCOMPANIMENT (GUITAR)	
What I did:	Musical:	Guitar and voice at the same time.
	Technique:	Record 3-4 takes 'blind' and see how they work together.
	Inspirations:	Māori words from Chaos score
	Score:	
What I used:	Equipment:	Cole Clark electric, Rode M2, Edirol FA101, Sennheiser HD202,
	Effects:	Reverb, Large tweed, with reverb and slight vibrato on the guitar, Limiter, Chromaverb (Dark Room 27%).
Where I was:	In my room	
What happened:	When combining the above: Modified Guitar, Dry (with Reverb)	
	Well, as previously stated, we got a cat. Today she is being a pain in the rear because she won't sit still. There are some atmospherics in all of my tracks until she gets used to the rhythm – or I buy a second litter tray. I liked the end result – I didn't like the process. I felt so awkward playing guitar that I felt restricted. That points out to me how little time I have had for my own "normal" creative practice routine. I do, on first look, enjoy listening to the finished product. It was unexpectedly, pleasantly dissonant and worked together – undoubtedly because I was staying on the same pitches for long periods of time. 	
Physical state:	Sneezy – new cat, so I have hay fever from her.	
Any problems or Unexpected Outcomes:	e.g. equipment caught fire, screamed too hard: result -lost voice,	
Reflection (week post):	Sounds way more like Jeff Buckley's 'Sketches for my Sweetheart, The Drunk' at the beginning with that guitar. Sounds like, '***ART***'. Dissonant. I can tell that I haven't been able to play my guitar as often recently in this recording. Here, I publicly lament this. It has its moments. 'Furry little jerk. Furry little jerk.' Here, I describe the cat. And then sigh.	

WEEK 21B (H9)

Date/Week:	TUESDAY 9TH JULY: BIRDS – I AM NATURE	
What I did:	Musical:	Inward phonation, growl, creak, breath sounds, some under/overtones. YouTube videos for Cats. https://www.youtube.com/watch?v=uUah6_-SKR8
	Technique:	
	Inspirations:	
	Score:	
What I used:	Equipment:	Rode K2, Edirol FA101, etc.
	Effects:	Binaural Panning, Limiter, Chromaverb (Bloomy 78% 90%, Airy 50% 70%)
Where I was:	In my room.	
What happened:	When combining the above: Dry (with Reverb)	
	Convincing enough to get the cat interested. Winner, winner, chicken dinner. So, this is an A+ in the cat's book. Nice. On serious notes, I found the river and grass elements to be the most challenging because I internally rebel against the idea of mimicking them from too many bad experiences with new-age "woo". 	
Physical state:	Sneezy – new cat, so I have hay fever from her. Antihistamines – so a little dry.	
Any problems or Unexpected Outcomes:	e.g. equipment caught fire, screamed too hard: result -lost voice,	
Reflection (week post):	I like it. It sounds nature-y. Here's my 'Ferns' inspiration section.	

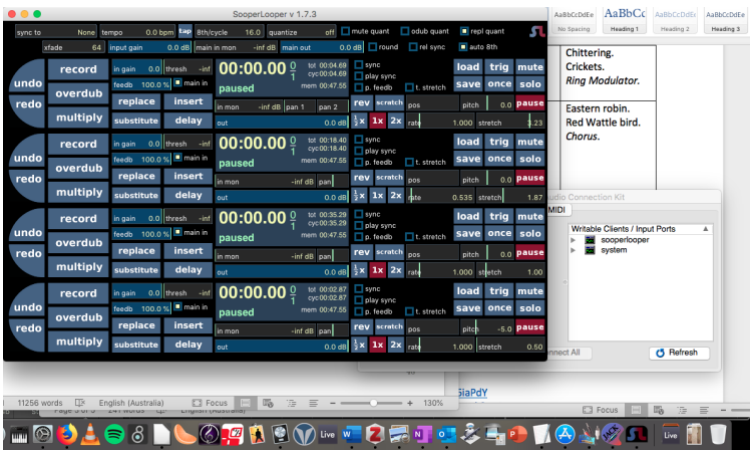
WEEK 22A (H10)

Date/Week:	TUESDAY 23RD JULY: FILM SCORE TASK	
What I did:	Musical:	I've been listening to a lot of Lisa Gerrard today for a project that may be coming my way. I will be channelling her 'vibe' and types of timbres that traditionally go underneath her voice with only voice.
	Technique:	
	Inspirations:	
	Score:	
What I used:	Equipment:	Rode K2, Logic Pro X & effects.
	Effects:	ChromaVerb (Dark Room & Concert Hall: 63% dry, 100% verb) pitch shift (octave and fifth).
Where I was:	In my room.	
What happened:	When combining the above: Modified/Dry (with Reverb)	
	I improvised a plain note pattern for the entire duration and then use pitch shifters and doubled the lines (fifth and octave below) to create a pad. I then sang a medium-high pad. One melody line was sung close to the mic. One was sung far away from the mic. I further added an absolute stack of reverb and in different presents. Airy, dark, theatre, and bloomy reverb. All 100% wet, the pads had all/most of the dry track removed. The cat decided to have some zoomies time during the recording. As such there are some, not unflattering, cat bell tinkles in the background during vocal pauses. I used a half-step/whole-step vocal motif in different parts to try to emulate more of Gerrard's vocal habits and bump up the "other-ness" sound. 	
Physical state:	Sick/not sick etc.	
Any problems or Unexpected Outcomes:	e.g. equipment caught fire, screamed too hard: result -lost voice,	
Reflection (week post):	I like the blocking and texture. I know that this was not useful for the purpose it was intended for (film score). But as a piece, it stands. The cat's bell going off in all of my final recordings makes me laugh. It is also kind of useful in some of them – like this one. The incidental noise would be something that I would keep in and add too – perhaps sleigh bells?	

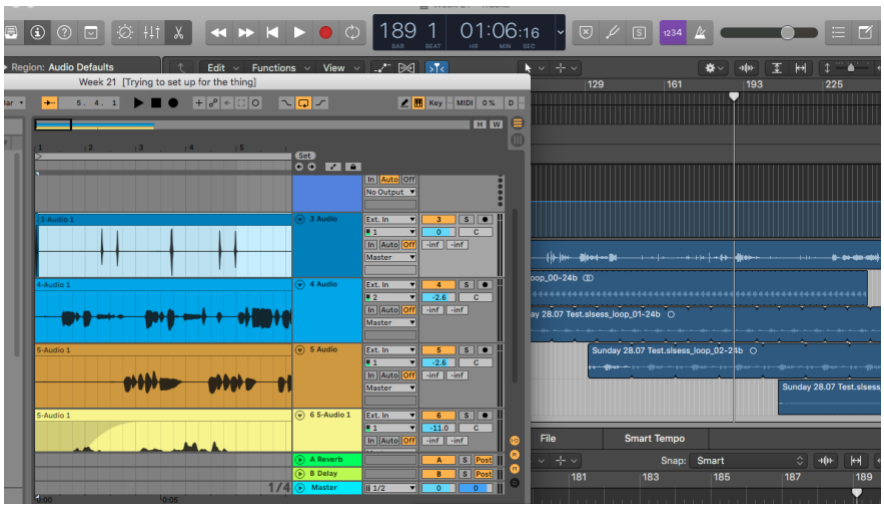
WEEK 22B (H10)

Date/Week:	SUNDAY 20TH JULY: ELECTRONIC DRONES	
What I did:	Musical:	Build a series of drones and then use binaural panning to create movement and space. Growl and rhythmic growl sample.
	Technique:	
	Inspirations:	
	Score:	
What I used:	Equipment:	Laptop, vocal samples, Logic Pro x.
	Effects:	Octaver, tape delay, echo delay, compressor, limiter, reverb, EQ.
Where I was:	My room.	
What happened:	When combining the above: Modified	
	Textural. I used a transformer hum drone that I built up from a sample and bounced out as one long .mp3 (thinking of 'Smother's length and composing for that piece). I did the same for an airy drone and a vocal drone made of some samples that I had made for the vocal synth. For the experiment piece, I focused on placing these sounds in a binaural space, moving textures rather than piece and actual rhythms. 	
Physical state:	Stuffy nose from allergies and post illness snuffles.	
Any problems or Unexpected Outcomes:	The drone that I built was surprisingly interesting for me. I could turn the layers into a synthesizer. However, my purposes that I have been thinking of for this week's experiment mean that that is not an effective use of time. I want to use a modified/effected vocal drone in 'Smother'.	
Reflection (week post):	'Smother', yes. Manipulating overtones, building my own drones. Filtering, shifting the sounds around. I dig it all.	

WEEK 23A (H11)

Date/Week:	SUNDAY 28TH JULY: SOUPER LOOPER	
What I did:	Musical:	Tuesday 23rd July: Souper Looper would not work. So, I made a work around and will try again with souper looper once I've had an update and a restart of my system. Sunday 28th: Using Jackpilot, Ctl Jack, AND Souper Looper. Working. Another calamity. It only recorded the headphones despite seemingly picking up the audio from watching Logic's metering…
	Technique:	
	Inspirations:	
	Score:	
What I used:	Equipment:	Jack, Souper Looper, Logic Pro X, very bad headphones.
	Effects:	Reversing, rate changing, pitch manipulation, over dubbing, looping, delay, time stretching. Limiter.
Where I was:	My room.	
What happened:	When combining the above: Modified/Dry (with Reverb)	
	I created a loop in Ableton using all of their effects. Bounced it, layered it again three times in Ableton. Then I recorded a 4th line over the top using more false vocal fold action and quick register shifting. As a performance tool, Souper Looper seems incredibly valuable. You could foreseeably use it as your only tool considering the live reversing, slow-downs, stretching, quantising, etc. that you can do with it. It's well laid out – most everything is right there where you can see it (unlike Ableton or Logic where you need to have a more intimate knowledge in order to use it effectively live). However, it's recording capabilities and not being able to insert it as an audio track into a DAW are annoying problems. The outcome of this test is not what was performed as that has now been lost into the ether. 	
Physical state:	Can't tell if I'm sick or have allergies. Neither the antihistamine tablet, nor the Sudafed tablet have helped. Contemplating a nasal flush right now.	
Any problems or Unexpected Outcomes:	e.g. equipment caught fire, screamed too hard: result -lost voice.	
Reflection (week post):	The beginning is hilarious. That sped up loop while I was recording… The dishes in the background because the cat kept yelling about being in or out of the room… Spoiler alert. Did the nasal flush and came down with the sickness pretty badly.	

WEEK 23B (H11)

Date/Week:	THURSDAY 25TH JULY: ABLETON INTO LOGIC PRO X	
What I did:	Musical:	Using the space in Ableton and an incidental approach to music making.
	Technique:	I had been watching a Twitch.tv stream (Sips – Minecraft) and saw another example of an individual taking conversation/random audio snippets and turning them into songs/jingles/meme art.
	Inspirations:	
	Score:	
What I used:	Equipment:	Ableton, Logic Pro X, Laptop, headphone microphone.
	Effects:	Ableton: Delay (Uneven Two Step), Distortion (Vinyl), Saturator (Warm Up Lows), Reverb (Tile Room, Drums Room), Warm Tube. Logic: Tape Delay, Chromaverb 100% (Bloomy), Limiter.
Where I was:	In my room.	
What happened:	When combining the above: Modified/Dry (with Reverb)	
	I overlaid my loops created in Ableton to see if/how using Logic affected the outcome of the Ableton section. I think that the finger snaps came out really well (for my taste, anyway). The cats bell in the background is a nice nod to the aspect of life that is making me stay sane. She was definitely a good decision for this point in life and it has helped me feel fine. The Logic aspect of the recording feels a little more random and I feel like it's really just experimenting with this extreme reverb sound – which is feasible in recordings but in a live performance will mean that you always have some dry sound because you're in the room with the performers. 	
Physical state:	All is fine.	
Any problems or Unexpected Outcomes:	e.g. equipment caught fire, screamed too hard: result -lost voice,	
Reflection (week post):	This one sounds similar to some stuff I do at other times. I like the snaps for percussion.	

Barren

By Sophie Rose – 2019

Piece #1 from '*Vowels in Retrograde*'

Table of Contents

About

This piece goes for a minimum of 15 minutes and is written for three voices using extended vocal techniques and throat-singing and one percussionist using a drumkit, cymbals, and a Wavedrum. The duration of this piece is flexible, and it should flow into the next piece, '*Ferns*' by transitioning to impressionistic sounds of wind, water, and insect and bird noises. It is to be read with the Decibel ScorePlayer app (Decibel 2013) on an iPad. The number of players may change to suit the performance as long as the integrity of the piece remains the same. The score is a 3-dimensional graphic score using black and white acrylic paint on Perspex. The physical score is stored at my home in Coburg, VIC. Its dimensions are **Xcm*Xcm**. A small image of the score is featured below, with another version under the heading 'Graphic Score'. A high-resolution image of the score is in the folder 'A4 – Barren Documentation' and is labelled 'Barren Graphic Score.jpg'. The Decibel ScorePlayer file is labelled 'Barren' and is in the same folder. Players are labelled by name for the rehearsals of this performance, they may be assigned to other vocalists in further performances.

As this score is three-dimensional, players should touch the score to understand the textures and flows to aid their interpretation of the score. Each player has a different key for reading colours and textures that are assigned to each player. Within the plane of each time location on the score, the player may read vertically, as long as the general flow and sense of ambiance is retained. The four raised sections are to be read by only the soloist and the percussionist.

The desired atmosphere for this piece is that of a sand dune. There is a surprising amount of activity, a lot of small, fine movements – but the overall mass appears to remain the same, as though it has not moved in aeons. The piece explores textures and desolate environments and how they may be expressed by the human voice and percussion. The voices drone on D in any octave for two minutes. One player then adds the fifth (A), and E is added at around 3 minutes. This is the backing until around 10 minutes when two voices duet and one continues the D drone.

During solo sections performers deviate from the drone pitches and use electroacoustic effects. The texture of the drones changes slowly over the piece, as does interaction between the players. The percussion takes its own path with slowly shifting textures with the focus on smaller or swelling sounds. The atmosphere is meditative – a consequence of the extended drones and shifting timbres. Any rhythmic patterns used should be inconsistent, shifting from odd to even feel as the people must do on the sand to avoid detection by the worms in Frank Herbert's *Dune* (2005). During 'solo' sections the assigned performer may use audio effects, such as: Fuzz, Delay, Echo, EQ, Panning, Time Stretching and Manipulation, and Looping.

Key

Texture

This is a general guideline, to see 'Performer Specific Score Reading Techniques' for player-specific information.

Texture	**To be read as…**
Spikey	Tinkling, spikey sounds, stinging sand.
Flat plastic	Soft, consistent noise. With voice, soft sound, but not breathy.
Matte	Soft but coarse.
Lumps	Emotional intensity.
Circles	Interchanging solo sections, larger = longer.
Waves	Movement (only effect Soloist)

Colour

Stays the same regardless of performer.

Black ⟷ **White**

QUIET < Continuum > **LOUD**

Inventory

Cloud

- Wavedrum #87
- Cymbals
- Sticks, mallets, fingers, rods.

Sage

- Microphone x1
- Laptop and interface to audio
- Drones:
    - D, E
- Effects:
    - Delay
    - Panning
    - Time Manipulation
- Loops: none until solo sections. Free choice during solo sections according to guide.
- Overtones/Undertones: black to white is a sliding scale of simple to complex, e.g. number of overtones sung compared to time on each one.

Sophie

- Microphone x1
- Laptop and interface to audio
- Drones:
    - D, A
- Effects:
    - Delay
    - Panning
    - Echo
- Loops: none until solo sections. Free choice during solo sections according to guide.
- Overtones/Undertones: black to white is a sliding scale of simple to complex, e.g. number of overtones sung compared to time on each one.

Troy

- Microphone x1
- Laptop and interface to audio
- Drones:
    - D
- Effects:
    - Fuzz (not extreme)
    - Delay
    - Panning
    - Time Manipulation
- Loops: none until solo sections. Free choice during solo sections according to guide.
- Overtones/Undertones: black to white is a sliding scale of simple to complex, e.g. number of overtones sung compared to time on each one.

Performer Specific Score Reading Techniques

Cloud (Percussion)

As this score is three-dimensional, please touch the score to understand the textures and flows to aid your interpretation. Use 'solo' sections to inform your playing. Mostly following the feel of the relevant voice and working with it.

Texture

Texture	**To be read as…**
Spikey	Tinkling, spikey sounds, stinging sand. Cymbals and light sticks/bamboo routers etc.
Flat plastic	Very quiet rhythmic work. Start with hands on drums. Shifting time sig./free time. Odd to even feel. Sparse.
Matte	**Grey**: cymbals. **Black**: Wavedrum. **White**: Kick/floor tom, alternative striking implements and sticks, rolls.
Lumps	Swells, movement in density.
Circles/Dots	Hands on drums. Shifting rhythm feel. More density. Towards the end of the piece use mimic voices.
Waves	Movement, across different parts of the instrument.

Colour

Black ⟷ **White**

QUIET ⟷ **LOUD**

Sage (Voice 1)

As this score is three-dimensional, please touch the score to understand the textures and flows to aid your interpretation. Only read the solo sections when assigned to do so. Your solo is the third raised area. Use effects only in solo sections.

Texture

Texture	**To be read as…**
Spikey	Tinkling, spikey sounds, stinging sand (use prescribed drone). Hold an overtone for one breath when first solo section is notated. In solo section: add this tinkling/sparkling sound to the 'waves' movement.
Flat plastic	D drone, only broad frequency phonation. Mostly read this in the first section, leave spikey to percussionist.
Matte	E drone. Hold low overtones and/or undertones. Remain for one breath and then move to a new combination over the drone. After 2 minutes, shift the voice quality as well (vocal colour). Use colour to guide harmonic use.
Raised Lumps	Mark solo sections (which have been independently assigned per performer). Shift drone to E, at first solo mass. SOLO section second raised mass.
Circles/Dots	Interchanging solo sections, larger = longer. This player starts. Interact with different voices in turn.
Waves	Movement (only effect Soloist): Rainfall, instantly drying. Effect: Delay, Echo, Panning, Looping

Colour

Black to white is a sliding scale of simple to complex, e.g. number of overtones sung compared to time on each one.

Black ⟷ **White**

QUIET ⟷ **LOUD**

Lower harmonics ⟷ **Higher harmonics**

Sophie (Voice 2)

As this score is three-dimensional, please touch the score to understand the textures and flows to aid your interpretation. Only read the solo sections when assigned to do so. Your solo is the second raised area. Use effects only in solo sections.

Texture

Texture	**To be read as…**
Spikey	Tinkling, spikey sounds, stinging sand (use prescribed drone). Shift drone to A and hold an overtone for one breath when first solo section is notated.
Flat plastic	D drone, only broad frequency phonation. Mostly read this in the first section, leave spikey to percussionist.
Matte	Drone on A. Hold low overtones and/or undertones. Remain for one breath and then move to a new combination over the drone. After 2 minutes, shift the voice quality as well (vocal colour). Use colour to guide harmonic use.
Raised Lumps	SOLO section third raised mass.
Circles/Dots	Interchanging solo sections, larger = longer. Interact with different voices in turn.
Waves	Movement (only effect Soloist). Hopeful. It's summer and a storm's brewing. Humidity, weight, rolling. Effects: Panning, Time Manipulation, Delay, Looping

Colour

Black to white is a sliding scale of simple to complex, e.g. number of overtones sung compared to time on each one.

Black ⟷ **White**

QUIET ⟷ **LOUD**

Lower harmonics ⟷ **Higher harmonics**

Troy (Voice 3)

As this score is three-dimensional, please touch the score to understand the textures and flows to aid your interpretation. Only read the solo sections when assigned to do so. Your solo is the first and fourth raised areas. Use effects only in solo sections.

Texture

Texture	**To be read as…**
Spikey	Tinkling, spikey sounds, stinging sand (use prescribed drone). Quiet with lumps and spikes. Grains being stripped from a dune. Effects: Fuzz, Delay, Looping.
Flat plastic	D drone, only broad frequency phonation. Mostly read this in the first section, leave spikey to percussionist.
Matte	Drone on A. Hold low overtones and/or undertones. Remain for one breath and then move to a new combination over the drone. After 2 minutes, shift the voice quality as well (vocal colour). Use colour to guide harmonic use.
Raised Lumps	SOLO section first and last raised masses.
Circles/Dots	Interchanging solo sections, larger = longer. Only read this section when more than one line of circular dots begins. Interact with different voices in turn.
Waves	Movement (only effect Soloist): Serenity, nightfall, sleep. This last solo section has many spikes. Keep interspersing the spikey texture with the waves. **Effects: Looping, Time Manipulation**

Colour

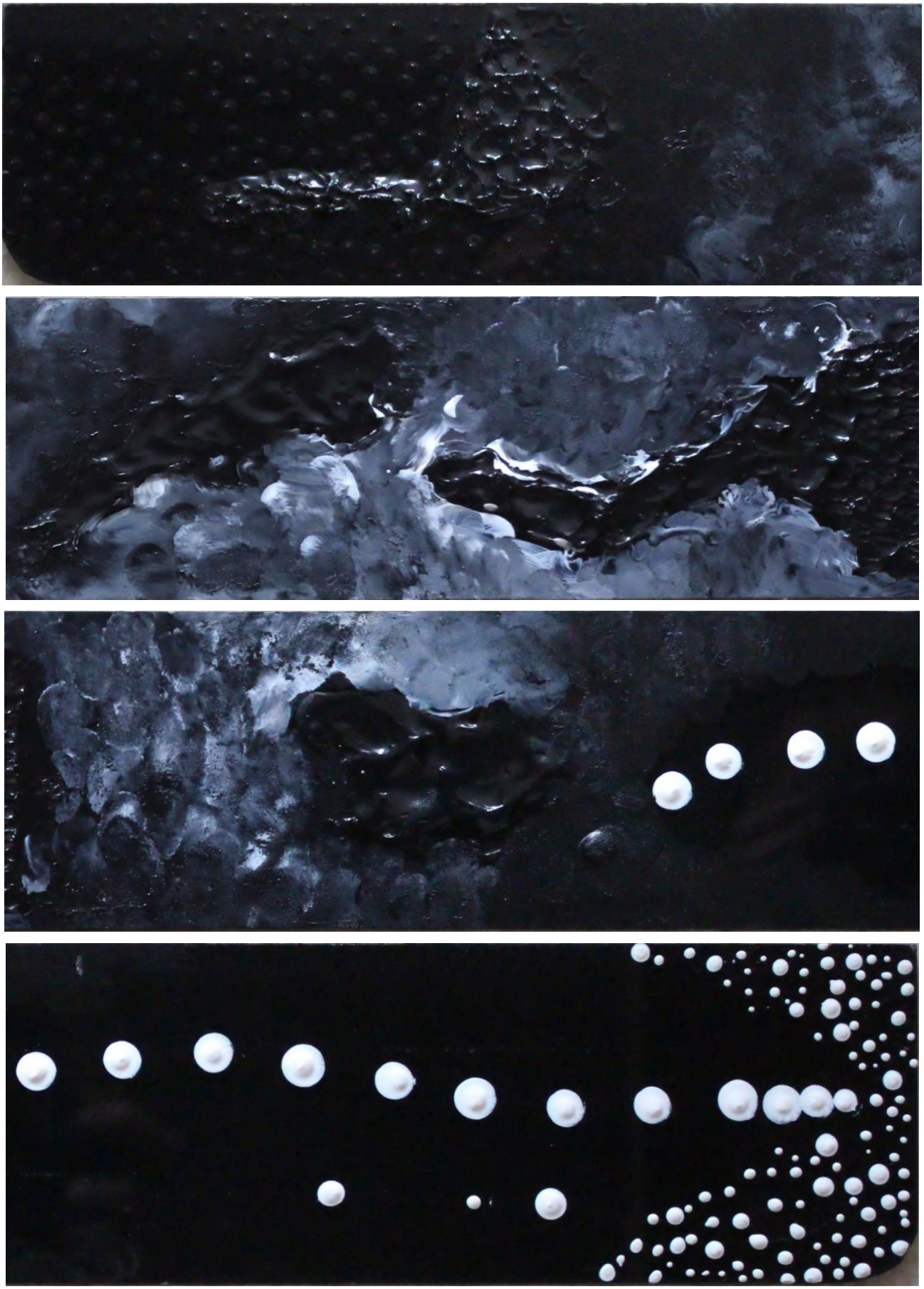
Black to white is a sliding scale of simple to complex, e.g. number of overtones sung compared to time on each one.

Black ⟷ **White**

QUIET ⟷ **LOUD**

Lower harmonics ⟷ **Higher harmonics**

Graphic Score



Graph Score (planning document)

Time	*Cloud*	*Sophie*	*Sage*	*Troy*
0m0s	***Trigger Wavedrum #87*** Cymbals, tinkling. Light hits with sticks/rods/pen.	**Drone: D** No over- /undertones	**Drone: D** No over- /undertones.	**Drone: D** No over- /undertones.
1m0s				**SOLO:** Quiet with lumps and spikes. Grains being stripped from a dune. **Effect: Fuzz, Delay, Looping.**
2m0s		**Drone: A** Single held overtone & undertone.	**Drone: D** Single held overtone & undertone.	
2m30s	Morph from tinkling density, use more cymbal swells.			
2m40s				*Break.*
3m0s		**Drone: A** Low overtone & undertone. Hold for one breath and then choose a new overtone.	**Drone: E** Low overtone & undertone. Hold for one breath and then choose a new overtone.	**Drone: D** Low overtone & undertone. Hold for one breath and then choose a new overtone.
3m30s	**Grey**: cymbals **Black**: Wavedrum. **White**: Kick/floor tom, alternative striking implements and sticks, rolls.			
4m0s		*Break.*		
4m05s		**SOLO:** **Rainfall, instantly drying.** **Effect: Delay, Echo, Panning, Looping**		
5m0s			Moving overtones, according to colour (filtering frequencies).	**Drone: D** Moving overtones, according to colour. ***Singers: Black to white is a sliding scale of simple to complex, e.g. number of overtones sung compared to time on each one.***
5m25s			*Break.*	
5m30s		*Break.*	**SOLO**: Hopeful. It's summer and a storm's brewing. **Effect: Panning, Time Manipulation, Delay, Looping**	
5m45s		**Resume Drone: A** Low overtone & undertone. Hold for one breath and then choose a new overtone.		
7m30s			*Break.*	
7m45s			**Resume Drone: E** Low overtone & undertone. Hold for one breath and then choose a new overtone.	
8m35s				**SOLO:** Serenity, nightfall, sleep. **Effect: Looping, Time Manipulation**
10m0s	Return to cymbal swells & occasional tinkles. Use wind from Wavedrum.	Duet, moving to trio/quad. Call and response. **Sage starts.** 3-7 second musical phrases Leave space between calls and responses, starting with larger spaces and moving so that they almost connect.	Duet, moving to trio/quad. Call and response. **Sage starts.** 3-7 second musical phrases Leave space between calls and responses, starting with larger spaces and moving so that they almost connect.	Drone with slowly shifting multiphonics.
11m20s	Very quiet rhythmic work. Start with hands on drums. Shifting time sig./free time. Odd to even feel.			Free choice fundamental but use between 1-4 different notes.
13m0s	Quiet rhythmic work. Hands on drums.			Soft undertones and overtones.
13m45s	Use routers. Mimic voice.			Join call & response.
14m0s				
~15m	END	END	END	END

References

This reference list is formatted with Zotero's Monash University – Harvard settings.

Decibel 2013, Decibel ScorePlayer (Version 1.10.14) [IOS], Decibel, Edith Cowan University; Australia, Retrieved from https://apps.apple.com/us/app/decibel-scoreplayer/id622591851.

Herbert, F 2005, *Dune*, Ace Books.

Ferns

By Sophie Rose

Piece #2 from 'Vowels in Retrograde'

Table of Contents

About

A high-resolution image of the score is found in folder 'A5…' and labelled 'Ferns Graphic Score.jpg'. A Decibel ScorePlayer (Decibel 2013) file is labelled 'Ferns.dsz'. This document contains the rationale for the piece, performance inventory, links to example sounds for animal noises, the score key for reading the graphic score, the text table that I used to shape the piece, and a small version of the graphic score. Players are labelled by name for the rehearsals of this performance, they may be assigned to other vocalists in further performances.

This piece is a lighter moment in the *'Vowels in Retrograde'* program. The duration of this piece is 10 minutes and 53 seconds. When played in the full programme, the piece should flow from 'Barren' without pausing. This piece is written for three voices, spatialised field recordings, percussion and drums. The compositional experiments 'Cat.' And 'I Am Nature Sounds' were the seedling examples of this work. The audio for these experiments can be found at https://sophierose.bandcamp.com/album/time-and-space and in A1: Practice Diary and Composition Experiments Audio. Discussion about these experiments can be found in Chapter 3 – In the Present of the thesis.

'Ferns' is inspired by the animism that underpins many cultures throat-singing practices. I incorporate animal sounds (particularly birds) from New Zealand, Tasmania, Victoria, and Western Australia. This is based around my ensemble's home states and/or countries. Olga Letykai Csonka, an inspiration this piece, discusses her transformative experience in performance,

> "No, I am a bird!" she laughed. "I forget who I am when I am singing," she said. … … "I see something from here go …" her voice trailed off as her hand floated away from her face.
> (Schwing 2014)

This piece is intentionally a little whimsical and occasionally humorous, particularly in reference to the bird calls and types of sounds that I have chosen for the performers. Melody exists through replication and pre-recorded bird, insect, and amphibian noises. Players should mix accurate mimicking and impressionistic representation in performance. Each performer has their own list of animal calls and noises to draw on including the availability to use real-life sources for elemental sounds (dirt, water, wind). Performers should not purposefully sync with any other players rhythms but keep it authentic in replicating a bush soundscape. Three field recordings play underneath the live performers and are spatialised around a quadrophonic audio set-up. Each field recording plays out of two speakers and is spaced in thirds around the four-speaker arrangement.

Inventory

Cloud

- Water bowl and contact microphone.
- Towel
- Leather gloves
- Brushes, hands, and sticks
- Wooden rulers
- Guiro
- Cymbals and bow

Sage

- Towel
- Microphone
- Latex gloves

Sophie

- Hand fan
- Rain stick
- Microphone
- Leather gloves

Troy

- Cellophane, tissue paper, dried leaves.
- Microphone
- Leather gloves

Animal Noises and Extra Instrumentation

Cloud

Animal Noises

Brushtail Possum – https://www.youtube.com/watch?v=cHulXzuc_9Y

Tasmanian Frogs – https://www.youtube.com/watch?v=sTB9P1h35QE

Extra Instrumentation

- Bow for cymbals
- Ruler
- Guiro
- Water-whistle

Sage

Bird Sounds

Emu: https://www.youtube.com/watch?v=Lkg7_6iaPdY

Bush Stone-Curlew: https://www.youtube.com/watch?v=QmN_WBJs3Nw

Pobblebonk Frog: https://www.youtube.com/watch?v=7k3UaE_3Igk

Australian Raven: https://www.youtube.com/watch?v=Oy-5zAtAmZE

Sophie

Bird Sounds

Fantail: https://www.youtube.com/watch?v=988Jy-22u1g

Kea: https://www.youtube.com/watch?v=N37rN29nUIc

Kakapo: https://www.youtube.com/watch?v=NU2llmV4YKk

Ruru: https://www.youtube.com/watch?v=ZyLxi3o4tFQ

Troy

Bird Sounds

Emu: https://www.youtube.com/watch?v=Lkg7_6iaPdY

Quail: https://www.youtube.com/watch?v=_T3KU93FxP4

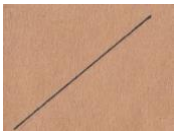
Eastern robin: https://www.youtube.com/watch?v=pgJYWC8oSTw

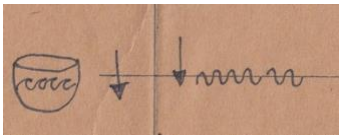
Corella: https://www.youtube.com/watch?v=9JAgVR282EA

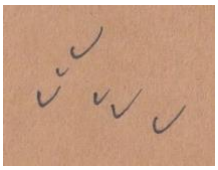
Key

Cloud

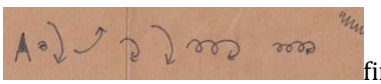
Time moved from left to right. Length of image indicated approximate duration. Height on 'stave' is relevant to pitch on frog and bird calls.

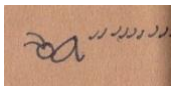

bow cymbal

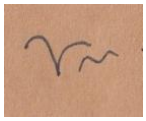

water bowl playing

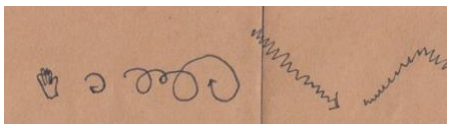

pobblebonk frog

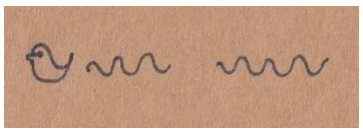

guiro – frogs

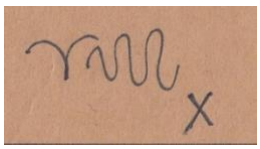

fingernails on skins.


Crickets


wings


hands on skins


water whistle

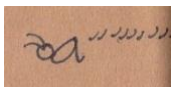

wings – then bird lands

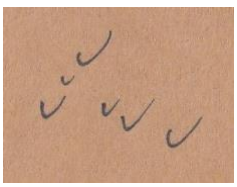
Sage

Time moved from left to right. Length of image indicated approximate duration. Height on 'stave' is relevant to pitch on frog and bird calls.

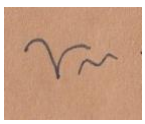

Australian raven.

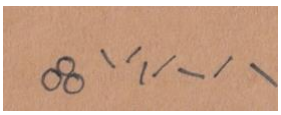

Purring.

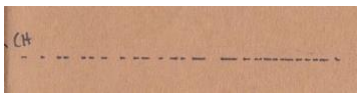

Crickets.

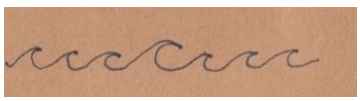

pobblebonk frog

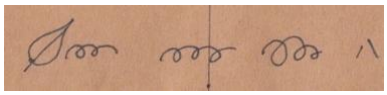

Emu.

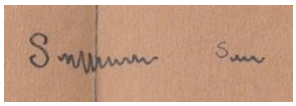

wings.


Pebbles.


Chittering


imitate water.


imitate leaves/foliage.

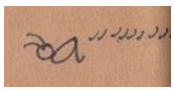

Snuffling.

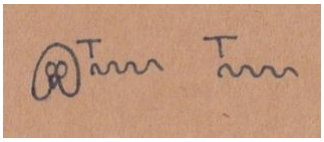

Curlew.

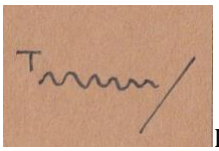
Sophie

Time moved from left to right. Length of image indicated approximate duration. Height on 'stave' is relevant to pitch on frog and bird calls.

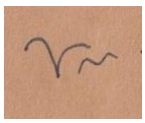

Play sample

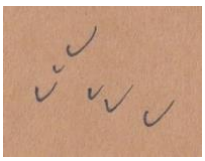

Crickets.

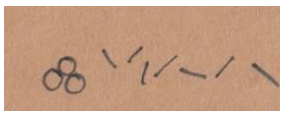

Kakapō talking

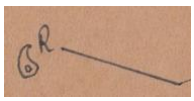

Kakapō talking then screech.


Purring


wings

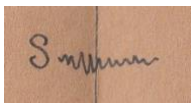

pobblebonk frog

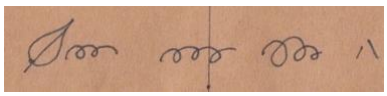

Scratching


Rain

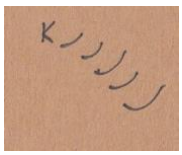

Chittering

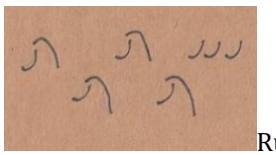

Fantail.


Snuffling


imitate leaves


imitate air

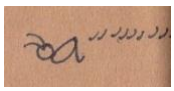

Kea

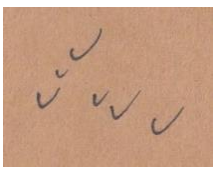

Ruru

Troy

Time moved from left to right. Length of image indicated approximate duration. Height on 'stave' is relevant to pitch on frog and bird calls.

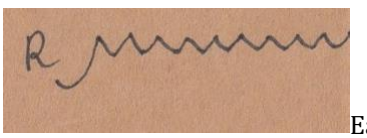

Purring

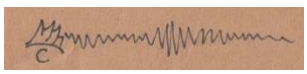

Crickets

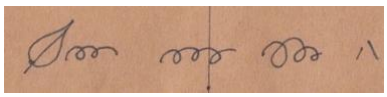

Pobblebonk frog

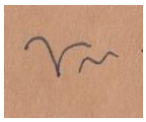

Pebbles.


Chittering

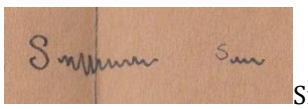

Eastern robin.

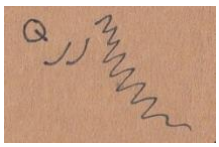

Corella


imitate leaves


wings.


Emu.

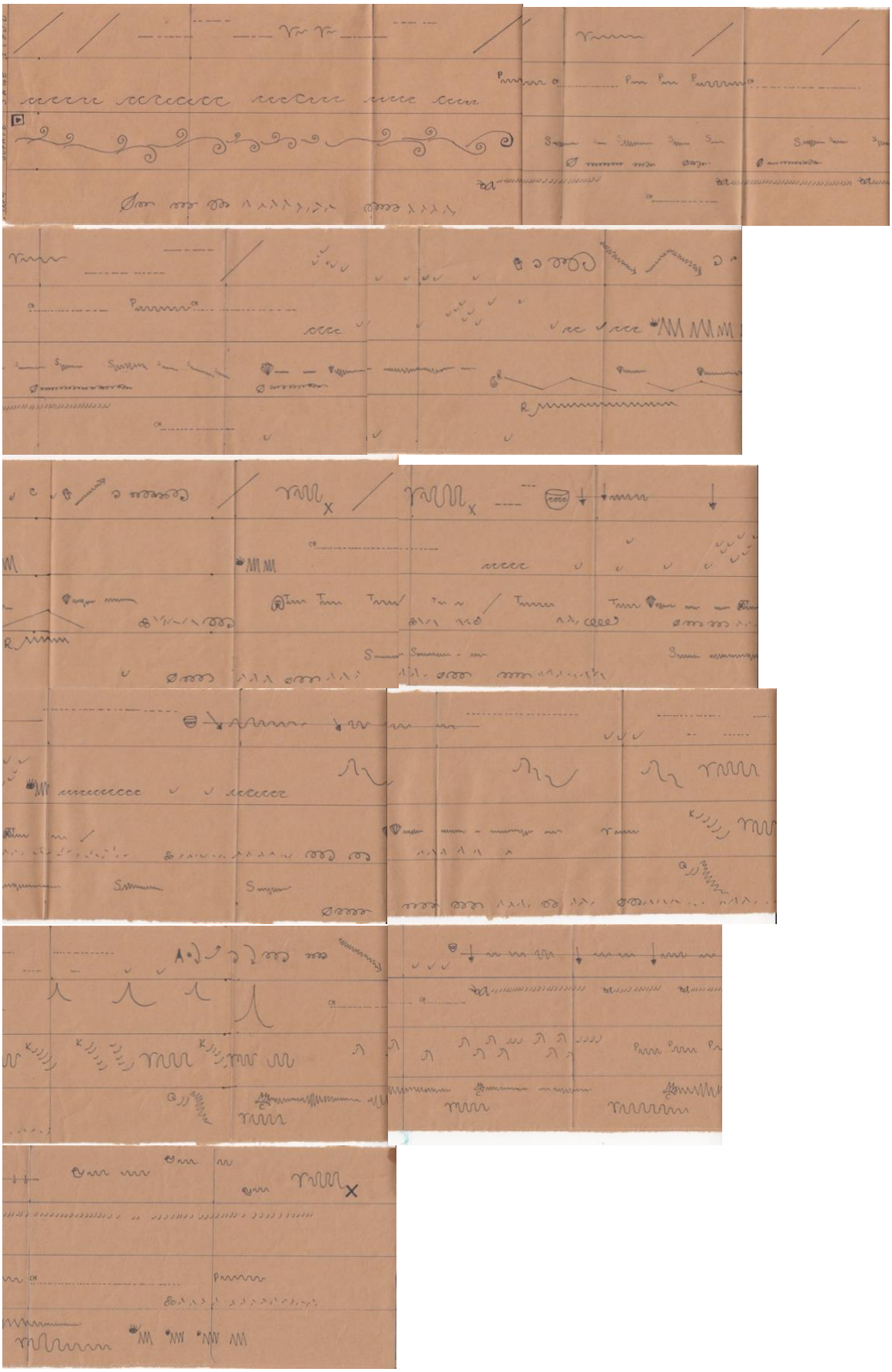

Snuffing.


Quail.

Score Table (Draft Document)

Time	***Cloud***	***Sage***	***Sophie***	***Troy***
0m0s	*Frogs*: Guiro. *Wings*: Leather and latex gloves. *Bird shrieks from a distance*: Bowed cymbals.	River.	*Trigger sample.* Wind.	Leaves.
1m0s				
2m0s		Purring. Chittering.	Snuffling. Pebbles.	Chittering. Crickets.
3m0s	*Rustling*: Rubbing on drumheads with hands and brushes. Pobblebonk frog. Bowed cymbals.	Pobblebonk frog. Emu.	Fantail. Kakapo. Rain. Crunching.	Eastern robin. Pobblebonk frog.
4m0s				
5m0s				
6m0s	Water bowl. Crickets. Wet thumb on Skins. Fingernails on Wavedrum.			Snuffling.
7m0s		Curlew. Australian Raven.		
8m0s			Kea. Ruru.	
9m0s		Chittering. Crickets.		Quail. Corella.
10m0s	Water-whistle. Water bell.		Purring. Chittering.	Emu.

Score (small)



References

This reference list is formatted with 'Melbourne University – Harvard' settings from Zotero.

Decibel 2013, *Decibel ScorePlayer*, Decibel, Edith Cowan University; Australia, accessed October 7, 2019, from <https://apps.apple.com/us/app/decibel-scoreplayer/id622591851>.

Schwing, E 2014, 'A voice that fascinates humans and lures creatures from the sea', *Aljazeera America*, accessed October 30, 2018, from <http://america.aljazeera.com/articles/2014/9/14/a-voice-that-fascinateshumansandlurescreaturesfromthesea.html>.

Smother

Sophie Rose

Piece #3 from 'Vowels in Retrograde'

Table of Contents

About

This piece goes for 20 minutes and is written for four performers controlling a drone build from their voice in addition to vocalising, one percussionist, and seven panned field recordings shaped with filters, volumes, and cues. The score is text-based and is to be read with Decibel ScorePlayer app (Decibel 2013) on an iPad. Players are labelled by name for the rehearsals of this performance, they may be assigned to other vocalists in further performances.

'*Smother*' is inspired by the weight of modern urban living. Some people find space to breathe. For many it weighs them down almost imperceptibly until the pressure is finally relieved. Aspects of life fade in and out of focus and as our focus shifts, life shifts from underneath us while we are distracted. The constant bustle. Constantly shifting noise. Disorientation. Chaos. Disorder. Disruption.

The piece starts with a recording of a person leaving a house, the audible frequencies and volume then compress to the edge of hearing (for each sound source) and gradually open up over the duration of the piece in all live and pre-recorded audio. The volume and frequencies spread slowly becomes a cacophonic mass of noise. The drone sources then begin to move around the room by the players panning the audio around a quadrophonic arrangement, providing a sense of inertia. This expresses how the clutter of life builds up and wears a person down, becoming unbearable. Four field recordings have been modified and edited to play out of different speakers in the quadrophonic set-up. The final two field recordings are placed centrally and will play out of all speakers. These tracks mark the start and end of the piece.

In the performance, performers will be controlling their voice as external to their body, morphing it, and spatializing their voice around a quadrophonic set-up. I have pre-controlled high/low frequency cuts in performer's drones. At the same time, they will be making live vocal utterances which are repeated for minutes at a time and reflect the changes in volume and frequency spread similarly to the shape of the frequency filters on the pre-prepared audio. The live vocal sounds are corrupted interpretations of urban ambient sounds, such as crowd noise, rattling, and low hums.

Inventory

- Candle snuffers x4
- Candles: 1x big candle, 4x small candles each in glass containers.
- Fragrance (Smoke/campfire) to be dripped on candles pre-performance.
- Drone for each player: Found in folder A6 Smother Documentation > Player.
- Pre-recorded audio: Found in folder A6 Smother Documentation > Backing.

- Microphone x3 for vocalists.
- Microphone stands x3.
- Percussion: Snare (with rattle).
- Overhead microphone for percussion.
- Laptops and controllers for controlling panning and volume, x4 (one for each performer).

Drones

Drones have been built from samples of each performers voice and shaped with EQ's to fit the filters of the piece. The samples that have been taken use extended vocal techniques, such as, vocal fry, ingressive phonation, scream, overtone-singing, and subharmonics, as well as any other phonation that the individual felt comfortable with adding. These drones have been recorded to a specific length and the performers will alter the panning and volume of the drones in the performance.

Ambient Recordings

Recording 1: Walking Out

Panned centre, low focus on the sound source so that it will play out of all four speakers. This track starts with a wide spread of frequencies. When the door closes the performers start their drone at a very low volume. The frequencies and volume of the pre-recorded audio then begin to reduce to the edge of hearing.

Recording 2: Walking In

Panned centre, low focus on the sound source so that it will play out of all four speakers. This track comes in around 18 minutes 30 seconds. The person returns to the house and the frequencies open up rapidly, providing a rushing sound. The frequencies return to full spectrum and the door closes.

Recording 3: Cafeteria

Panned to speaker one, 50% focus. Developed from several recordings in the cafeteria at Box Hill Institute, Nelson campus.

Recording 4: Bell Street Traffic

Panned to speaker two, 50% focus. Taken from two recordings at the intersection of Sussex Street and Bell Street in Coburg, Victoria.

Recording 5: Traffic and walking

Panned to speaker three, 50% focus. Taken from two recording, one at the intersection of Autumn Street and Gaffney Street in Coburg, Victoria, one walking to the intersection of Sussex Street and Bell Street in Coburg, Victoria.

Recording 6: Vending Machine

Panned to speaker four, 50% focus. Taken from three recordings from behind a noisy vending machine at Box Hill Institute, Nelson campus. This vending machine, it's nigh on violent hum, and the associated cafeteria burbling have been a regular part of my life for nearly two years.

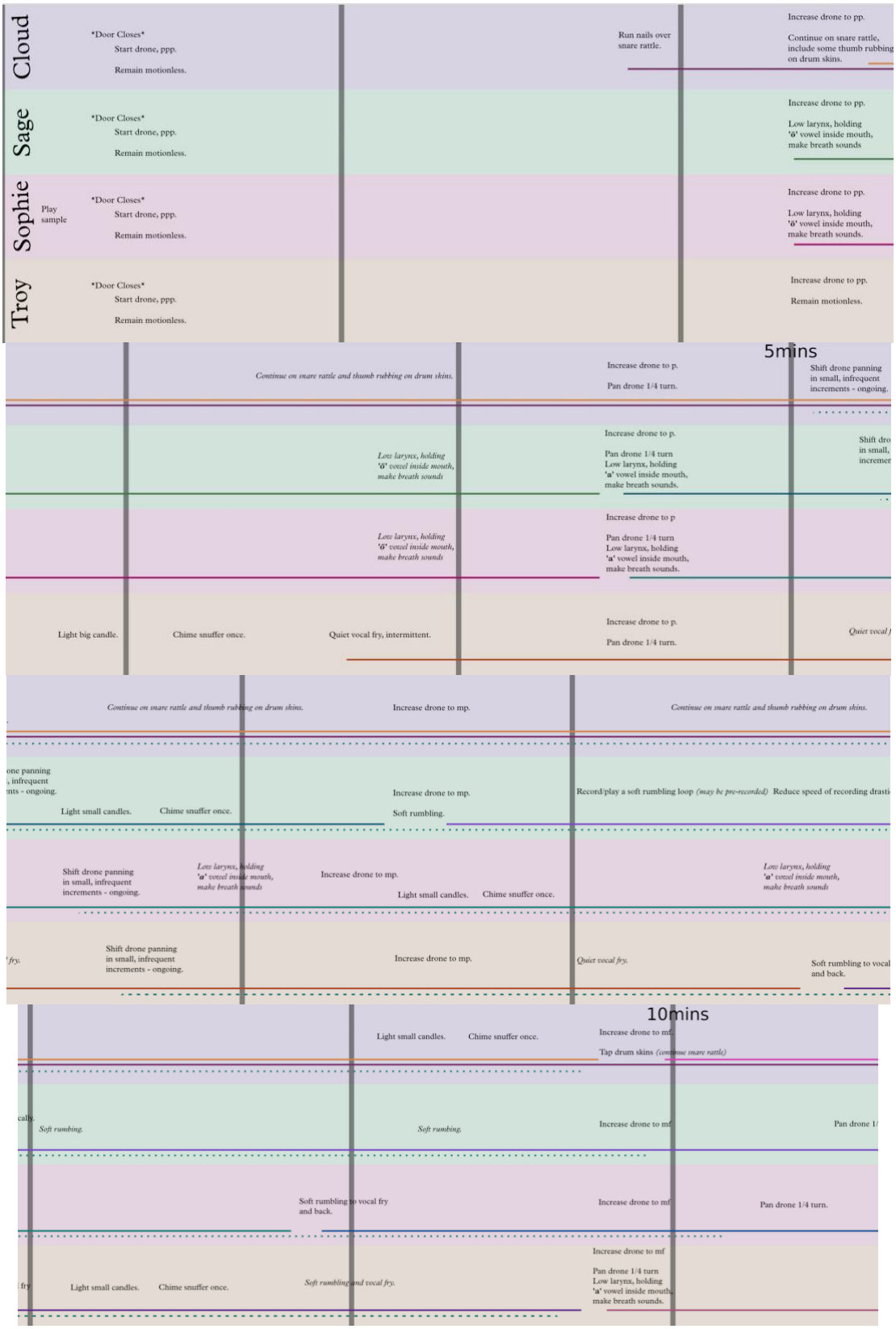
Performance Instructions

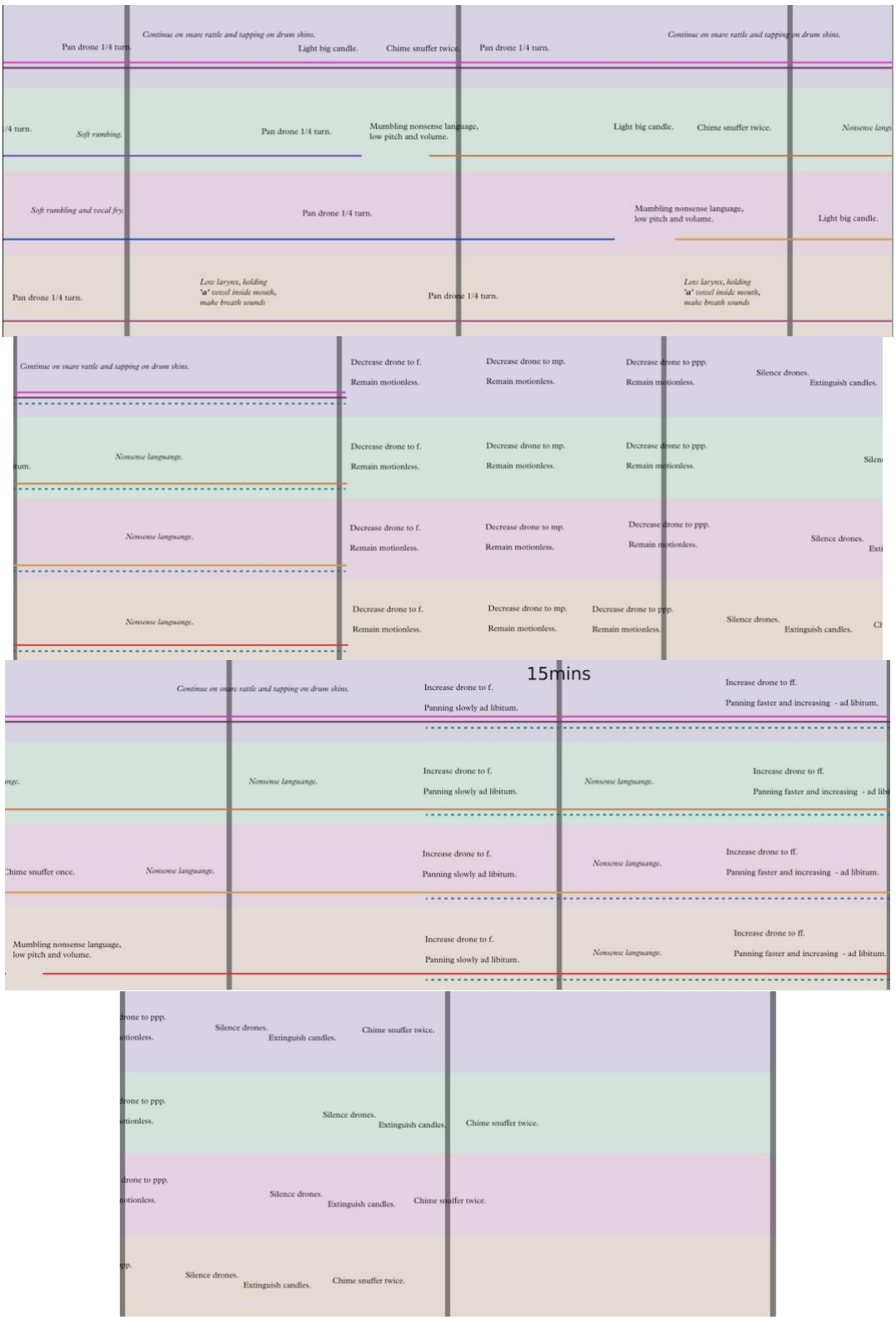
Performers will be lighting and extinguishing candles as noted in the score.

When not instructed to perform an action, the players should remain as still as possible.

If an instruction is to be continued through other actions, a straight line will continue for as long as that action is to be performed. Instructions in italics are reminders that that action is continuing.

Score


Cloud
Door Closes
Start drone, ppp.
Remain motionless.
Run nails over snare rattle.
Increase drone to pp.
Continue on snare rattle, include some thumb rubbing on drum skins.
Sage
Door Closes
Start drone, ppp.
Remain motionless.
Increase drone to pp.
Low larynx, holding 'ö' vowel inside mouth, make breath sounds
Sophie
Play sample
Door Closes
Start drone, ppp.
Remain motionless.
Increase drone to pp.
Low larynx, holding 'ö' vowel inside mouth, make breath sounds.
Troy
Door Closes
Start drone, ppp.
Remain motionless.
Increase drone to pp.
Remain motionless.
5mins
Continue on snare rattle and thumb rubbing on drum skins.
Increase drone to p.
Pan drone 1/4 turn.
Shift drone panning in small, infrequent increments - ongoing.
Low larynx, holding 'ö' vowel inside mouth, make breath sounds
Increase drone to p.
Pan drone 1/4 turn
Low larynx, holding 'a' vowel inside mouth, make breath sounds.
Low larynx, holding 'ö' vowel inside mouth, make breath sounds
Increase drone to p
Pan drone 1/4 turn
Low larynx, holding 'a' vowel inside mouth, make breath sounds.
Light big candle.
Chime snuffer once.
Quiet vocal fry, intermittent.
Increase drone to p.
Pan drone 1/4 turn.
Continue on snare rattle and thumb rubbing on drum skins.
Increase drone to mp.
Continue on snare rattle and thumb rubbing on drum skins.
Light small candles.
Chime snuffer once.
Increase drone to mp.
Soft rumbling.
Record/play a soft rumbling loop (may be pre-recorded)
Shift drone panning in small, infrequent increments - ongoing.
Low larynx, holding 'a' vowel inside mouth, make breath sounds
Increase drone to mp.
Light small candles.
Chime snuffer once.
Low larynx, holding 'a' vowel inside mouth, make breath sounds
Shift drone panning in small, infrequent increments - ongoing.
Increase drone to mp.
Quiet vocal fry.
Soft rumbling to vocal and back.
10mins
Light small candles.
Chime snuffer once.
Tap drum skins (continue snare rattle)
Soft rumbing.
Soft rumbing.
Soft rumbling to vocal fry and back.
Increase drone to mf
Pan drone 1/4 turn.
Light small candles.
Chime snuffer once.
Soft rumbling and vocal fry.
Increase drone to mf
Pan drone 1/4 turn
Low larynx, holding 'a' vowel inside mouth, make breath sounds.



Brief period of silence before next piece (Chaos).

Chaos

By Sophie Rose 2019

Piece #4 of 'Vowels in Retrograde'

Table of contents

This document contains the rationale for this piece, the performance inventory, guides to reading the score, the full English and Māori translation that is used in the re-recorded material, information about the desired tones and textures for the koauau and cello playing, and a small version of the score. A high-resolution score can be found in the folder 'A7: Chaos documentation', labelled as 'Chaos Graphic Score.png'. Players are labelled by name for the rehearsals of this performance, they may be assigned to other vocalists in further performances.

About

Chaos is written for three voices (with loops), percussion, cello, pre-recorded audio, and koauau. There are three sections: '*Internal*', '*Te Tangihana*', and '*Closure Is What You Make It*'. This piece is grounded in a personal experience from 2009. As such, the environment that I recreate is the past and the effect I explore is anamnesis (Augoyard 2014) to invoke the past. The inspiration is the feeling of confusion, rage, and despair at the conduct of a person (whom I had regarded as one of my best friends) and her fiancé in the days following a familial catastrophe. They have been dubbed 'Narcissisa' in the translation.

The samples are a Western traditional string section, and a Māori translation of the text that I wrote which inspired this work. They are played through the body of a cello that has been modified by fitting a speaker in the side. The samples will take on some of the spatial characteristics of the inside of the cello. Considering spatial music and how to change and localise sound led to the modifications of the cello for '**Error! Reference source not found.**'. I wanted the sound to be present, but slightly distanced when compared to the rest of the instrumentation. The translated narrative and 'nice' sounding cello samples are played into the speaker mounted on the side of the cello. This modification will consequently imbue the samples with my cello specific reverb. The cello can perform the triple duty of looking good, being an instrument, and being a vessel for sound. Testing of the cello modification can be viewed here: https://www.instagram.com/p/B0LUFnvgaWq/

'*Internal*' uses susurration and looping. The piece makes use of the prevalence of high frequencies to confuse the meaning of the words after the second loop begins. '*Te Tangihanga*' is a lament with crying and chanting sounds. '*Closure Is What You Make It*' revisits the whispering and lamenting. The koauau comes in in this section and closes the piece with its sorrowful sound. The text and translation are available on pages 5-7. This text has been translated by PACTRANZ New Zealand. The score is text-based and to be read as a scrolling score in Decibel ScorePlayer (Decibel 2013). Players have up to two staves to read at once. I have used font style to represent changes in whisper timbre in section one. Translations of words and parts of words are included in the score for the Māori text uttered in sections two and three. I have done this so that the performers may stick verbatim to the score with greater understanding to the patterns that they build, and if they desire to add some of their own story, they may add to the story by building up their own sentences using parts of words. This is inspired the use of morphemes to story-tell in Katajjaq (see A2: Styles of Traditional Throat-Singing of the related thesis).

Inventory

Voice 1 (Troy)

- Seven individually triggerable and manipulatable loops, labelled to alphabet.
- Quad panning:

A: FR *B: BR* *C: BL* *D: BL* *E: FL* *F: All* *G: FR*

- Microphone
- Effects for sections 2 & 3 (loops D and up): delay, distortion/fuzz, pitch-shift, time-shifting, reversing, reverb.

Voice 2 (Sage)

- Six individually triggerable and manipulatable loops, labelled to alphabet.
- Quad panning:

A: FL *B: FR* *C: BR* *D: BL* *E: BR* *F: All*

- Microphone
- Effects for sections 2 & 3 (loops D and up): delay, distortion/fuzz, pitch-shift, time-shifting, reversing, reverb.

Voice 3 (Sophie)

- Six individually triggerable and manipulatable loops, labelled to alphabet.
- Quad panning:

A: BL *B: BR* *C: All* *D: BL* *E: FL* *F: All*

- Microphone
- Effects for sections 2 & 3 (loops D and up): delay, distortion/fuzz, pitch-shift, time-shifting, reversing, reverb.
- Koauau
- Audio to trigger:
    - Māori text
    - Cello

Cello

- Cello, bow, rosin
- 2x 6.5mm leads (one into the speaker, one for the audio output)
- Mini Amplifier (Nobsound NS-10G)
- Shure PG Alta PGA98H Microphone

Percussion

- Wavedrum patches:
    - Section 1 - #86
    - Section 2 - #82
    - Section 3 - #86
- Striking implements: sticks, mallets, brushes, and hands.
- 2x 6.5mm leads.
- Kick, toms, snare, cymbals (drum kit).

Quadrophonic Panning

F: Front *B: Back* *L: Left* *R: Right*

Voice 1:

A: FR *B: BR* *C: BL* *D: BL* *E: FL* *F: All* *G: FR*

Voice 2:

A: FL *B: FR* *C: BR* *D: BL* *E: BR* *F: All*

Voice 3:

A: BL *B: BR* *C: All* *D: BL* *E: FL* *F: All*

Cello: All four speakers.

Sample: Goes into cello.

Wavedrum: All four speakers.

The Koauau

The Koauau is a traditional Māori instrument. It was traditionally played using the nose as the air from the nose is 'tapu' (sacred), whereas the breath from the mouth is not because the mouth can also be used to lie. The pitch range of this instrument is relatively small but can be made to have a larger pitch range through bending the notes with additional air pressure and altering the shape of the mouth. There are 4 holes that can be covered, each hole covered or uncovered changes the pitch by roughly a semitone. Vibrato should be created from the diaphragm (using air pressure fluctuations).

The Cello

The cello playing for this piece should have a mixture of traditional playing and noise or texture driven playing. The style of playing should devolve over the piece with more screeches and roughly dragging of the bow over the strings towards the end. The player should feel at liberty to play behind the bridge in addition to the normal five playing positions.

Font Explanation Key

■	Start/End loop.
CAPITAL	Loud whispering
Bold	Emphasis
Superscript	High pitch whisper
Subscript	Low pitch whisper
Italicized	Sarcastic emphasis.
P.E.R.I.O.D.S.	Say letters individually.
H-Y-P-H-E-N-S	Extend the word for duration of other lines.

Section 2: 'Te Tangihanga' – Guide to Māori Text

Inward>Outward Phonation

The rhythmic inward>outward phonation should take influence from Katajjaq, Rekkukara, and Pic-eine'rkin. This means that parts of the words (morphemes) should be used, with the performer using whole words it they so desire, e.g. the performer may choose to concentrate on the word, 'hinengaro' (hee-nay-ng-ah- ⟨r⟩o), further breaking the word into hine, and ngaro. The Māori text translates as:

Voice 2

Tangaroa horomia ahau katoa. *Tangaroa swallow me whole.*

- Tangaroa: sea god.
- Horomia: horo and horomi – to swallow, mia – passive ending added to horo.
- Ahau: personal pronoun.
- Katoa: modifier - all, every, totally, wholly, completely, without exception - used to indicate that something is all-encompassing, all-consuming or all-conquering

Kāore e taea e ahau te whakangā anō. *I can't breathe anymore.*

- Kāore: Negative affirmation of the sentence to follow, ore to drill, shake, or quiver. Ka, indicates present tense.
- E: participle. Shows action in progress (in this case).
- Taea: indicates that something is possible
- Te: the
- Ahau: personal pronoun.
- Whakangā: breathe
- Anō: Modifier, for emphasis

Voice 3

Te moana rahopē. *The sea stills.*

- Te: the
- Moana: sea. Moa – extinct bird that was similar in appearance but bigger than an ostrich and colouring more like the emu.
- Rahopē: calming of the sea. Raho – labia majora, or testes. Hope – hips.

E ngōki mai roto ana. *And crawl inside*

- E: participle. Shows action in progress (in this case).
- Ngōki: to creep, or crawl
- Roto: to be inside
- Ana: follows a verb to indicate the continuation of an action.

Whakakīia tōku hinengaro. *Fill my mind.*

- Whakakīia: to fill. Kī – to say/express. Whaka – participle – causing something to happen.
- Tōku: My (possession)
- Hinengaro: mind, consciousness, intellect. Hine is girl. Ngaro is to be hidden out of sight.

Pre-Recorded Māori

This story happened in 2009. A person that I had regarded as one of my best friends and their fiancé said some disgusting things to me in the wake of a familial catastrophe. We will call her 'Narcissisa'.

English

I was friends with 'Narcissisa' from 2007, my final year at university. It was a tough year. She had many emotional breakdowns about her perceived moral failures, often coming to my house after midnight, crying and needing solace. She would talk and sleep over and go on her merry way to commit her 'abominations' again. Eventually, she moved in, and then her partner did too.

In 2009, my father died suddenly from pulmonary thrombosis – a blood clot being delivered to the heart – instant death. I returned to my friend's house where she, and other friends came to be with me. I waited for my brother to fly in from Brisbane so I could drive us all home. We left at midnight for our hometown and arrived at 6AM.

The next few days yielded no contact from 'Narcissisa'. Then, I received a series of text messages from a friend that 'Narcissisa' and her partner had been messaging and calling her with abuse and threats. 'Narcissisa' then began messaging me saying that she was sorry that she hadn't contacted me, she didn't know what to say, or how to be of comfort. I could understand that – after all, there is nothing that you can do to change the situation, nothing makes it better or provides any relief. She promised to come to the funeral and the airport to see me off.

Two days later I received a series of abusive messages from her fiancé, about how I had left them to take the rubbish to the tip, how I was the world's worst person, no wonder my father died – a series of horrible, untrue, manipulative, and damaging accusations. In tears, I showed these messages to my family. After reading the messages, my mother called the number and screamed at him to never contact me again. She further asserted that if he dared to show his face around any of our family again, she would make sure that the Tainui knew his name, face, and his current request for experimental dental surgery.

'Narcissisa' didn't come to the funeral. She did not come to the airport.

In 2013, I received a message from 'Narcissisa'. She said she did not know what went wrong. She knew that something had happened but could not figure out why we no longer spoke, considering how close we were. I stated that if she could not remember what lead us to no longer speak, maybe she should talk to her husband. I also said that if she was looking for absolution for her guilt, she was better off looking towards her god. She told me I was full of hate. I smiled.

Māori

This translation was provided by PACTRANZ New Zealand.

He hoa nōku a 'Narcissisa' mai i te tau rua mano mā whitu, taku tau whakamutunga i te whare wānanga. I uaua taua tau. He maha ngā wā i pōrangi ia mō ana ngoikoretanga kaha mō ana hapa whanonga maha, i te nuinga o te wā i haere mai ia ki tōku kāinga i muri i te waenganui pō e tangi ana, e kimi tautoko ana. Ka kōrero ia, ka moe mai ia, ā, kātahi ka haere ia ki te mahi anō i ana mahi 'mōrikarika'. Nāwai nāwai, i hūnuku mai rāua tahi ko tana hoa ki tōku noho ai.

I te tau rua mano mā iwa i mate tōku pāpā i te mate tetepe ia pūkau – he tetepe toto ka tukuna ki te manawa – i mate tonu atu ia. I hoki atu atu ki te kāinga o tōku hoa, i reira ia, ā, ka haere mai ōku hoa ki te tauawhi i ahau. I tatari ahau kia tae mai taku tungāne mai i Piripane kia pai ai taku taraiwa i a mātou katoa ki te kāinga. I wehe atu mātou i te waenganui pō mō te wā kāinga, ā, ka tae atu i te ono karaka i te ata.

I ngā rā i muri mai kāore ahau i rongo kōrero mai i a 'Narcissisa'. Kātahi ka whiwhi ahau i ētahi karere mai i tētahi o aku e kī ana ia i te tuku karere me te waea a 'Narcissisa' rāua ko tana hoa tāne ki a me te taunu, whakatumatuma i a ia. Ka whakapā mai ia ki ahau me te whakapāha mō tana kore i whakapā mai, he kore mōhio nōna he aha he kōrero māna, me pēhea rā te tauawhi i ahau. I te marama ahau ki tērā – ina, ahakoa pēhea kāore e taea e koe te āhuatanga te whakarerekē, kāore he mea e taea ana te whakapai ake, te whakamauru rānei. I kī mai ia ka haere mai ki te nehu, ki te taunga rererangi hoki ki te kite i ahau.

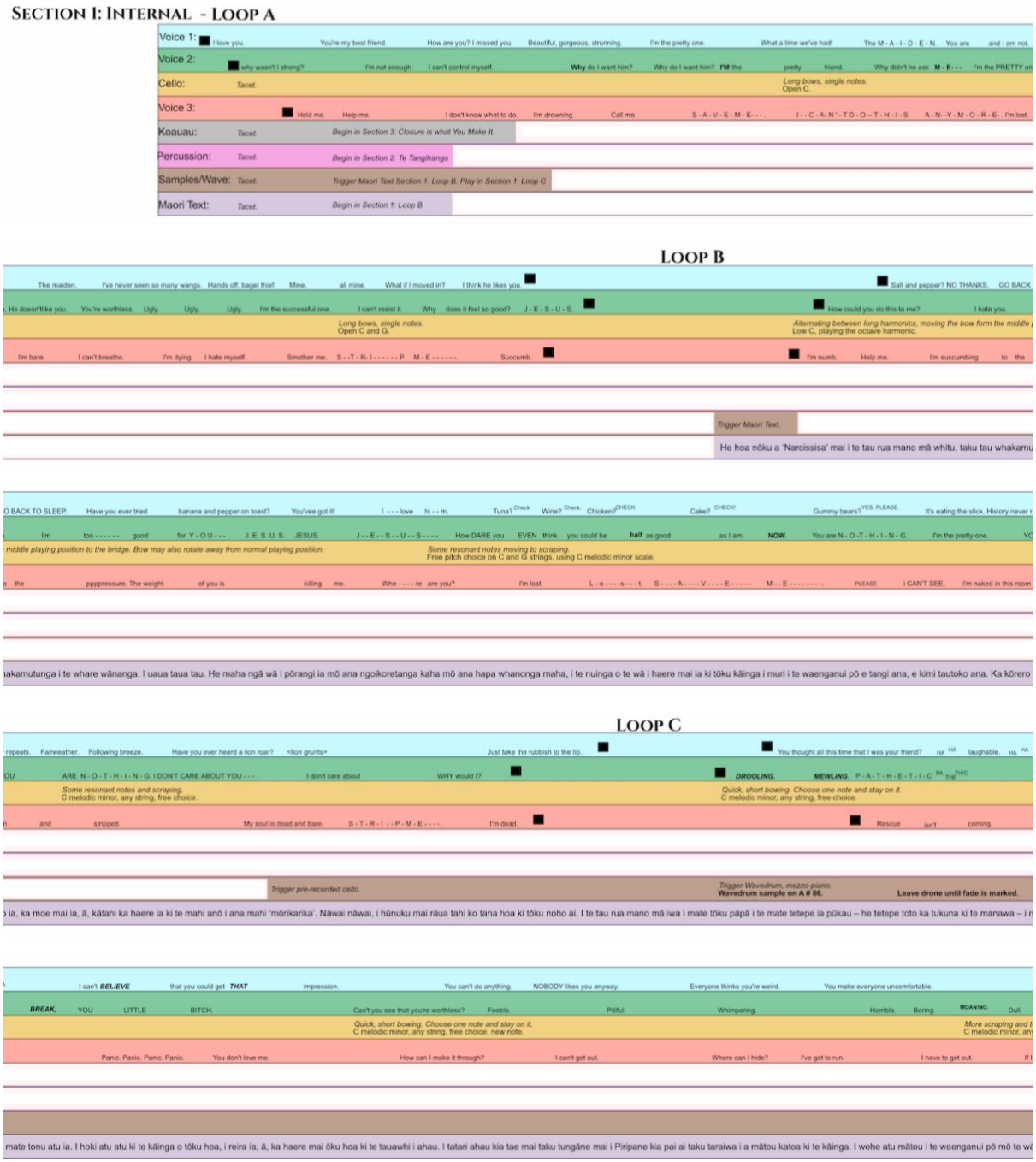
I ngā rā e rua i muri mai i whiwhi i ahau i tētahi karere taunu mai i tana whaiāipo, mō taku whakarere i a rāua i a rāua ki te here i ngā rāpihi ki te rua para, ko tētahi tangata kino, nā whai anō i mate taku pāpā –

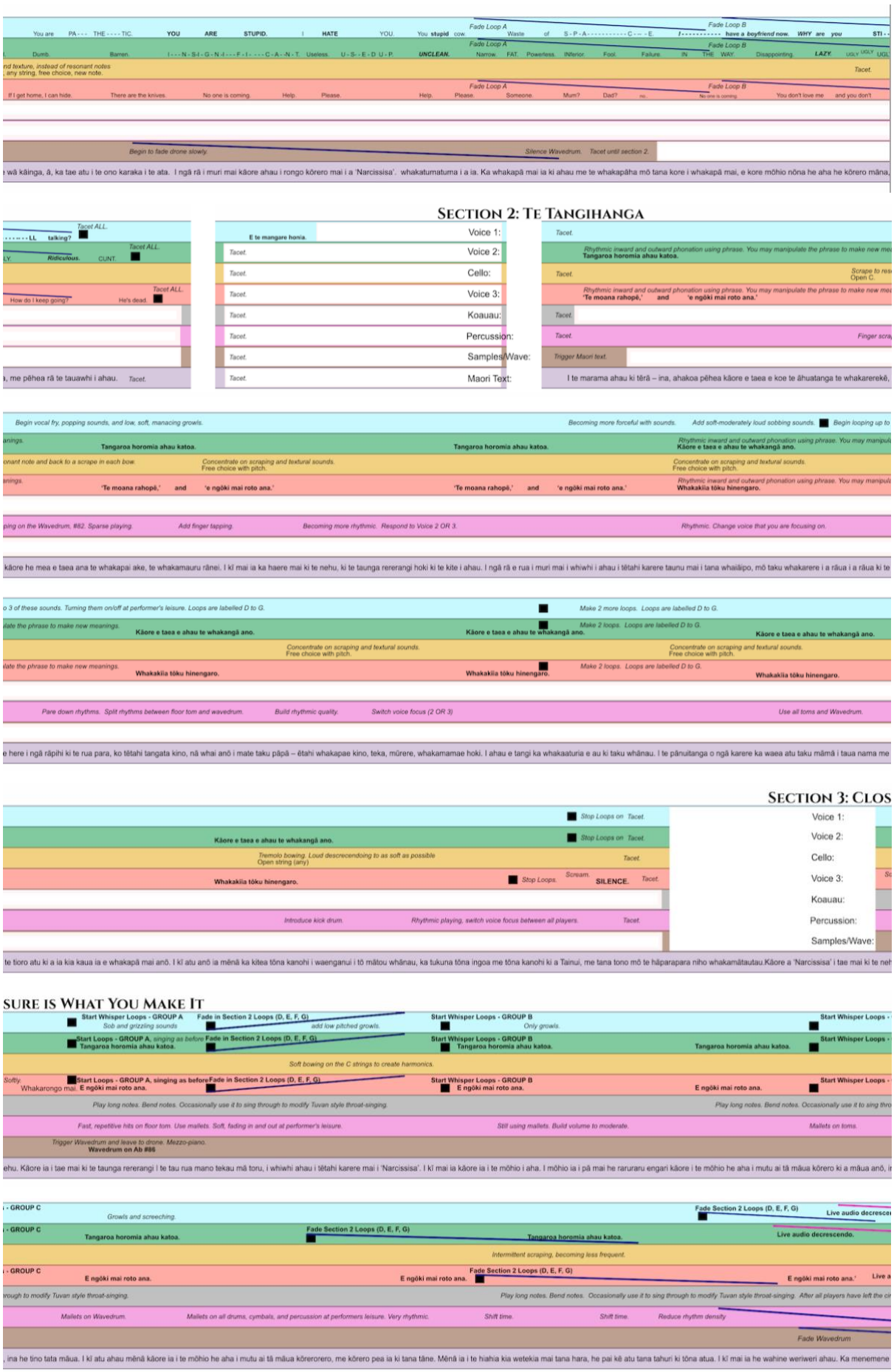
ētahi whakapae kino, teka, mūrere, whakamamae hoki. I ahau e tangi ka whakaaturia e au ki taku whānau. I te pānuitanga o ngā karere ka waea atu taku māmā i taua nama me te tioro atu ki a ia kia kaua ia e whakapā mai anō. I kī atu anō ia mēnā ka kitea tōna kanohi i waenganui i tō mātou whānau, ka tukuna tōna ingoa me tōna kanohi ki a Tainui, me tana tono mō te hāparapara niho whakamātautau.

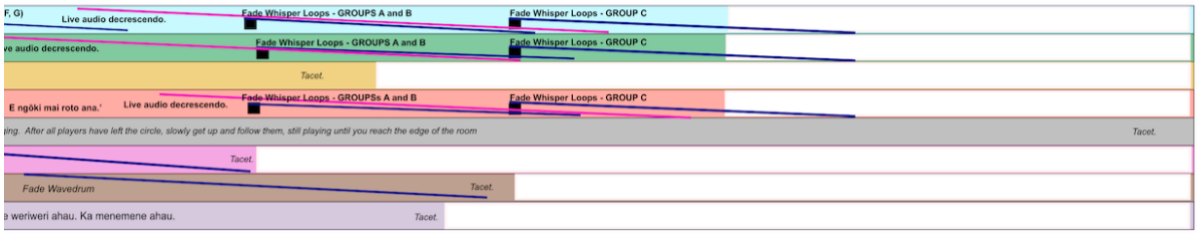
Kāore a 'Narcissisa' i tae mai ki te nehu. Kāore ia i tae mai ki te taunga rererangi.

I te tau rua mano tekau mā toru, i whiwhi ahau i tētahi karere mai i 'Narcissisa'. I kī mai ia kāore ia i te mōhio i aha. I mōhio ia i pā mai he raruraru engari kāore i te mōhio he aha i mutu ai tā māua kōrero ki a māua anō, ina he tino tata māua. I kī atu ahau mēnā kāore ia i te mōhio he aha i mutu ai tā māua kōrerorero, me kōrero pea ia ki tana tāne. Mēnā ia i te hiahia kia wetekia mai tana hara, he pai kē atu tana tahuri ki tōna atua. I kī mai ia he wahine weriweri ahau. Ka menemene ahau.

Score




SECTION 2: TE TANGIHANGA
Voice 1:
Voice 2:
Cello:
Voice 3:
Koauau:
Percussion:
Samples/Wave:
Maori Text:
SECTION 3: CLOS
SURE IS WHAT YOU MAKE IT



References

This reference list has been formatted with Monash University's Harvard settings.

Augoyard, J-F 2014, *Sonic Experience: A Guide to Everyday Sounds* trans. H. Torgue, McGill-Queen's Press - MQUP.

Decibel 2013, Decibel ScorePlayer (Version 1.10.14) [IOS], Decibel, Edith Cowan University; Australia, Retrieved from https://apps.apple.com/us/app/decibel-scoreplayer/id622591851.