Responding to Sounds of the Environment: Developing Strategies for Improvised Musical Performance

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Abstract

This research project concerns the development of an improvisatory music practice informed by sounds of the environment. The primary outcome of this project is a compilation of audio recordings of five works created while undertaking the research. This exegesis elucidates my interest in developing performance frameworks for improvising musicians by studying sounds of the environment, outlines the development of performance strategies in response to field recordings from select locations, and provides a commentary on the final works.

Following a reflective, practice-led research methodology a study of select field recordings of acoustic locations was undertaken to develop improvised musical works. Selected locations were those I traversed during my routine activities while living in Melbourne, Australia. The refinement of the musical process involved reviewing literature by theorists and musicians such as Luigi Russolo, Pierre Schaeffer, Salomé Voegelin, and Paul Hegarty, and the musical output of practitioners such as Luc Ferrari, Brian Eno, and Jim Denley. Engaging with the work of significant predecessors whose work has also been inspired by sounds of the environment informed my practice and contextualised my contribution to the field.

Inspired by Jon Rose's essay *The Music of Place: Reclaiming a practice*,[1] the performance practice established during this research integrated my interest in free improvisation within the notion of place – the sounds of my everyday environment. I have demonstrated how these sounds can inform an improvisatory performance practice – an approach that is malleable and could be adopted by other practitioners from differing musical backgrounds. In addition, this project offers broad insights into a contemporary improvisatory practice for both specialised and non-specialised listeners and readers.

[1] Jon Rose, "The Music of Place: Reclaiming a practice," *Platform Papers: Quarterly Essays on the Performing Arts*, no. 35 (May, 2013): Strawberry Hills: Currency House Inc.

Declaration

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

Signature: 

Date: November 2016

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Chapter 1: Introduction

1.1 Content of Recorded Audio and Exegesis

The primary outcome of this practice-led research was a compilation of audio recordings comprised of five original works performed in duo and quintet formations. Each work featured musicians improvising within pre-conceived performance frameworks informed by studying field recordings of acoustic environments. Thus, sounds of the environment were studied as source material on which to develop an approach to improvisation. In this project, 'sounds of the environment' refers to any perceptible sound, including those that are natural, urban, and human-made (referring to sounds emitted from human beings in real-time, such as coughing, talking, the patter of footsteps etc.). The music created for this research largely draws from the free improvisation movement that emerged from the jazz and experimental music of the 1950s and 1960s.

The recorded works and durations are:

1. **Investigating Ensemble Interaction: A Performance Structure Informed by Sounds of the Environment** 08:11
2. **Responding to the Port Melbourne Jetty, as it was on June 25, 2015** 10:36
3. **Responding to Flinders Street Railway Station, as it was on June 30, 2015** 08:02
4. **Responding to the Darebin Creek Trail: Afternoon, Clear Weather, as it was on June 29, 2015** 21:21
5. **Responding to Flinders Walk, Under the St. Kilda Road Bridge, as it was June 30, 2015** 08:59

The exegesis outlines my rationale for undertaking this project and situates my research within a field of practitioners and researchers who have influenced my project, such as Luc Ferrari, Brian Eno, and Jim Denley. It also documents and provides a reflective commentary on the processes involved in developing the music. In Chapter One, I situate my project within a lineage of practitioners and explain the value in studying sounds of the environment to develop a musical practice. I also outline my reflective, practice-led research

methodology. Chapter Two documents the process of studying sounds of the environment to create performance frameworks for improvisation and discusses the relationship between the performance frameworks and the recorded works. Chapter Three is a summary and synthesis of my observations.

1.2 The Music of Place

The initial and underlying inspiration for this project was an essay from 2013 entitled *The Music of Place: Reclaiming a practice*,[2] written by Australian musician Jon Rose. His argument and vision for music to bring us into 'communion with … the natural world from which we came' held considerable influence when deciding to pursue this research.[3] Rose writes about developing a music practice through the study and appreciation of Australian wildlife and the environment. He asks readers to 'recognize the inherent sonic connectivity of land,' and calls for 'a kinship with geographical location.'[4] At a time when environmental issues are at the fore of discussions across a multitude of disciplines including politics, architecture, infrastructure, science, and the arts, it seemed appropriate to develop a music practice intimately connected to place and locality. Inspired by Rose, in this project I establish a practice that integrates my interest in free improvisation within the notion of place – the sounds of my everyday environment.

I recognise the musicality of sounds of the environment in alignment with sound ecologist R. Murray Schafer who writes, 'all sounds belong to a continuous field of possibilities lying within the comprehensive dominion of music. Behold the new orchestra: the sonic universe!'[5] While Schafer's work has been influential within the discipline of sound ecology, influencing the likes of Hildegarde Westerkamp, Barry Truax, and David Dunn, it would seem his aforementioned comment has somewhat encountered a similar problem to John Cage's assertion that all sound is (or has the potential to be) music. As Max Neuhaus writes, in regards to Cage bringing the sounds of the street into the music hall, 'most members of the

[2] Rose, "The Music of Place."
[3] Ibid., 56.
[4] Ibid., 56.
[5] R. Murray Schafer, *The Soundscape: Our Sonic Environment and the Tuning of the World* (Vermont: Destiny Books, 1977), 5.

audience seemed more impressed by the scandal than with the sounds, and few were able to carry the experience over into an appreciation of these sounds in their daily lives.'[6]

Thus it seems more work can be done to foster an appreciation of sounds of the environment. In consideration of Neuhaus' observation, I took an alternate approach to that of Cage and Schafer and developed a performance practice that involved musicians improvising in real-time. Key to my project was that performances were guided by pre-conceived performance frameworks informed by field recordings of sounds of the environment. My intention is that this approach, building upon the work established by Cage and Schafer, might instil an appreciation of everyday sounds of the environment in my audiences. My engagement with this performance practice led to the emergence of two primary research questions that I address throughout my research: How can sounds of the environment inform strategies for improvised musical performance? And, how does engaging with environmental sounds affect improvised musical performance?

1.3 General Context for My Performance Practice

Two ensembles recorded the works created for this project; a quintet consisting of Tony Hicks (woodwinds), Reuben Lewis (trumpet), Mark Shepherd (double bass and synthesiser), Zeke Ruckman (drums), and myself (guitar); and a duo comprised of Shepherd (synthesiser) and myself (guitar).[7] Ensemble formations were selected by considering the sonic characteristics of the correlating environment informing the work; the works are discussed in detail in chapter two. In order to narrow down the potential locations that could inform the works, I selected environments that I (and many others) traversed while engaging in my routine activities in Melbourne, Australia: The Port Melbourne jetty (my work area); Flinders Street railway station (where I change trains); the Darebin creek trail (an exercise/leisure spot); and Flinders walk, under the St. Kilda Road Bridge (the central business district). What each work has in common is that they were informed by sounds of the environment, were improvised, involved pre-conceived performance strategies, and focused on sound colour and texture.

[6] Max Neuhaus, "Listen (1966-76)," in *Sound*, ed. Caleb Kelly (London: Whitechapel Gallery and The MIT Press, 2011), 191.

[7] My selection of ensemble members was guided by three factors: people whom I had experience working with prior to this project; performers who were experienced performers within free improvisation and sound art disciplines; and musicians who possessed a keenness and willingness to engage in this project over the required period of time.

1.3.1 Improvisation, as Understood in My Project

My understanding of the term 'improvisation', as it relates to this project, drew from definitions provided by American saxophonist, Steve Lacey, and Australian guitarist, Ren Walters. Lacey draws attention to the temporal aspect of improvisation by comparing it to traditional compositional processes by writing, 'in composition you have all the time you want to decide what to say in fifteen seconds, while in improvisation you have fifteen seconds.'[8] Lacey's statement refers to the moment musical decisions are made and executed, whereby the decision to make a particular musical statement is made and performed in real-time during performance. There is no time to stop (at least not for extensive periods of time) and consider compositional choices once the performance has begun and there is no option to edit musical contributions after the fact. Thus in regards to responding to other performers during performance, improvising musicians work in the moment and draw from their existing materials, experience, and expertise as improvisers to create a musical work.

To gain a deeper insight as to what happens between the sounding of the first and last note of any given improvised performance, I referred to Walters' description of his own approach:

> I describe my experience of improvising, as making sounds and assembling them in a way that comes to me as I begin to play with these sounds. … I am the initiator of the sounds but equally I am the listener of these sounds, as they are heard; simultaneously experiencing both positions.[9]

Walters' description, which largely revolves around listening, provides further insight into the act of improvisation. Performers simultaneously make sounds, listen to and experience these sounds, as well as the sounds created by other performers, and contribute further musical content in response to what they have heard. In my project this process also involved working within pre-conceived performance frameworks. Thus each performer's musical decisions were informed not only by listening to their own, and the other ensemble

[8] Derek Bailey, *Improvisation: Its Nature and Practice in Music* (United Kingdom: The British Library National Sound Archive, 1992), 141.
[9] Reynold Walters, "The moment of performance: trace and materiality in improvisational music performance" (Masters exegesis, The Victorian College of the Arts and Music, Melbourne University, 2014), 10.

members' contributions, but also by following a performance strategy, which required them to perform a specific role, such as reflect machine-like sound qualities on their instruments. Due to the improvisatory nature of this project, it would be expected that subsequent performances of each work would differ from the recordings submitted. These recordings document just one iteration of each work.

1.4 Situating My Practice

In line with my musical background, the music created for this project was situated within the tradition of free improvisation that emerged from Europe and North America in the twentieth century. While musicians from this tradition, such as Jon Rose, Jim Denley, and David Rothenberg, have drawn inspiration from the environment to develop musical works, many other Western music practices have also found inspiration in sounds of the environment. These include classical compositions by Ludwig van Beethoven, Henry Tate, and Olivier Messiaen; futurist works by Luigi Russolo; sound ecology by R. Murray Schafer, Hildegarde Westerkamp, and David Dunn; the experimental music of John Cage, Alvin Lucier, and Pauline Oliveros; and *musique concrète* compositions by Pierre Schaeffer and Luc Ferrari.

Italian futurist composer Luigi Russolo is considered by scholars to be one of the earliest advocates for studying sounds of the environment (or 'noise', to use Russolo's term) to further musical practice.[10] He writes:

> I want to lead you to the understanding and admiration of the noises that nature and life offer us. … I will be satisfied if I succeed in convincing you that noise is not always as disagreeable and annoying as you believe and say, and that for him who *understands* it, noise represents instead an inexhaustible source of sensations, from one moment to the next exquisite and profound, grandiose and exaltant.[11]

During the 1940s and 1950s Cage, Schaeffer and their contemporaries, in effect, took up Russolo's call for the study and appreciation of environmental sound and made efforts to understand and draw from what Russolo described as environmental sound's 'inexhaustible

[10] Paul Hegarty, *Noise/Music: A History*, New York and London: Bloomsbury Publishing Inc., 2007.
[11] Luigi Russolo, *The Art of Noises* (New York: Pendragon Press, 1986), 41.

source of sensations.' Musical traditions established by Cage and Schaeffer created a nexus for experimentalism in music, resulting in practitioners from varying musical backgrounds, some of whom I will briefly mention below, becoming increasingly interested in how sounds of the environment could further musical practice.[12]

Synonymous with the Cagean assertion that every sound can be considered music, North American Pauline Oliveros developed her *Deep Listening Practice* in the late 1980s, which advocates becoming aware of and listening to one's surroundings as music.[13] In the discipline of *musique concrète*, French musician Luc Ferrari developed an approach to collecting and presenting (with minimal electronic manipulation, a practice distinct from earlier *musique concrète* artists) sounds of the environment.[14] Within improvised music practices, Australian performers such as Rose and Denley, as well as Rothenberg from North America have developed approaches to improvising whereby they interact in real-time with sounds of the environment.[15] In Japan, performers Ôtomo Yoshihide, Sachiko M, and Toshimaru Nakamura established a form of music-making called *onkyô*; an improvisatory practice that combines Cagean methodologies (allowing incidental sound a place within musical performance) with electronic free improvisation.[16]

Sound artists Max Neuhaus and Christina Kubisch have also developed distinct approaches to experiencing sounds of the environment. Neuhaus' *LISTEN* project involved audiences following him through the streets and listening to the sounds occurring around them,[17] while Kubisch makes it possible to hear noises otherwise hidden from us in our daily activities. Kubisch's specially designed headphones amplify electromagnetic waves in our environment, providing a means for people to hear the sounds emitted from automatic teller machines, among other things, as they are led through the streets.[18] This overview of musical practitioners engaging with sounds of the environment outlines the field in which my

[12] Brandon LaBelle, *Background Noise: Perspectives on Sound Art,* 2nd ed. New York and London: Bloomsbury Publishing Inc., 2015.
[13] John Cage, *Silence: Lectures and Writings*, Connecticut: Wesleyan University Press, 1973; Pauline Oliveros, *Deep Listening: A Composer's Sound Practice*, New York: Deep Listening Publications, 2005.
[14] LaBelle, *Background Noise*.
[15] Jon Rose, *The Fence,* RER Megacorp, 1998, compact disc; Jim Denley, *Through Fire, Crevice + the Hidden Valley,* Splitrec, 2006, compact disc; David Rothenberg, *Why Birds Sing,* Terra Nova, 2005, compact disc.
[16] David Novak, "Playing Off Site: The Untranslation of Onkyô," *Asian Music* 41, no.1 (winter/spring, 2010): 36-59, DOI: 10.1353/amu.0.0064.
[17] Neuhaus, "Listen (1966-76)," 190-192.
[18] Seth Kim-Cohen, *In the Blink of an Ear: Toward a Non-Cochlear Sonic Art*. New York and London: Bloomsbury Publishing Inc., 2013.

practice is situated. Specifically, Western avant-garde and improvisatory practices. In the following section I discuss in more detail three practitioners who directly informed my project, namely Luc Ferrari (1929-2005), Brian Eno (1948-) and Jim Denley (1957-).

1.4.1 Luc Ferrari

Where *musique concrète* artists were traditionally concerned with the electronic manipulation of sonic material, LaBelle asserts that Ferrari's work referenced 'the real as autobiographical narrative rather than sonic material'.[19] Expanding upon this, LaBelle describes Ferrari's piece *Presque Rien No. 1*:

> Ferrari's work consists solely of a recording produced by positioning a microphone out his window while staying in a small fishing village in Yugoslavia near the Black Sea. In short, the work moves outside the confines of both the concert hall and the music studio to confront the random and ambient murmurings of everyday life.[20]

Ferrari's method of creating musical works by presenting sounds from everyday acoustic locations inspired my approach. By presenting sounds of the environment, no matter how extraordinary or banal, LaBelle writes that Ferrari's work '"tells stories" by harnessing the "bodily real," the quotidian environment'.[21] Similar to Ferrari, I explored sonic characteristics of the environment that were unique to a particular location, regardless of how remarkable or ordinary they may have been. As opposed to seeking out exotic locations or particular sounds, my intention was to reflect the general character, or 'ambience' (referring to the overall quality of sounds heard within an environment, as they relate to one another as a whole) of a location.

Further, in *Presque Rien No. 1*,[22] the listener experiences sequentially composed fragments of environmental sound. The field recording was subjected to human intervention, as Ferrari selected the duration of each theme and ultimately, the overall piece. Compositional choices were made as to what content to remove and what to present to the listener. My project takes the process of human intervention further. While, similar to Ferrari, I made decisions

[19] LaBelle, *Background Noise*, 31.
[20] Ibid., 31.
[21] Ibid., 32.
[22] Luc Ferrari, *Presque Rien No.1/Société II*, Deutsche Grammophon, 1970, 33⅓ rpm.

about which characteristics of acoustic locations were to be pursued in performance, I felt little obligation to retain the environmental sounds themselves. Rather, sounds of the environment informed the development of performance frameworks that would guide improvised performance. While fragments of field recordings are included in three of the works for this project, sounds of the environment as musical phenomena did not comprise the entirety of any of the works.

1.4.2 Brian Eno

Brian Eno's *Ambient 4: On Land*[23] presents homogenous, immersive works that were largely inspired by the environment.[24] Of his ambient works Eno comments, 'immersion was really the point: we were making music to swim in, to float in, to get lost inside.'[25] Further, Eno expresses a fascination with music that exhibits 'stillness, homogeneity, lack of surprises and, most of all, lack of variety.'[26] Thus Eno's music reflects many of the characteristics exhibited in Ferrari's *Presque Rien No. 1*. LaBelle offers a description of how one may listen to such works, commenting on Eno's *Music for Airports*[27] (the first album from Eno's ambient works):

> The ear inevitably drifts toward a zone of ambiguity, where the free-floating tonalities supported by the gliding of smooth voices push the listener onto another level of attention – away from *listening* for *something* and toward reverie, fantasy, and distraction, as a listening that remains open and prone to wandering.[28]

LaBelle's commentary draws attention to the music's expansive quality. A quality reminiscent of the sounds that one might experience in public spaces. Similar to Eno's ambient music, many environmental sounds that we hear during our day-to-day activities ebb and flow as they move closer and farther away, and they collectively immerse us. By removing a rhythmic pulse and traditional compositional structures such as form, Eno's ambient music asks the listener to be patient. Throughout each piece he provides no clear

[23] Brian Eno, *Ambient 4: On Land*, E.G. Records, 1982, compact disc.
[24] "Ambient 4: On Land," Brian Eno, accessed August 31, 2015. http://music.hyperreal.org/artists/brian_eno/onland-txt.html
[25] Brian Eno, "Ambient Music," in *The Book of Music and Nature*, eds. David Rothenberg and Marta Ulvaeus (Middletown: Wesleyan University Press, 2001), 140.
[26] Ibid., 139.
[27] Brian Eno, *Ambient 1: Music for Airports*, E.G. Records, 1978, compact disc.
[28] Brandon LaBelle, *Acoustic Territories: Sound Culture and Everyday Life* (New York and London: Bloomsbury Publishing Inc., 2013), 198.

indication that works may ever finish; instead of balancing tension and resolution, or transitioning between contrasting themes, the music sits with the listener.

Eno's music ratifies works that exemplify minimal thematic progression. I strove to integrate this approach into the works created for this project as I believed it allowed the ensemble to reflect the ambience of the environment that informed each work. This meant, in line with Eno's ambient works, abandoning traditional notions of climax and resolution, as well as standard form structures, in favour of an approach that allowed the music to reflect the immersive nature of environmental sound.

1.4.3 Jim Denley

The approach to improvisation documented in this project is closely aligned to the work of Australian saxophonist Jim Denley, whose practice exemplifies the refinement of techniques that allow him to interact with and respond to sounds of the environment. His 2006 release *Through Fire, Crevice + the Hidden Valley* documents an approach to improvising and recording in situ, on location within natural environments.[29] It seems each work was recorded in a distinct location, as suggested by track names such as *Water Falls*, and *Through Fire*; the sounds of splashing water and crackling fire can be heard on each respective track. On these works Denley employs distinct improvisatory techniques, which allow him to respond to specific environmental sounds, particularly in regards to timbre and rhythm.

In an interview with Jon Rose, Denley comments on developing techniques that allow him to improvise in a variety of settings:

> Playing with Martin Ng, he's using turntables and electronics and I didn't want to sound like a flute player or saxophonist with a turntable; I wanted this melding together of the sounds. I was searching on my instruments. We rehearsed a lot, mostly trying to find ways to make ambiguous where the sound source is coming from. You don't want in performance to be copying and mimicking and operating like birds where one guy flies to the left so we all fly to the left, but it gives you a repertoire of sound objects to use in that context which are possibly more

[29] Denley, *Through Fire, Crevice + the Hidden Valley*. Denley recorded the album on site in the Budawang Mountains, a mountain range located in the Budawang National Park and the Morton National Park, in the south coast region of New South Wales, Australia.

> appropriate than if I was playing with [someone performing on a different instrument, such as a] bass [player].[30]

Comparable to Denley, who speaks of melding the sounds of his woodwind instruments with turntables and electronics, in my project performers melded their contributions with sounds of the environment (which is similar to Denley's approach on *Through Fire, Crevice + the Hidden Valley*). Melding sounds was important as it allowed the group to reflect the ambience and character of the environment that informed the work, which was particularly beneficial to our performance when field recordings were featured. In these instances, it was important that the field recording and the group's contributions could occur simultaneously while sounding congruent with one another.

Field recordings were not manipulated prior to their inclusion in the works. During performance their volume was controlled in real-time using an iPad. They were cued to begin playback at the beginning of each performance with the output volume set at zero (the field recording would begin playback, yet would not be heard). Therefore, it was a simple process of increasing the output volume to introduce the field recording during performance. The volume was controlled at my discretion throughout – improvised similarly to my contributions on the guitar. There were three primary considerations guiding my decision to introduce a field recording during performance. The first was to ensure variety between works; I did not want each work to feature the field recording in the same place, i.e. at the beginning. The second was in regards to my capacity to control the output volume, a task I was incapable of carrying out when both hands were needed to play guitar. Finally, and most importantly, I searched for moments during our performances that were appropriate to introduce the field recording. These moments generally coincided with sections of minimal activity from the group. Introducing the field recording at these times allowed it to be heard clearly as it was introduced, giving ensemble members the opportunity to respond and contextualise their playing appropriately. The presence of the field recording in performance also allowed the listener to establish a relationship between it and the music performed by the group. Exploring Denley's idea of melding sounds was

[30] "australia adlib," abc.net.au, accessed October 31, 2015. http://www.abc.net.au/arts/adlib/stories/s857584.htm

integral in maintaining consistency of ambience between field recordings and the music created by the performers.

Denley also mentions the process of improvising with a partner, providing an analogy of flying birds. In acknowledgement of Denley's comment, which infers that some approaches to ensemble interaction may be more desirable than others, outlining an approach to ensemble interaction was pertinent to my project. Since each performer was an experienced improviser in a variety of styles and settings it was important to specify how the ensemble would interact with one another. Establishing a unified approach was crucial, as the way performers interact can greatly affect musical outcomes. For example, musical decisions made while performing in a traditional jazz format with soloist and accompaniment, such as demonstrated on Sonny Rollins' *Tenor Madness*,[31] will differ to those made when performing collective non-idiomatic improvisation, such as demonstrated by the British ensemble *AMM*.[32] While there is somewhat of a hierarchy in the traditional jazz format (the soloist is often the feature), there are generally no such delineations in the music created by *AMM*.

In this project, a musical work created by the performers, as experienced by the listener, can be described as a 'monistic ensemble'. While this term refers to the final product (a complete musical work), understanding this concept directly affected decisions made during performance. While monism is generally a term associated with philosophy/theology, within a context of experiencing sound, artist and theorist Salomé Voegelin describes a monistic ensemble as individual elements that 'complete each other without abandoning themselves' – the 'ensemble appreciates the individual element' and 'brings together their particularity.'[33] In relation to actors, film director and theorist Sergei Eisenstein states that the individual elements of a monistic ensemble '*do not accompany* (nor even parallel) each other, but function *as elements of equal significance'*.[34] While the process of creating a work may be problematic in regards to adhering to the standard theological definition of monism

[31] Sonny Rollins Quartet, *Tenor Madness*, Prestige Records, 1956, compact disc.
[32] See, AMM, *AMMMusic 1966*, Elektra Records, 1967, compact disc.
[33] Salomé Voegelin, *Listening to Noise and Silence: Towards a Philosophy of Sound Art* (London and New York: Bloomsbury Publishing Inc., 2013), 125.
[34] Sergei Eisenstein, *Film Form: Essays in Film Theory*, trans. and ed. Jay Leyda (London: Harcourt, Brace & World, Inc., 1949), 20.

– a single unifying substance or reality,[35] by drawing from the thought of Voegelin and Eisenstein, the final work as experienced by the listener can embody the notion of monism.

A monistic approach to ensemble interaction can be understood with the following analogy of pedestrians moving through a city centre: An individual walking along the sidewalk moves along a specific trajectory to get from A to B. Yet, if it is busy, there will be multiple other individuals moving along the same sidewalk at similar speeds and in similar directions, each moving autonomously along their own trajectory. But they also move together, and the presence of others influences the movements of each individual. Should an obstacle present itself, depending on the urgency of their journey and the space available to them, the people may smoothly move to one side, split down the middle, or separate into any number of formations before re-joining to continue their journey. If another individual joins the parade mid-way, they too become part of the procession: autonomous, but interacting with those around them.

By expanding upon Denley's analogy of flying birds and accepting the functionality of the group as being fundamentally monistic, practitioners in this project found a balance between autonomous polyphony and mimicry without completely resigning themselves to either. Ensemble members instigated their own trajectories within the ensemble while simultaneously listening to and being sympathetic to the contributions of the other performers. The group worked together without intentionally accompanying one another, as Eisenstein playfully writes; 'one would not say that, in walking or running, the right "accompanies" the left leg, or that both of them accompany the diaphragm!'[36]

Select works by Ferrari, Eno, and Denley constitute the primary influences for this project. By studying these practitioners and assimilating aspects of their work within my own I developed a practice concerned with, (1) developing performance frameworks that allow works to be informed by a particular environment without the performance needing to take place on location; (2) consistency and homogeneity of sound; and (3) the creation of musical works through improvisation, requiring performers to assume a certain level of autonomy within the group.

[35] Frank Leslie Cross and E. A. Livingstone, *The Oxford Dictionary of the Christian Church* (London: Oxford University Press, 1974), monism.
[36] Eisenstein, *Film Form*, 21.

1.5 Literature That Informed My Practice

Five primary texts informed my approach to studying sounds of the environment to develop a performance practice. This included Russolo's *The Art of Noises*, wherein he cites his fascination with sounds of the environment:

> We futurists have all deeply loved and enjoyed the harmonies of the great masters. Beethoven and Wagner have stirred our nerves and hearts for many years. Now we have had enough of them, *and we delight much more in combining in our thoughts the noises of trams, of automobile engines, of carriages and brawling crowds*.[37]

Russolo's interest in the noises that everyday life has to offer provided a foundation for my project – for at the heart of both our work lay an interest in the sounds experienced during our daily activities. Russolo's approach, distinct from music practices that present field recordings to their audiences, such as *musique concrète* and sound ecology, was informed by sounds of the environment. Inspired by the sounds of the industrial revolution, he categorised environmental sounds into six families in an attempt to reproduce and orchestrate them with his mechanical orchestra.[38] Russolo's practice, that did not directly present sounds of the environment to the audience, but rather drew from their sonorous qualities, informed my decision to study sounds of the environment as source material to develop a performance practice.

To further explore how other practitioners have employed sounds of the environment within their music practice I consulted Hegarty's *Noise/Music: A History*,[39] wherein Hegarty provides an overview of contemporary musicians interested in noise. The book chronologically traces the inclusion of noise within and as musical discourse, beginning with Russolo and concluding with artists such as Merzbow and Throbbing Gristle.[40] Covering a range of musicians from varying backgrounds, Hegarty provides insight into the different ways noise has been included within music or as music. For example, he discusses the work

[37] Russolo, *The Art of Noises*, 25.
[38] Ibid., 28. Russolo's categorisation of sounds: (1) Roars, thunderings, explosions, hissing roars, bangs, booms; (2) whistling, hissing, puffing; (3) whispers, murmurs, mumbling, muttering, gurgling; (4) screeching, creaking, rustling, humming, crackling, rubbing; (5) noises obtained by beating on metals, woods, skins, stones, potter, etc.; (6) voices of animals and people: shouts, screams, shrieks, wails, hoots, howls, death rattles, sobs.
[39] Hegarty, *Noise/Music*.
[40] Ibid.

of Japanese noise musician Merzbow, whom Hegarty claims is the 'paragon of noise'.[41] He writes that, 'duration, volume, [and] harshness' are tools employed by Merzbow to create his music.[42] I considered how these tools could be employed in my project, particularly in regard to the works *Responding to the Port Melbourne Jetty, as it was on June 25, 2015* (*PMJ*), where duration was pivotal to create an ambience that adequately reflected the correlating environment, and *Responding to the Darebin Creek Trail: Afternoon, Clear Weather, as it was on June 29, 2015* (*DCT*), where volume and harshness were imperative in reflecting the sonic character of a construction site.

Reflecting characteristics of environmental sound through musical composition is a technique documented by Henry Tate in *Australian Musical Possibilities*.[43] In his book, Tate provides concrete examples of how he suggests sounds of Australian wildlife (expressing a particular interest in birdsong) might influence classical composition. He provides experiential descriptions of environmental sounds, which provide a foundation for his compositional approach. While our musical outcomes differ significantly, similarly to Tate, my works were founded on detailed descriptions that I wrote while listening to field recordings. Reflecting upon my journal entries provided me with a means to develop performance frameworks for each work. For example, when listening to the field recording from the Port Melbourne jetty I noted in my journal that the dense and unrelenting sound of waves lapping aimlessly against the jetty made me feel slightly claustrophobic. However, after continual listening, I noted that I gradually became able to search deeper into the sounds and hear the patterns from the bubbles that erupted each time a wave made impact with the jetty. Reflecting upon these descriptions brought into focus a particular character of the field recording that I wanted to feature in my music. I considered how I could create dense, drone-like sounds to immerse the listener. I was particularly drawn to investigate the idea of duration so as to create a work that allowed the listener to find subtle nuances in the music that may not be immediately apparent.

Further informing my listening to and study of environmental sound was Pierre Schaeffer's 'acousmatic' listening practice, an idea documented in his book *Treatise on Musical*

[41] Ibid., 16.
[42] Ibid., 155.
[43] Henry Tate, *Australian Musical Possibilities*. Melbourne: Edward A. Vidler, 1924.

Objects.[44] What Schaeffer calls acousmatic (a term borrowed from Pythagoras),[45] is sound separated from its source and experienced without accompanying visuals, for example, the radio, or a voice behind a curtain (which is how Pythagoras addressed his disciples for a time) create acousmatic experiences.[46] When sound has been recorded and exists as an object on tape, CD, or as a Wav file, etc., it is what Schaeffer would call a sonorous object.[47] Acousmatic listening and sonorous objects are deeply entwined. As Schaeffer writes, 'if there is a sonorous object, it is only insofar as there is a blind listening [*ècoute*] to sonorous effects and contents: the sonorous object is never revealed clearly except in the acousmatic experience.'[48] This is not to imply that if one knows the source of the sound, the experience is not acousmatic – Pythagoras' disciples who listened to their teacher speak from behind a curtain were surely aware it was in fact a person speaking to them. Thus acousmatic listening encourages the consideration of sound as a thing in itself. The answer to the question 'what is that sound?' is thus not the source of the sound, for example, a violin; the sound is rather the phenomenon heard as opposed to the external generator of that sound. Acousmatic listening posits sound as a phenomenon in its own right.

As a method of unveiling the sonorous qualities of a field recording, acousmatic listening was pertinent for my study, however, it was not a technique required of the audience when experiencing the works – as will become clear below. Maintaining a journal with written descriptions of field recordings, reflecting upon my observations, and re-listening to field recordings allowed me to focus on and evaluate sounds in the periphery, as well as those in the fore. When studying a field recording, I explored the qualities unique to each location. More often than not, I was intrigued by the relationships between sounds, such as the enveloping, repetitive sounds from the Port Melbourne jetty; the five distinct frequency bands from Flinders Street railway station; the gentle, natural sounds from the Darebin creek walking track which contrasted the intense, harsh sounds from the construction site nearby; and the intermittent booming presence of trams as they rumbled over the St. Kilda

[44] To date, a complete English translation of *Treatise on Musical Objects* has not been published. The chapter entitled *Acousmatics* however, has been translated to English and is featured in: Christoph Cox and Daniel Warner, eds., *Audio Culture: Readings in Modern Music*, New York and London: Bloomsbury Publishing Inc., 2013.
[45] Pierre Schaeffer, "Acousmatics," trans. Daniel W. Smith, in *Audio Culture: Readings in Modern Music*, eds. Christoph Cox and Daniel Warner (New York and London: Bloomsbury Publishing Inc., 2013), 76.
[46] Ibid., 79.
[47] Ibid., 77-79.
[48] Ibid., 79.

Road bridge – the echoes of which were heard from beneath the bridge and interrupted an otherwise gentle tapestry of natural sounds occurring below. Thus in my project, acousmatic listening to sonorous objects (field recordings) enabled me to acquire an intimate knowledge of the sounds heard on each field recording, which informed my development of performance strategies. For example, instead of attempting to reflect the lapping waves from the Port Melbourne jetty in performance, I instead considered the timbre, density, and ambience of the sonorous object.

While acousmatic listening allowed me to study sounds of the environment and determine characteristics to pursue in performance, distinct from Schaeffer, it was important that my music embrace the fact that it was informed by the environment – the sound's source. This was integral if the music was to convey an appreciation for the environment in my audience. Thus the relationship between me and the field recordings in the developmental stages of this project was quite different to the relationship between the final works and the audience. To ensure the intention of the project was received by the audience it was important to make clear the relationship between the environment and the works. By providing descriptive titles for each work and at times featuring the field recording in performance, a context for the works was established for the audience. The fragments of the field recordings that sounded throughout select works created an additional level of interest in our performances. They simultaneously provided an additional sound source for performers to respond to and provided a context for the audience.

Expanding on the notion of acquiring a personal understanding of environmental sound, I drew from Dunn's assertion that developing an environmental musical language is an 'experiential, dynamic process'.[49] With the following statement Dunn draws into focus an integral relationship between environmental sound and the musicians working with them: 'We can embrace the alien for its right to exist without destroying it or demanding that it either serve us or exhibit human traits.'[50] This idea informed much of my practice – in contrast to reworking environmental sound's characteristics into conventionally notated compositions (as suggested by Tate), I attempted to draw from the environment while acknowledging it as a (musical) phenomenon in its own right. This aligns with the underlying

[49] David Dunn, "Nature, Sound Art, and the Sacred," in *The Book of Music and Nature*, eds. David Rothenberg and Marta Ulvaeus (Middletown: Wesleyan University Press, 2001), 102.
[50] Ibid., 107.

intention of this project; to create music that draws attention to the environment. Rather than appropriate its resources, which relates to both music and life generally, I wanted to work with and be inspired by sounds of the environment.

1.6 Methodology: Reflective Practice

When considering a methodology for my research it became apparent that it would be necessary to adopt a reflective approach to show the process undertaken to develop the works. This is in contrast to prescribing a set of pre-conceived linear procedures. The methodology for this project is situated within the disciplines of practice-led research and reflective practice; an approach which has also been adopted by researchers such as Daniel Mafé, Paul Williamson, and Peter Knight.[51] Williamson asserts that practice-led research allowed him to 'explore the possibilities of [his] playing within studio practice, rehearsal, performance, and composition.'[52] And Knight writes, 'I wanted my research to be "research *in* music" as distinct from research *into* or *of* music.'[53] Both Williamson and Knight mention aspects of practice-led research that are directly relevant to my project, insofar as I conducted research in music through the exploration of practice, rehearsals, composition, and performance. And while in part I drew from the methodological approaches documented by my predecessors, as Mafé writes, 'creative practice and its specific methods will vary from practitioner to practitioner'.[54]

Similar to the work of Mafé, Williamson, and Knight, my project relied on my presence throughout, situating me as researcher, practitioner, and theorist; a responsibility Sullivan states as being common in practice-led research.[55] I strove to answer my research questions by being directly involved in the creative process. There was no clear pre-conceived end, rather, through the process of developing the works, ideas and insights emerged that were unforeseen at the beginning of the project. Sullivan describes this practice-led method of

[51] Hazel Smith and Roger T. Dean, eds., *Practice-led Research, Research-led Practice in the Creative Arts*, Edinburgh: Edinburgh University Press, 2009.
[52] Paul Williamson, "Developing Technical Control, Ensemble Interaction, and Flow within Jazz Performance," (Sir Zelman Cowen School of Music, Monash University, 2014), 14.
[53] Peter Knight, "The Intersection of Improvisation and Composition: A Music Practice in Flux," (Queensland Conservatorium Arts, Education and Law Group Griffith University, 2011), 30.
[54] Daniel Mafé, "Rephrasing Voice: Art, Practice-led Research and the Limits and Sites of Articulacy," (Creative Industries Faculty, Queensland University of Technology, 2009), 31.
[55] Graeme Sullivan, "Making Space: The Purpose and Place of Practice-led Research," in *Practice-led Research, Research-led Practice in the Creative Arts*, eds. Hazel Smith and Roger T. Dean (Edinburgh: Edinburgh University Press, 2009), 42.

transitioning from the unknown to the known as 'purposeful yet open-ended, clear-sighted yet exploratory.'[56] This style of research is what theorist Donald Schön calls 'reflective practice'.[57] In *The Reflective Practitioner: How Professionals Think In Action,*[58] Schön explains how professionals from diverse backgrounds draw upon their knowledge of the field to provide solutions to problems that may not fit within available theories or structures.[59] When discussing reflective research methodologies Schön outlines a model called 'repertoire-building research'; a methodology whereby the researcher describes their evolution of enquiry by reflecting upon already completed processes.[60] Repertoire-building research enables practitioners to elucidate linkages between 'action, outcome, and context'.[61]

By maintaining a reflective journal throughout my research, I documented the relevant avenues of enquiry pursued throughout this project to develop the artistic works. As Bolton writes, reflective practice 'can enable practitioners to learn from experience about themselves [and] their work.'[62] For example, after completing the quintet recording session for this project I was able to reflect upon the relationship between the field recording, performance strategy, and the relevant work, enabling me to see links between each step in the creative process. These findings were then written up to be included in this exegesis.

Reflecting upon my practice, I documented a series of non-linear steps that provided a foundation for developing the works created for this project. While illustrations may only represent a superficial understanding of musical process, the following diagram reflects the possible pathways to develop a work.

[56] Ibid., 49.
[57] Donald A. Schön, *The Reflective Practitioner: How Professionals Think In Action*, United States: Basic Books, 1983.
[58] Ibid.
[59] Ibid.
[60] Ibid., 317.
[61] Ibid., 317.
[62] Gillie Bolton, *Reflective Practice: Writing & Professional Development* (London: SAGE Publications, 2010), 3.

Fig. 1 A model of creative processes – note that red arrows point in a single direction, black arrows are bi-directional, and the green arrows represent the realisation of the performance framework to create the work.

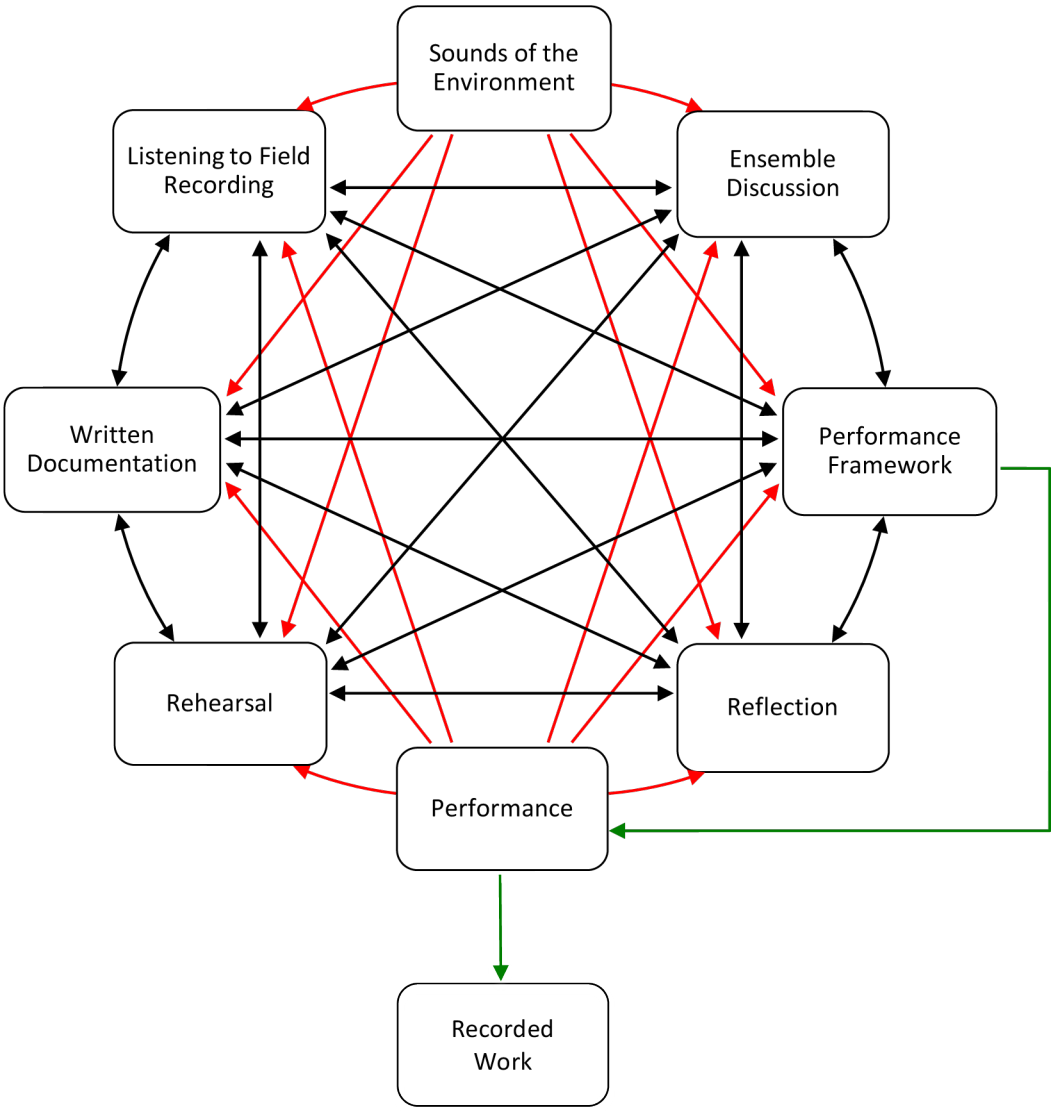

Figure 1 visualises the complexity of developing a work. It is inspired by Smith and Dean's *iterative cyclic web*.[63] The category 'sounds of the environment' (as they were, at the time the field recording was taken) is situated at the top of the diagram as it informed all subsequent aspects of the process. The arrows throughout the diagram reflect the possible non-linear steps taken to refine and develop the performance strategy in order to arrive at the final work. Each category (excluding 'sounds of the environment' and 'recorded work')

[63] Smith and Dean, *Practice-led Research, Research-led Practice in the Creative Arts*, 20.

can be skipped or visited as many times as necessary, in varying order, to develop the work. The path to the performance is from the performance framework (as indicated by the green arrow), however, if the performers deem the performance unsuccessful, arrows leading away from the performance allow any or all of the categories to be revisited as necessary to further refine the work. During recording, the first successful take of a performance became the final work for this project. The ensemble judged the success or failure of a performance collectively. After recording, we discussed whether or not we were happy with our performance to determine if we should record a subsequent take. Our primary consideration when determining the success or failure of a performance was whether or not a clear relationship between our performance and the correlating environment and performance framework was established.

Chapter 2: Developing and Performing the Works

In this chapter I outline how audio referents (field recording excerpts) and verbal performance instructions (which are also referents) were informed by field recordings of sounds of the environment. I also discuss how these referents were realised through performance. The term 'referent' (borrowed from musician and psychologist Jeff Pressing) in this exegesis refers to pre-conceived materials that guided and generated context and continuity for our performances.[64] Rather than conduct a comprehensive analysis of each individual work, the approach taken in this chapter is to present the methods, experiences, and discoveries revealed through this research by using examples from the works. It is my intention to elucidate the developmental process of this project, thus this chapter mirrors the order that the works were conceived and recorded.

When I began working with the other performers in the early stages of this project I trialled four types of referents to see which were most effective: audio, verbal, text-based, and graphic images. Audio referents were field recordings of acoustic locations. I envisaged that text, graphic images, and verbal instructions would accompany the audio referent and convey specific instructions to the ensemble. However, after only a handful of rehearsals it became clear that an audio referent, coupled with my verbal instructions was sufficient. The benefit of working from an audio referent, as opposed to responding directly to sounds of the environment on location in real-time, was twofold. Firstly, field recordings, while subject to limitations in regards to recording equipment,[65] defined the range and scope of the environmental sounds to be studied. Secondly, as sonorous objects, they provided consistency, which allowed me to re-listen, share with ensemble members, and rehearse and perform with the same materials multiple times.

After studying a field recording, preliminary performance strategies were rehearsed and refined through reflective practice – a method advocated for by theorists and practice-led researchers such as Borgdorff (although he would call it 'interpretive perspective'),

[64] Jeff Pressing, "Cognitive Processes in Improvisation," in *Cognitive Processes in the Perception of Art,* eds. Antony J. Chapman and W. Ray Crozier (Amsterdam: Elsevier Publishers B.V.), 1984.

[65] My field recording equipment comprised a Fostex FR-2LE CF field recorder and a Rode NT4 X/Y stereo condenser microphone. It was not expected that field recordings would provide an exact reproduction of what the human ear might have heard on location. However, field recordings became the definitive resource throughout my project, taking precedent over my listening on-site while recording.

Haseman and Mafé, Knight, and Bolton.[66] During rehearsals, I verbally conveyed performance frameworks to the ensemble before we collectively listened to the audio referent. I described how a specific player or the ensemble as a whole would aim to reflect a certain aspect of the field recording in a particular way, for example, the intensity and density of sounds emitted from a construction site. I was able to refine these instructions over time to ensure the effective realisation of the work.

2.1 Investigating Ensemble Interaction: A Performance Structure Informed by Sounds of the Environment

Investigating Ensemble Interaction: A Performance Structure Informed by Sounds of the Environment (*IEI*) was conceived in the early stages of my research to explore ensemble interaction. Whereas each of the other works correlate to a single acoustic location, *IEI* was not a response to a specific location. Rather it was first and foremost conceived as a learning tool for ensemble development. After extensively listening to field recordings taken at a variety of locations I became interested in the relationships between environmental sounds, specifically, their autonomy – i.e. one sound is not a result of, or in direct response to, another. It was around this time in the project that I began thinking of the monistic ensemble and how our performances might better reflect this idea. I developed a written score (Appendix 1) to investigate how the ensemble could reflect the autonomy of sounds such as flowing water, wind, traffic, etc., that contribute to the environmental soundscape without responding to one another.[67]

The work featured a quintet consisting of Tony Hicks (soprano saxophone), Reuben Lewis (trumpet), Mark Shepherd (double bass), Zeke Ruckman (drums), and myself (guitar). To reflect the autonomy of environmental sound and to ensure a non-responsive relationship between each performer, ensemble members were required to record their contributions independently. Performers sent their recordings to me via Dropbox and I layered each track

[66] Henk Borgdorff, *The Conflict of the Faculties: Perspectives on Artistic Research and Academia*, Amsterdam: Leiden University Press, 2012; Brad Haseman and Daniel Mafé, "Acquiring Know-How: Research Training for Practice-led Researchers," in *Practice-led Research, Research-led Practice in the Creative Arts*, eds. Hazel Smith and Roger T. Dean, 211-228, Edinburgh: Edinburgh University Press, 2009; Peter Knight, "The Intersection of Improvisation and Composition"; Bolton, *Reflective Practice*.

[67] Of course there are instances when these sounds respond to one another; car horns are often responsive. However, I am largely comparing these sounds to the level of interaction and responsiveness inherent in human dialogue and other similarly interactive sound relationships.

on top of one another – no editing of parts took place besides mixing the recording. The duration of the piece was set at eight minutes; however, it could have been set longer or shorter.

Since many environmental sounds are not constant or drone-like (excluding sounds such as flowing water), rather they pass by or start and stop intermittently, I decided that throughout the work each member should contribute sound for approximately four minutes. The ratio of 50:50 sound/silence[68] was decided upon as a unifying structure for each performer to follow. Since my primary concern was to explore autonomy and chance interactions in performance, ensemble members were instructed to interpret the sound/silence ratio loosely in order to maintain flow and coherence throughout their improvisation. It was not specified how each performer should structure their contribution. For instance, they could perform four minutes of constant sound followed by four minutes of silence, or they could alternate between sound and silence in smaller, uneven structures of time. The only instructions regarding how or what to play were the written instructions 'gradual dynamic shifts' and 'texture'.

Reflecting upon the work (Appendix 2.1), I noticed there were moments when it seemed almost pre-composed; phrases line up and musicians seemingly pause or start together, such as at 2:06 when my entry seems to coincide with Shepherd's, at 5:00 when Lewis and I paused at a similar time and Shepherd seemingly responded by beginning a new section just moments after, and at 6:57 where Hicks and Lewis began their final contributions within moments of one another. Stemming from preliminary discussions regarding a monistic ensemble this piece demonstrated that an interesting and coherent musical outcome could be achieved without musicians accompanying or even responding to one another.

While I believe this composition stands alone as a piece of music, it also functioned as a valuable learning tool. It highlighted the importance of having a strong, autonomous idea to pursue throughout a performance and solidified the idea that if we approached interactive performance from a similar perspective, we could find a balance between autonomous polyphony and responsive playing within the ensemble. This exploration of group

[68] I use the term 'silence' to refer to periods when a musician is not intentionally contributing sound to the recorded work.

interaction informed my idea of a monistic ensemble – a concept that permeated through all subsequent works created for this project.

2.2 Responding to the Port Melbourne Jetty, as it was on June 25, 2015

PMJ was performed as a duet that featured Shepherd (synthesiser) and myself (guitar). This instrumentation was appropriate as the intention of the work was to explore and amplify the repetitive and homogenous character of the primary sound from the audio referent. As can be heard on the audio referent (Appendix 2.2), the sound is constant, yet has small, regular fluctuations in volume; there is a back and forth, almost a gentle rocking between the primary sound. This sound, while gentle and enveloping, has a brittle glass-like timbre, a result of the lack of reverberation provided by the open landscape. In addition to listening to the audio referent, to further contextualise our approach to performance Shepherd and I listened to and discussed Brian Eno's *Ambient 4: On Land* and Nurse with Wound's *Soliloquy for Lilith*;[69] two albums exhibiting stillness and homogeneity as primary characteristics.

We intended to create music that was drone-like, dense, and immersive. I wanted the work to plateau and exhibit only slight variations throughout, to verge on the border of monotony with minimal deviation from a continuing theme. In line with LaBelle's description of Eno's *Music for Airports*, mentioned in chapter one, I wanted to create a work that allowed the listener's mind to wander. To achieve this and reflect the ambience of the field recording, an extended duration was pivotal. For after reflecting upon earlier, shorter iterations of the work (between four and seven minutes in duration), an immersive, monotonous character was not adequately established. Thus, while we did not reference a time-keeping device during the final performance, we set out to perform for a minimum of ten minutes – a duration that allowed the work to exhibit the desired characteristics.

After studying the field recording, I noted in my journal that there were multiple levels of sound: the gentle sound of moving water, the louder sound when the waves made contact with the jetty, and the bubbling that immediately followed after impact. There was a pattern that continually enveloped itself – as if a complete cycle never finished before it was overcome by another incoming wave. To reflect this character in our performance Shepherd and I created comparable sounds from our instruments. We performed primarily within a

[69] Brian Eno, *Ambient 4: On Land*; Nurse with Wound, *Soliloquy for Lilith*, United Dairies, 2003, compact disc.

limited frequency range in the lower register of our instruments. Our contributions were similar in density, texture, timbre, and register, and exhibited minimal thematic variation. Gradually, our contributions developed as the piece progressed, yet never into areas that were surprising or unexpected. Rather, the work (Appendix 2.3) ebbed and flowed and could be situated in the domain of ambient, drone-like minimalism.

2.3 Three Works for Quintet

2.3.1 Developing and Performing the Works

I developed the three works for quintet configuration after completing *PMJ*. My intention was to develop performance strategies that correlated to contrasting Melbourne locations where a large variety of sounds were present. The selected locations were Flinders Street railway station, the Darebin Creek walking track, and Flinders walk, under the St. Kilda Road Bridge. These works were recorded consecutively in a single session.

The first work rehearsed by the ensemble was *Responding to Flinders Street Railway Station, as it was on June 30, 2015* (*FSRS*). At this stage in the research, I was still developing my approach to creating referents for a quintet. While I was able to draw upon knowledge gained from the creation of *PMJ*, my approach was also informed from my studies with Ren Walters in 2011-2012. During lessons, Walters set performance restrictions for us to adhere to while we improvised together; with a focus on developing extended techniques on the guitar. Examples of these exercises with inbuilt restrictions include: 'improvise exclusively with natural harmonics,' and 'improvise exclusively on one string of the guitar'. These exercises encouraged me to explore the guitar in technical and creative ways previously unconsidered. Further, as Walters did not encourage rehearsal of improvised music, these lessons also taught me to approach each exercise (and every improvised performance, whether at home or on stage) as an opportunity to create a musical work.

When considering a performance framework for *FSRS* I drew from these experiences with Walters and developed a strategy that revolved around allocating each ensemble member a role, or restriction. I wanted the quintet to reflect the division of frequency ranges heard in the audio referent while we collectively improvised. Since it was impractical to reflect the multitude of sounds heard on location, pursuing the general division of frequency ranges in which these sounds occurred was more manageable in performance. Guided by the range of

our instruments, it was determined that Hicks' soprano saxophone and flute, and Ruckman's cymbals, would best suit the upper registers. Lewis' trumpet would occupy the middle range alongside Ruckman's drums, and Shepherd's synthesiser and my guitar would fill out the lower registers.

While the ensemble collectively deemed the approach worthy of developing further, our first attempt resulted in music that lacked a clear relationship to the correlating field recording. Our performance was somewhat monotonous as the range of contrasting sounds and diversity of dynamics and rhythms present in the field recording were absent from our performance (Appendix 2.4). Reflecting further upon our rehearsal, I noted in my journal that the process was effective, but the work needed to develop slower. The thematic development that occurred over the course of approximately 30 seconds would have been more effective had it taken several minutes. Thus I revisited the concept of duration that Shepherd and I had explored in our duet. This led me to reflect upon the experience of being stationary in an acoustic environment. I mused upon the homogeneity of sound and how it was somewhat predictable (at least in the sense of knowing I would not encounter the sounds from the Port Melbourne jetty while on location at Flinders Street railway station). After extended listening to sounds from a particular environment an overarching, unifying ambience became apparent. It became clear that similar to *PMJ*, quintet performances required an extended duration to adequately reflect the homogeneity and predictability of each location.

It seemed necessary to expand upon what I had learnt from Walters and develop performance frameworks that were more specific than the initial one conceived for *FSRS*. Ensemble members would need to be allocated more than one restriction to create a more encompassing performance strategy. Acousmatic listening to the field recording enabled me to uncover characteristics of the environment that could further inform performance strategies. For example, in relation to Flinders Street railway station, the field recording exhibited a diverse array of sounds that presented themselves in a dense tapestry – it was at times difficult to differentiate sounds. While some exhibited predictable rhythms, others existed as flurries heard only briefly before fading away. They were rich in dynamics, often unexpectedly spiking in volume, yet overall, the volume of the soundscape was relatively

consistent. The sonorous qualities of the environment were dense, yet most sounds were short in duration; constantly being replaced by new sounds (Appendix 2.5).

To create a work more closely related to these observations, I expanded upon the initial performance framework for *FSRS* by developing a strategy that revolved around instrumentation (the aforementioned division of frequency ranges), maintaining a consistent density and volume throughout the piece, and encouraging performers to overlap and envelope the contributions of others – similar to the field recording where sounds of outgoing trains receded into the distance or murmurs of traffic were overcome by the sound of incoming closer sounds, such as groups of people walking past. Additionally, the quintet aimed to abandon traditional notions of thematic climax and resolution – a theme that ran throughout the entire project. This performance strategy was deemed a success by the group and it informed our performance of the final work (Appendix 2.6).

The approach to developing the performance framework for *FSRS* was maintained to develop the remaining two works, albeit with subtle variations. These works are discussed sequentially, beginning with *DCT* before moving on to *Responding to Flinders Walk, Under the St. Kilda Road Bridge, as it was June 30, 2015* (*FWSKRB*). *DCT* (Appendix 2.7) was informed by field recordings from two separate, but related, locations. Two performance strategies, one in response to each location, guided two consecutive performances. The first field recording (Appendix 2.8) documented the sound of a person walking along Darebin creek's gravel walking track. It had a rhythmic quality to it, as one can hear every step the person took – a consistent, repetitive sound that possessed a human-like quality. The second field recording captured sounds emitted from a construction site located at one end of the walking track. I decided these locations should be performed in succession as they were visited consecutively (the walking track led to the construction site).

Whereas developing the performance strategy in response to the walking track involved a similar process to developing the strategy for *FSRS*, the performance framework in response to the construction site was different. The goal was to contrast the natural, human-like sounds of the walking track by reflecting the intrusive and unfaltering nature of machinery and industrialised environments. Instead of delineating specific roles for each performer, in this instance I was more interested in our performance reflecting the general mood and

presence of the sounds heard on location. After explaining this to the ensemble the group deemed it unnecessary to work from an audio referent.

We set out to explore the notion of 'harshness' in our performance; drawing from Hegarty's previously mentioned description of Merzbow's approach.[70] While I did not specify how each performer should embody harshness in their performance, we achieved this in the moment of performance through the timbre of the distorted guitar and muted trumpet; the frequency range of Hicks' soprano saxophone, which he played in its upper register; Ruckman's pointillist approach to striking his drums and cymbals; and Shepherd's slow volume swells, whereby he created a sense of intensity by transitioning from low to high volume. The ensemble improvised intensely to create a theme much denser than our response to the walking track. The consistency of the music stood out in our performance. The volume and density plateaued, continuing without faltering for the duration of approximately eight minutes. Similarly, the contributions of each member reflected the autonomous nature of machinery. For example, Ruckman's drumming appeared to almost work in complete disregard to the rest of the ensemble, sounding at will, yet unfaltering.

In contrast to the performance strategy developed in response to the construction site, the improvisatory framework for *FWSKRB*, more so than any other piece, drew from specific events that occurred in the correlating field recording. While studying the field recording I became interested in the relationship between the sound of trams passing over the bridge above (the field recording was taken on a walking path next to the river and directly beneath the bridge), which approached with a short crescendo before creating a low frequency booming sound (Appendix 2.9), and the general murmur of sounds when trams were not present. The field recording also exhibited a tapestry of consistent, often indistinct sounds that created a textural backdrop to other more distinct passing sounds that occurred in closer proximity to the recording equipment (Appendix 2.10). These three sound groups (the background murmur, distinct passing sounds, and trams overhead) constitute the foundation from which the performance strategy for this work was developed.

I was interested in drawing attention to the dichotomy between gentle, natural sounds and the intermittent trams passing overhead. To achieve this in performance (Appendix 2.11),

[70] Hegarty, *Noise/Music*, 155.

Ruckman (drums) was instructed to reflect the passing trams by intermittently performing a short motif inspired by the repetitive rhythm of the trams. He was also free to contribute to the overall performance when not contributing this tram-like role. Shepherd and Lewis strove to reflect the tapestry and continuity of background sound by contributing textural pads (long tones that sit in the background of the performance). Hicks and I endeavoured to perform sporadically with gaps of silence between our contributions – inspired by the distinct passing sounds heard on the field recording. In many ways this performance strategy reflected the culmination of knowledge gained throughout this research: creating a work that maintains a relatively consistent volume and density, performing music that is immersive, juxtaposing natural and industrial sounds against one another, and creating a work that could be described as a monistic ensemble. Additionally, the group endeavoured to reflect specific events from the field recording, namely the passing trams that contrasted the otherwise natural sounds of the location.

2.3.2 Reflecting Upon the Quintet Performances

The way sounds of the environment informed our performances varied between each work. Each performance framework presented a unique challenge to the performers, similar to those I experienced while adhering to performance restrictions while studying with Walters. However, while the majority of musical content featured on these three works can be clearly traced back to the performance framework, there were two primary instances where the ensemble somewhat diverted from the pre-conceived strategy. This occurred on both *DCT* and *FWSKRB*.

After Ruckman ceased playing at approximately 15:15 on *DCT*, the musical theme in response to the construction site came to a conclusion, but the work continued. A new theme emerged that was not directly related to our performance strategy. Lewis and Hicks, who engaged in a duet and created bird-like squawking sounds from their instruments, led this section. While reflecting natural sounds, such as bird song, in our performance did not relate to the strategy of reflecting machinery, these contributions can be traced back to the bird calls heard on the walking track audio referent. At 17:35, Shepherd joined Hicks and Lewis and created gurgling water-like sounds, which can be traced back to the flowing river from the same audio referent (Appendix 2.12). When Hicks dropped out and Lewis and Shepherd continued as a duo, the apparent references to natural locations became less

obvious. Gradually it became clear the ensemble had abandoned the construction site theme and had established a new theme in response to the walking track audio referent.

Distinct from *DCT*, the quintet's deviation from the performance strategy on *FWSKRB* demonstrated how in addition to structuring our improvisation, the performance framework could function as a starting point, or catalyst, for improvisation. While aspects of our performance strategy were maintained throughout the piece, such as Ruckman's drumming reflecting the passing trams, other parameters evolved throughout the performance. Particularly noticeable was Hicks' contributions on the soprano saxophone. While he began in a largely pointillist manner with short staccato notes, over time his notes gradually lengthened. From approximately 4:51 he maintained a clearly audible long tone until 6:22. This had a noticeable impact on the ensemble and in many ways instigated a new response to the audio referent. Throughout the remaining 2 minutes and 36 seconds of the work the music gradually became less dense and predominately featured synthesiser and percussion. I believe throughout this section our performance acknowledges the fluid nature of referents in this project. While the audio referent provided a foundation and starting point for our improvisation, the context of each member's contributions slowly changed as the piece progressed. When Hicks opted to play a drone almost two minutes in length (a contribution not out of place with the rest of the performance), the ensemble responded by assimilating themselves within this new context. This change in musical direction did not impact negatively on our response to the environment. Having already established the intended characteristics earlier in the piece, and without departing from the initial theme entirely, this final section further developed the underlying ambience of the work. Hicks' performance presented the ensemble with a previously unconsidered approach, which took our improvisation in a new direction – we had found new territory to explore.

Finally, I would like to discuss the relationship between the audio referent, as featured in our performances, and the ensemble. The group's initial intention was to respond to field recordings similarly to how we responded to one another, but in practice this was not the case. Due to the self-evident fact that pre-recorded materials such as field recordings cannot respond to, or interact with, performers, the relationship between field recordings and the ensemble was different to the relationship between individual members of the

group. While Hicks' previously discussed long tone on *FWSKRB* considerably altered the direction of our contributions mid-performance, at no point did the introduction of field recordings within our performances exhibit so much influence over our playing. Rather, the ensemble's relationship with the field recording was one of framing – this can be acknowledged in two ways. The first is pre-emptive, whereby the ensemble, responding to the referents, established an ambience that was congruent with that of the field recording. Pre-emptive framing ensured the field recording blended with the music created by the ensemble when it was introduced into performance. The second is responsive framing, where the ensemble altered its performance in some way to accommodate the field recording during performance. Often, this resulted in the ensemble collectively reducing the density of its contributions, or an ensemble member (or two) temporarily dropping out so the field recording could be heard clearly. An example of this occurs on *FSRS* between 4:00 and 4:20 when I create space for the field recording by reducing my contributions on the guitar.

2.4 Summary

Chapter Two focused on how field recordings of acoustic locations informed the development of performance strategies. My approach to developing these strategies emerged through my engagement with the field recordings and by reflecting upon rehearsals and performances, in line with Schön's 'repertoire-building research'. Acousmatic listening to sonorous objects allowed me to gain a detailed understanding of field recordings, which led to the development of referents. The sequential study of sonorous objects and the realisation of strategies through performance unveiled a variety of performance considerations to be addressed and overcome. For example, our understanding of ensemble interaction, informed by *IEI*, transferred to each subsequent work. Thus each piece served a dual purpose. Firstly, the works reflected and drew attention to acoustic locations. Secondly, musicians had the opportunity to develop a repertoire of materials that could be employed in subsequent works. Working from the same performance strategies multiple times allowed the ensemble to reflect upon previous performances and work towards specific outcomes over time while allowing for the development of an overall ensemble aesthetic.

By developing performance strategies in response to sounds of the environment the ensemble was required to overcome a variety of challenges. Traditionally, in many ensembles, performers are required to possess a certain level of technique to execute a sequence of notes as stipulated by a score or by the harmonic structures through which they are improvising, but this project demanded something different. Similar to Denley's approach on *Through Fire, Crevice + the Hidden Valley*,[71] performers were required to search on their instruments for a means to assimilate their sounds with those not originally created by traditional instruments. Thus performance strategies that asked woodwind and brass players to improvise while reflecting human and bodily characteristics such as breathing or gasping, as heard at the beginning of *DCT*, or drummers to reflect passing trams (*FWSKRB*), presented unique challenges to the ensemble.

Featuring the field recordings in three of the works challenged the quintet to create music that was congruent with the ambience exhibited by the audio referent. However, the ensemble was able to reflect the desired ambience by being familiar with the correlating field recording and by adhering to the performance strategies verbally conveyed to them prior to performance. The inclusion of field recordings in performance provided an important context for the listener, but in the relation to creating the works they were more influential in regards to developing performance strategies than they were as material for performers to respond to and interact with during performance.

[71] Denley, *Through Fire, Crevice + the Hidden Valley*.

Chapter 3: Conclusion

I embarked upon this research project inspired by Rose's essay *The Music of Place: Reclaiming a practice*,[72] with broad aspirations to develop an approach to improvisation that framed and drew attention to the environment. My research questions emerged as I began to consider how I might work with particular acoustic locations to create musical works. Throughout my research, I addressed the questions 'how can sounds of the environment inform strategies for improvised musical performance?' and 'how does engaging with environmental sounds affect improvised musical performance?'

My enquiry was largely informed by my prior experience as an improvising musician and through trial and error, which is in line with Schön's assertion that experienced practitioners possess a unique ability to problem solve and overcome challenges relating to their field of expertise through reflective practice.[73] For example, by reflecting upon a number of the ensemble's early rehearsals and performances I explored the idea of a monistic ensemble, which, by solidifying the functionality of the ensemble, enabled us to reflect the desired characteristic of environmental sounds. Reflecting upon rehearsals, performances, and recordings also allowed me to trace connections between field recordings, performance strategies, and the recorded works. This enabled me to pursue distinct performance outcomes in response to each selected environment as well as expand upon knowledge gained from one work to the next.

Key aspects that emerged within this practice-led research project were studying sounds of the environment to develop performance strategies for improvisation, establishing an approach to ensemble interaction, acquiring a repertoire of improvisatory materials from developing each work, and creating an artistic impression of acoustic environments. As a practice-led research project, the musical works comprise the primary outcome of my research. I believe the works themselves embody the clearest answers to my research questions as they provide concrete examples of precisely how sounds of the environment informed my musical practice. However, in the following paragraphs I provide a written overview to accompany the recorded works so as to articulate a final synthesis of my observations.

[72] Rose, "The Music of Place."
[73] Schön, *The Reflective Practitioner*.

How can sounds of the environment inform strategies for improvised musical performance? The strategy developed for each work inherently reflects a personal understanding of each location. However, my approach to developing these strategies, as documented in this exegesis, is one that could be applied by other practitioners. Acousmatic listening to sonorous objects provided me with a means of uncovering characteristics of field recordings to be highlighted in performance. The characteristics of environmental sounds that informed performance strategies were conveyed to performers as general concepts. For example, the vast array of sounds heard on the field recording from Flinders Street railway station were considered in relation to their general frequency ranges. By orchestrating the ensemble into similar frequency bands, the group was able to reflect a certain character of the field recording without attempting to directly recreate specific sounds.

The answer to my second research question 'how does engaging with environmental sounds affect improvised musical performance?' can be found when comparing different tracks. The contrast between working with stimulus from the Port Melbourne jetty (resulting in ambient and drone-like music within a limited frequency range), compared to working with sounds from Flinders Street railway station (resulting in polyphonic counterpoint over an expansive frequency range) highlights how responding to different acoustic locations affects musical outcomes. Similar to how improvising within an idiomatic tradition informs a musician's contribution in performance, the frameworks created in response to each location established a context and direction for each work. Thus, from the perspective of creating the works, my contribution to the field is the development of an improvisatory practice that is informed by the environment, yet does not require performers to be at the particular location that informed the work.

While performance strategies clearly affected the musical direction taken by the performers, the relationship between the works and the listener is worth discussing. Hence, I would like to conclude by examining an observation raised after my conference presentation at the 2016 Performance Studies international (PSi) conference. After listening to excerpts from *DCT* an audience member asked about the tension between natural and industrial sounds; specifically, whether or not it was my intention to suggest natural sounds are more desirable than industrial sounds. The audience member explained how their musical tastes aligned more closely to the music created in response to the construction site than the music

performed in response to the walking track. In the context of this response, it is my contention that we cannot presuppose a simple opposition between natural and industrial sounds; the implication that natural sounds embody the sublime – a world intact and untarnished, while industrial sounds represent destruction, is misguided. Rather, both phenomena possess their own beauty and deserve to be experienced without bias. For it would be folly to deprecate the artistic value in Frank Gehry's architectural design of the Guggenheim Museum Bilbao – and the sounds experienced at such a location – solely on the premise that its construction was a result of industrialisation. We can recall Russolo's fascination with the sounds of 'trams', 'automobile engines', and 'brawling crowds' to establish a precedent for finding aesthetic beauty in industrial sounds.

There is a multitude of economic, political, and environmental factors involved in determining the positive or negative effects of industrialisation. Therefore, it is important not to pass judgement upon the sounds we experience based on their origin. While we may experience particular natural environments and revel in their beauty while other locations disappoint us because they have been sullied by human intervention, the aesthetic qualities of any given environment can still be of interest. Even locations that many would consider ecological disasters, such as Chernobyl, are capable of possessing sonorous beauty, especially from an acousmatic perspective. Thus my project does not ask the audience to pass judgement upon the environment; rather it aims to create an opening for the listener to experience the innate musicality of environmental sound. If such awareness were to lead to more environmentally-focused considerations and maybe even actions on the part of my listeners, I would consider my music to have reached its full potential.

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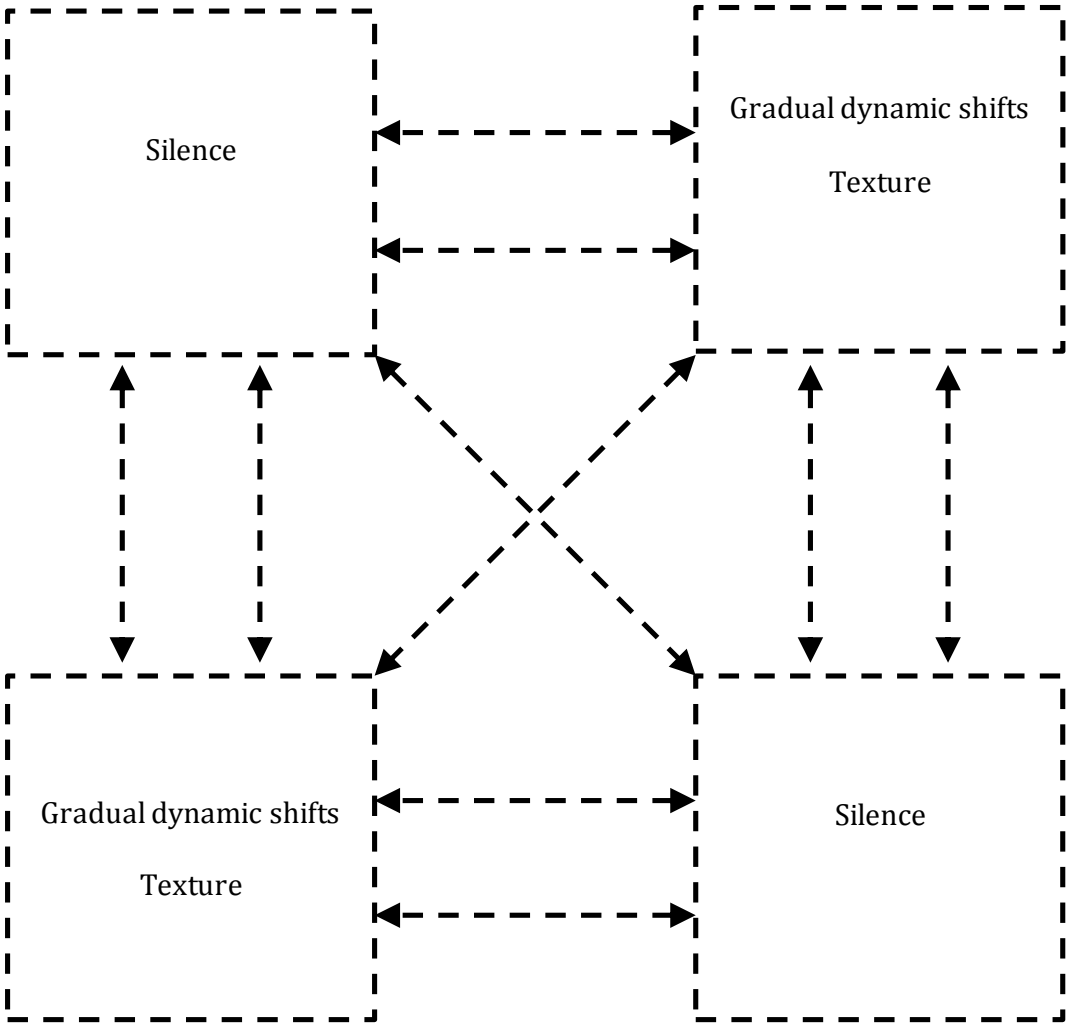
Appendices

Appendix 1: referent for *Investigating Ensemble Interaction: A Performance Structure Informed by Sounds of the Environment*

Ensemble members are to individually record themselves performing the following piece, solo, for eight-minutes:



*Once each member of the ensemble has recorded the piece, the composer is to layer each recording on top of one another, creating a final eight-minute work.

Appendix 2: Audio CD – complete works and excerpts

2.1 Investigating Ensemble Interaction: A Performance Structure Informed by Sounds of the Environment

2.2 Excerpt from Port Melbourne jetty field recording

2.3 Responding to the Port Melbourne Jetty, as it was on June 25, 2015

2.4 Excerpt from first rehearsal of Responding to Flinders Street Railway Station, as it was on June 30, 2015

2.5 Excerpt from Flinders Street railway station field recording

2.6 Responding to Flinders Street Railway Station, as it was on June 30, 2015

2.7 Responding to the Darebin Creek Trail: Afternoon, Clear Weather, as it was on June 29, 2015

2.8 Excerpt from Darebin creek walking track field recording

2.9 Excerpt from Flinders walk, under the St. Kilda Road Bridge field recording (trams overhead)

2.10 Excerpt from Flinders walk, under the St. Kilda Road Bridge field recording (ambience)

2.11 Responding to Flinders Walk, Under the St. Kilda Road Bridge, as it was on June 30, 2015

2.12 Excerpt from Darebin creek trail walking track field recording (flowing river)

Appendix 3: Annotated booklet to accompany the final works

This booklet documents personal experiential descriptions of the environments that informed the works created for this project. The descriptions allude to my first impressions of each location and provide insight into the foundation upon which I developed the objectives for each of the works.

Wherever we are at any given time we are exposed to a multitude of sounds from our surrounding environment. We are constantly exposed to sound, and if we focus our listening we may experience sounds we previously did not realise were there. What is intriguing, or at times irritating, about these sounds is subjective; it is a personal relationship between the listener and the audible – between subject and object. It is the exploration of this relationship that drew Duchamp to the urinal, in order to create 'Fountain', led Warhol to seek (and find) aesthetic beauty in the Campbell's soup can, and that resulted in Cage bringing everyday sounds from the streets into the music hall. They each found beauty in pre-existing phenomena that were not commonly associated with possessing aesthetic value. By investigating how the innate musicality of the environment could inform performance strategies to guide improvised musical performance I aimed to instil a greater appreciation of environmental sounds in my audiences.

Descriptions of the selected environments that informed the works

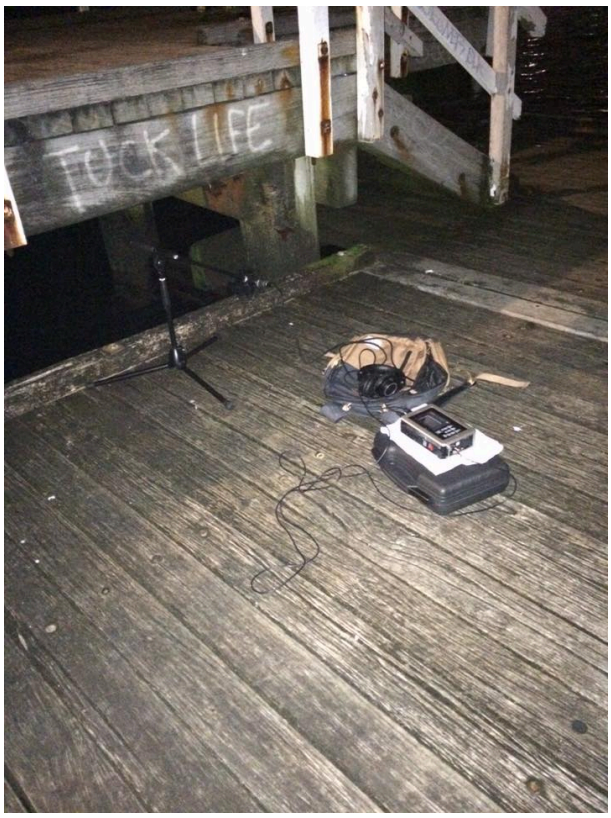
1. **Investigating Ensemble Interaction: A Performance Structure Informed by Sounds of the Environment** 08:11

> The truck's engine revved, someone yelled to a friend, birds sung to one another, and I shuffled on the couch to get comfortable. A multitude of natural and man-made aural stimuli, sounding autonomously (Sam McAuliffe, journal entry May 15, 2015).

When one listens with intent to experience their environment as music, a complex ecology of relations can emerge. As I listen at the moment of writing, I hear the hum of distant traffic, birds calling from the trees, a lawn mower being pushed next door, a garbage truck doing the rounds, and the person in the apartment below me is (presumably) making their morning smoothie in a blender. Those sounds are immediately apparent, but there are countless more. While these sounds can affect one another – perhaps the lawn mower startles the birds and they fly from the trees – they mostly occur autonomously. Yet, when I listen to and experience these sounds as music, they make sense to me – as if there is a compositional relationship, or compatibility, between each sound. I enjoy them; they intrigue me. It is their autonomy that draws me in. The sounds are simultaneously predictable and unpredictable. I know that when the garbage truck moves on from emptying a bin, it will stop again only moments later. I know that the blender will only sound briefly, and chances are, I will not hear that sound again until tomorrow morning. It is how they unintentionally relate to one another that makes them unpredictable. The hum of traffic is suddenly drowned out by the whir of the blender. The blender stops and I become aware of a new sound, perhaps someone hammering something in the distance. I am drawn to this sound as it is in effect framed by the other sounds still occurring. It was an exploration into these relationships that led me to develop this work. *Investigating Ensemble Interaction: A Performance Structure Informed by Sounds of the Environment* is the result of five musicians individually recording themselves improvising for eight minutes in response to a text-based referent. The five recordings were then layered on top of one another to create a musical work that exemplifies the notion of autonomy.

2. **Responding to the Port Melbourne Jetty, as it was on June 25, 2015** 10:36

> The hypnotic, dependable sounds of waves gently lapping against the jetty at dusk – splashing, bubbling, gurgling, and enveloping one another (Sam McAuliffe, journal entry September 10, 2015).



It was early evening and a deep chill blew off the ocean as I strolled along the esplanade, taking a break between teaching my guitar students. I ventured to the end of the jetty, passing two silent fishermen on the way. There were a few steps leading down to a separate platform a metre or so below the main walkway. I set up my recording equipment and directed the microphone toward the water to capture sounds from underneath the main structure. I pressed record and waited patiently, listening. After a period, I took a photo of the location with my phone. The camera flash briefly illuminated my equipment. Looking at the photo displayed on my screen I notice what was hidden in the darkness. Graffiti. There is often more to a location than what appears at first sight – or first listen. Thus acousmatic listening to each field recording was important in this project. After sitting in the bitter cold for almost an hour, I packed up, and slowly walked back to the studio to teach, contemplating how the repetitive, gurgling, immersive sound of lapping waves could inform a framework for improvisation.

3. **Responding to Flinders Street Railway Station,**
   as it was on June 30, 2015 08:02

> Some people hurried to the platform, while others casually strolled with their friends. The railway station is a meeting point for humans and the human-made; high frequency drones, laughter, wheeled baggage towed over uneven tiles, and announcements over loudspeakers (Sam McAuliffe, journal entry September 10, 2015).

The first word that came to mind when reflecting upon this environment was ‘flux’. Shortly after this, I wanted to preface flux with ‘noticeable’. ‘Noticeable flux’. The environment changes before your ears. A multitude of sounds were constantly coming and going, stopping and starting. They were sometimes familiar, but different each time. Sounds blended into a fabric that enveloped my senses. They were raw; I doubted if they were ever paid much attention, yet they fascinated me. Over time, on location, I started to differentiate sounds. I was suddenly aware of a high frequency beeping. And while I cannot

be certain, I started to believe it had been there the whole time. I decided to focus on this sound, to see if it would stop. I do not know how long I listened, yet when I began to wonder how much time had passed, I realised my focus has shifted to the sound of nearby laughter. I wondered if the beeping stopped – if it did, it had returned. I would certainly have to revisit the field recording later. I indulged myself and followed whichever sound drew me in first. I chopped and changed and tried to experience as many sounds as I could; they overlapped in a variety of registers and their general consistency of density remained steady. Perhaps this would form the basis of a performance framework. Despite my location, a place generally associated with industrialised convenience, there was beauty there.

4. **Responding to the Darebin Creek Trail: Afternoon, Clear Weather, as it was on June 29, 2015** 21:21

> I veered off-road to feel the gravel and dirt underfoot, to see the trees standing idly either side, to hear the sound of my footsteps, the birds overhead, and the flowing creek to my right. Gradually, the serenity of my environment was injected with the faint sound of beeping trucks, crashing beams, and people yelling to one another. Continuing along my path, these sounds transitioned from the periphery to the fore (Sam McAuliffe, journal entry July 30, 2015).

I walked just a few blocks from my home and arrived at the Darebin creek trail. Cyclists rode past me on the smooth concrete path, ringing their bells and calling 'overtaking on the right'. If I followed the path to the right, I would do a sort of loop – my usual route. But on this occasion I turned left and followed the dirt track that closely follows the river. No cyclists here. I stopped to listen and decided to unpack my recording equipment. While I set up, I started thinking about my location and why I came here: to walk and to escape the confines of my apartment. I slung my Fostex FR-2LE audio recorder over my shoulder, held on to the microphone, pushed record, and began walking. I walked silently and I listened. After a while I paused and gazed into the river before continuing my adventure. Gradually, I began to hear sounds that seemed out of place here in the trees. A concrete path emerged, which lead me up a gentle incline; I noticed the sounds getting louder. With the trees behind me, I faced a construction site with a multitude of workers and machinery. The tranquillity of my previous environment was overcome with industralisation. Curious, I sat and listened – the juxtaposition of these two environments seemed to be the key to reflecting this location in performance.

5. **Responding to Flinders Walk, Under the St. Kilda Road Bridge, as it was June 30, 2015** 08:59

> To escape the hustle and bustle of the city centre, I moved to find a quiet area. Past the gridlocked traffic, toward the river. Past the crowds of people lining up at the trendy bars and restaurants there seemed to be a space of inactivity near the underpass. I stopped here and gazed at the river and up towards the beams of the bridge overhead. Birds playfully called to one another, families strolled past, boats worked their way down the river, and trams thundered overhead (Sam McAuliffe, journal entry September 2, 2015).

The hum, or roar, of traffic seemed inescapable in the city. Standing under the St. Kilda Road Bridge provided some respite from the main thoroughfare. I positioned myself on the wide footpath next to the river, directly under the bridge. A tram passed overhead. The sound reverberated under the bridge and it felt like I was standing in some sort of echo chamber. I

was stunned by the sound. I stood patiently, waiting for it to happen again. People walked or jogged past. Boats moved down the river and birds perched in the rafters of the bridge. A tram thundered overhead again. The birds seemed unperturbed. And when the tram had passed it was like it was never there. This juxtaposition of natural and industrial sounds, which seamlessly co-exist, intrigued me. I already had in mind the genesis of a performance strategy in response to this location: to explore the murmur of natural sounds, the passing of voices and bird song, interspersed with the sounds of trams.