Platial Phenomenology and Environmental Composition

by

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MA Music Technology

Dissertation submitted in partial fulfilment of the requirements for a

Doctorate of Philosophy
at the
Institute for Sonic Creativity
De Montfort University
May 2019

Acknowledgements

Thanks to my supervisors Dr. Peter Batchelor and Prof. John Young for guidance throughout this process, and to all who provided critical feedback, particularly Dr. James Andean and Dr. Giuseppe Torre. Thanks to my examiners, Prof. Simon Emmerson and Dr. Suk-Jun Kim, for their valuable insights. This research was predicated on the generous contributions and inspiring work of Dallas Simpson and Robert Curgenven. This work would not exist without the ongoing support of Susannah Kelly, to whom I owe my deepest thanks.

Abstract

This study concerns field recordings, location audio gathered from unscored and unexpected sounds, which retain an indexical relationship to their origin in the natural world. The term "environmental music" describes aesthetic works that use field recordings as primary material. This practice requires an engagement with the ontology and phenomenology of place, but such relationships have remained under-theorised. This study addresses this lacuna by developing a rich vocabulary of place that can aid both the practice and analysis of environmental music. The historical development begins with the multiplicity of concepts of place known to the Ancient Greeks. One of these, Ptolemy's geos, based on a God's-eye view of the world, has dominated understandings of the world and its effects, hence the term *geography*. This perspectivism was reinforced first by Alberti's optics, which placed a viewer in a strict topological relationship to the object of their gaze, and then by Cartesian rationalism, a philosophy that reduced place to mere secondary characteristics of an ordered, homogeneous space. Against this background, alternative models of place will be discussed. Topos, exemplified by tales like The Odyssey, emphasises the perambulations of an individuated subject, foregrounding the experiential nature of the journey. The *klimata* of Ptolemy models place as psychic zones of influence on the Earth. Plato's khōros is both receptacle and material, a generative site of instability and unknowability. Taken together, these concepts assert the primacy of place as milieu, a responsive context that shapes, and is shaped by, being-in-the-world. The word platial is proposed to encompass this understanding. This thesis is supported by the phenomenology of Martin Heidegger and Maurice Merleau-Ponty, as interpreted by Tim Ingold and Edward Casey. Analysis of the environmental music of Dallas Simpson, Robert Curgenven, and the author illustrate how platial thinking can provide deep insights into a variety of creative sonic practices.

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Chapter 1: Introduction

1.1 Impetus and context for this study

This research began with a personal, artistic practice of field recording and some hard questions. How are places formed as a product of individual and societal acts, over time? How are places constituted in the intentional act of field recording? How are field recordings used in electroacoustic music? It is apparent from the work of Hildegard Westerkamp, Francisco López, Annea Lockwood, Alan Lamb, Christina Kubisch, Stéphane Marin, Slavek Kwi, David Dunn, Peter Cusack, and many others that a wide range of aesthetic practice incorporates field recordings. Indeed, there is no single word that names this activity, nor the resulting works. Practitioners are labelled phonographers, field recordists, and sound artists; they are engaged in soundscape studies or acoustic ecology; their products are nature recordings, ambient music, and installations. Disciplines as diverse as ecology, anthropology, and ethnomusicology claim field recording as an important activity within their domain. So, the first problem is a matter of definition.

This study will use the term "environmental music" to include products (fixed pieces, installations, performances) that use field recordings as primary material, where the intentions of the practitioner are primarily aesthetic, as opposed to scientific or documentary. Such sounds are not planned or scored, but are largely unexpected, encountered at hazard. The composer first encounters these within a phenomenological milieu, as a listener. There is congruence here with Luc Ferrari's "anecdotal music." This method eschews the abstract, instead foregrounding "natural sounds," which is to say those sounds encountered in their original context, sounds that retain some indexical relationship to their originating milieu. This term "environmental music" will be defined more carefully in the following section.

It is remarkable that there is yet no book-length study or history of field recording. This being the case, it's not surprising to find little writing on a more specific topic: the phenomenology of field recording. This state of affairs can be understood by recognising the prevailing ocularcentrism of philosophy, a discipline that has focused almost exclusively on vision for its entire history. The philosophy of sound has been a minority interests and remains a fledgling subject, even now. This dissertation attempts to redress this oversight, beginning

with a discussion of sound reproduction technologies (in this chapter), continuing with a history of birdsong and field recording (chapter 2.2).

The history of place fares much better, being well-studied in several disciplines: philosophy, ancient history, anthropology, and human geography. A great deal can be learned from these fields that is applicable to environmental music, and in this way deeper understandings may be developed across disciplines. A structured philosophical framework for environmental music will facilitate detailed study of an individual artist, while also highlighting commonalities between practitioners. These are the general benefits of the approach taken herein.

The specific thesis will now be outlined. For the past two millennia *geos*, a mode of spatial thinking, and ocularcentrism, the consideration of the visual sense over all others, have dominated Western thought. This view makes a quantified, universal, rational space the primordial substrate of the world. Place is relegated to being considered only a secondary aggregation of qualities. The English language reflects this bias. We have the adjective "spatial" meaning "of or relating to space," but there is no word meaning "of or relating to place." Similarly, the study of place is called *geography*, but other concepts of place (*choros, topos*) are not so enshrined. Thus, our very language predisposes us to particular ways of thinking about, and hence composing with, places.

This study proposes the term "platial" to counter this dominance of space, to assert the primacy of place as milieu, a responsive context that shapes, and is shaped by, being-in-the-world. This ties place directly to both an ontology of being and a phenomenology of perception. The history of this thought will be traced from Archytas and Aristotle in the ancient world; through the phenomenology of Husserl, Heidegger, and Merleau-Ponty; finally to writers such as Bachelard and Ingold. Edward Casey has made a similar argument for the Archytian Axiom, and his parallel work will be discussed in some detail.

Though philosophical writing has provided the terms and concepts needed to develop platial thinking as a core concept, very little of this prior writing has concerned sound. The significant contribution of this dissertation is to apply

The word "topography" does not accord with the meanings of *topos* to be explored below, but is rather a synonym for the *geos* approach. The word "chorography" exists in English, but is obscure.

platial thinking to environmental music practitioners. Two artists in particular, Dallas Simpson and Robert Curgenven, will be explored in detail as case studies. The goal is to illustrate the utility of the platial formulation through detailed analysis of the process of recording and composition. This is not predominantly a listening study, nor an aesthetic analysis, though both approaches will play their part.

The following section outlines a history of audio recording technology (phonautograph, graphophone, phonograph, tape recorder) and electroacoustic composition (Schaeffer, Cage, Schafer), pertinent to the current discussion. This is groundwork for a discussion of environmental music to follow in section three. Environmental composition will be defined relative to Luc Ferrari's anecdotal composition. Section four presents the methodology and literature review for this study. Section five provides an overview of the remainder of the dissertation.

1.2 Field recording and electroacoustic composition

The phonautograph of Édouard-Léon Scott de Martinville (1817–1879) was the earliest means of producing a visual representation of sound. It functioned by transducing sound pressure waves into mechanical vibrations in a stylus, which then scratched a tracing into candle soot. The resulting phonautograms were designed to be indexical representations of speech but were not transduced back *into* sound [Sterne 2001, 268]. Nonetheless, a recording of Scott singing the melody from the French folk-song *Au Clair de la Lune* has recently been reproduced from a phonautogram made on 9 April 1860 [First Sounds 2019a]. This recording is both the first intelligible reproduction of a human voice *and* the first recording of music².

Alexander Graham Bell (1847–1922) became interested in this technology as a means for teaching the deaf to speak. By viewing the patterns produced by "correct" speech, an individual lacking hearing could train their voice to repro-

This is not, however, the first recording proper. de Martinville had earlier made phonautograms of tuning forks and short unintelligible voice fragments as technical tests. Furthermore, tuning fork waveforms were published in the book *Notions générales de physique et de météorologie à l'usage de la jeunesse* (1850) by Claude Servais Mathias Pouillet (1791–1868) [First Sounds 2019b]. These have been reproduced from the visual representations.

duce the same tracings [267]. In 1874, Bell and Clarence Blake emulated Scott's phonautograph, creating a strange contraption that integrated an actual disembodied human ear [260]. This device was superseded by the phonograph, the first machine purposefully designed to *reproduce* sound. Bell's initial public demonstrations of the phonograph (in 1878) were both revelatory and disappointing; the tin foil substrate allowed only a scratchy and faint utterance to be heard by the audience [Gitelman 2003, 287]. The method was impractical for any purpose other than stage demonstrations, since the already flimsy foil was rendered quite fragile by the indentation process. By 1885, Thomas Edison (1847–1931) had improved on this design by addressing the robustness of the recording medium. Instead of foil, his graphophone used a wax cylinder, which was engraved rather than punctured [Sterne 2003, 179]. But soon the distinct term faded from use and this graphophone was also known as a phonograph.

Edison was, from the earliest demonstrations, promoting the phonograph as a tool for anthropological research, specifically to preserve the voices of native peoples under threat of extinction [Gitelman 2003, 288]. The benefits of this method were immediately apparent. In March 1890, Jesse Walter Fewkes (1850–1930) documented the Passamaquoddy Indians on phonograph, creating the first field recording [Clayton 1996, 67]. This term "field recording" was a natural cognate of the "field work" in which ethnographers and anthropologists were already engaged. Field work meant getting outside the office and library, gathering primary data and original sources. Wax cylinder phonographs allowed sound recordings to augment written notes. This was especially valuable to those anthropologists who studied music, as they had previously been limited to the error-prone practice of transcribing music into notation by hand [Poole 2015, 73-4]. The wax cylinder allowed them to record music as it was performed, deferring the transcription process. This technology marked the end of amateur study; fieldwork became professionalised, subject to stricter standards of data acquisition [Nelson 2014, 78].

The impact of field recording on music composition was immediate. By 1896 Béla Vikár began recording folk-songs in Hungary. By 1906 composers Zoltán Kodály and Béla Bartók (1881–1945) joined the growing ranks of recordists who focused attention on Hungarian peasant song, inventing the practice of ethnomusicology in the process. The profound influence of folk musics on the classical composition of Bartók were enabled by his strict practice of cataloguing

and classifying songs recorded in the field [Nelson 2014, 75]. For Bartók, the activities of field recording and compositional practice were intertwined. But Bartók did not use the recordings themselves in (or as) his own music, and so his activities did not yet fall within the scope of environmental music.

As the twentieth-century approached, numerous artistic movements fomented revolutions in accepted thinking about art, culture, and, specifically, music. A brief catalogue of such innovations might begin with the "furniture music" of Erik Satie (1866–1925), which was designed to function while being ignored. This was an early attempt to turn listeners' attention from the foreground of the content to the background, resulting in music that might now be classed as ambient. Starting in 1912 Filippo Marinetti (1876-1944), author of the first Futurist Manifesto, published Zang Tumb Tumb, a concrete sound poem. Together with Luigi Russolo (1885–1947) he performed the first of several noise concerts, complete with invented instruments (intonarumori), in April 1914. The Dada experiments with language as sound continued with Hugo Ball (1886-1927), whose first nonsense verse was Karawane (1916). Kurt Schwitters (1887–1948) read the first version of his *Ursonate* in 1925. Edgard Varèse (1883–1965) integrated siren calls with a large orchestra for *Amériques* (1918–21), his attempt to represent the sonic effect of the urban environment. Further experiments with timbres include *Ionisation* (1931), the first concert composition for percussion alone. In the score of The Pines of Rome (1924), Ottorino Respighi specified that a field recording of a nightingale be played between movements three and four³ (chapter 6.2). These experiments had in common a growing understanding that various sounds, not just those produced by canonical musical instruments, were valid material for compositions. This led Varèse to define music using the inclusive phrase "organised sound."

A most significant development occurred in Paris in 1948 when the first *Concert de Bruits* was broadcast over French radio. This consisted of phonographic recordings manipulated by Pierre Schaeffer (1910–1995) and engineer Jacques Poullin as part of a new composition practice, *musique concrète* [Dunn 1992, 11]. By 1950 Pierre Henry (1927–2017) and Schaeffer had collaborated on *Symphonie pour un homme seul*. This practice was organised and codified under the

³ Contemporary scores of *Pini di Roma* from publisher Boosey & Hawkes are accompanied by a compact disk for this same purpose.

auspices of Radio-Télévison Française by the creation of the Groupe de recherches de musique concrète (GRMC) in October 1951 [Battier 2007, 193]. The further history of *musique concrète* need not be recapitulated here, since it has been documented thoroughly.

Innovations in the USA soon followed, encouraged by rapid technological development. In 1951 the first tape recorders were made commercially available. John Cage, David Tudor, Earle Brown, Christian Wolff, and Morton Feldman responded by creating the Music for Magnetic Tape Project [Dunn 1992, 15]. They utilised the studio of Bebe and Louis Barron, who reportedly had the first reel-to-reel tape recorder in New York City. Several works resulted from this collaboration, but the most emblematic was Cage's *Williams Mix* (1951–1953). The score for this piece explicitly called for extra-musical content, including sounds from the city and country, sounds both "electronic" and "manually produced," and so on. The eight-channel composition lasted 4'15" and took nine months to compile. Cage's practice not only expanded the palette of sounds available for use as musical content, it also challenged orthodoxy regarding the processes to be applied, and the aesthetics of the result. Dunn notes that *Williams Mix* "represented a radical compositional and philosophical challenge" to both *musique concrète* in Paris and Elektronische Musik in Cologne [15].

R. Murray Schafer (1933–) was directly influenced by Cage when he used the phrase "musical soundscape" in his book *Ear Cleaning: Notes for an Experimental Music Course* [Schafer 1967, 25]. The term grew to be central to Schafer's programme of education, two years later appearing as the title of the pamphlet *The New Soundscape* [Schafer 1969]. On the first page, Schafer describes how Cage replied to his request for a definition of music with the following: "Music is sounds, sounds around us whether we're in or out of concert halls: cf. Thoreau" [Schafer 1969, 1]. This definition serves as justification for considering the soundscape, which is to say the entire sonic environment, as a musical composition [3]. By 1977 he summarised his thinking in a full-length book, later re-issued under the name *The Soundscape: Our Sonic Environment and The Tuning of the World* [Schafer 1994].

In 1970 these ideas entered the popular imagination with several different publications. Atlantic Records distributed *Environments: New Concepts in Stereo Sound*, which had been released the previous September by Irv Teibel (1938–2010) on his own Syntonic Research label [Powell 2016]. The side-long

ambience *The Psychologically Ultimate Seashore* had been created from field recordings, using the latest computer technology at Bell labs. This strange hybrid found a home in millions of college dorm rooms, as a tool to "tune in, turn on, and drop out." Surprisingly, it was *Psychology Today* magazine who released *Songs of the Humpback Whale*, on their imprint CRM Records [O'Dell 2010]. Compiled by bioacoustician Roger Payne (1935–), this record was formative in galvanising the environmental movement, aided by a series of articles that followed in *National Geographic*⁴. The same year Beaver & Krause released *In a Wild Sanctuary*, a popular music album that integrated field recordings. Bernie Krause (1938–) had followed a folk music career before venturing into synthesis experiments, finally dedicating himself to an extensive practice of nature recording [Krause 1998].

This is the context for contemporary music that incorporates field recordings. But since *musique concrète*, tape music, soundscape composition, and ambient music are each embedded in historical practices — each with their own distinctive methods, goals, and ideologies — a different term was deemed necessary for the current study, one that would delineate the scope of the current research. Environmental composition is the subject of the next section, where this term will be defined relative to the work of Luc Ferrari.

1.3 The anecdotal and environmental music

Composer Luc Ferrari (1929–2005) entered the GRMC in 1958 and continued with its successor, the GRM. At first, he produced doctrinaire *musique concrète* works [Robindoré 1998, 8]. But he had already met Cage in Darmstadt two years prior and was immediately influenced by Cagean thinking [Warburton 1998; Ferrari 1996, 98; Robindoré 1998, 11-13]. As soon as portable tape recorders became available, he leveraged the mobility they enabled.

I was the first composer to use the Nagra portable tape recorder, which had just been invented, and to take it everywhere. During an entire year I was part of a film crew, for which I provided sound. I spent a year with a Nagra on my shoulder. This work allowed me to

⁴ An issue of *National Geographic* in 1979 included a flexidisc with excerpts from the album. This is reputably the largest music release in history, with ten million copies made to service a readership in 25 languages [Rothenberg 2014].

travel all over Europe and thus amass considerable recordings [11].5

The result was *Hétérozygote* (1963-64), a four-channel composition that combines the techniques of tape music and *musique concrète*. Orchestral music was edited with "natural sounds [heard] in our environments" [Palmer 2008]. The goal was to refute the abstraction inherent in *musique concrète*, to "recognise causality" in sounds [Warburton 1998, 5]. This impetus was formalised in 1968 during an interview with the Swiss music critic Hansjörg Pauli [Pauli 1971]. Here, Ferrari states: "My anecdotal music brings to the public the pictures of its own reality and its own imagination" [quoted in Emmerson 2007, 8]. The term "anecdotic music" was subsequently used for the liner notes to the Philips album release of *Hétérozygote / J'ai Été Coupé* (1969) and soon became a staple of Ferrari's vocabulary [Ferrari 1969]. This term requires explanation, in particular to distinguish this method from other approaches Ferrari would adopt.

Consider first how *Hétérozygote* uses sonic material. Starting with a plain oscillator in one channel, the work explodes after a few seconds into complex inharmonic sound, revealing in its wake a strange admixture of textures in debt to both phonography and *musique concrète*. Before long, instruments from some lost jazz recording and a shouting, indistinct male voice join the fray. By 5:15 the conversational voice of a woman is distinctly heard. She is soon accompanied by others, in several languages. The heterogeneous nature of these sound streams is anticipated by the title. Here, music is not abstracted from other sounds but is instead "an actively participating element of human reality" [Boehmer 1990]. Ferrari's desire to combine multiple approaches was explicit, as this quote from the Pauli interview makes clear:

I thought it had to be possible to retain absolutely the structural qualities of the old *musique concrète* without throwing away the content of reality of the material which it had originally. It had to be possible to make music and to bring into relation together the

⁵ Throughout this document all formatting, including italics and typographic errors, will be preserved from original texts, unless noted.

shreds of reality in order to tell stories [Pauli 1971 in Wishart 1996, 129].

This mimetic landscape owed a debt to radiophonics, a form that is inclusive of music, spoken word, and sound effects. Yet *Hétérozygote* was not predominantly narrative, in the manner of a Hörspiel, but was instead quite recognisable as a musical form, Ferrari utilising spatialisation, repetition, phrasing, contrast, counterpoint, and other familiar devices. Neither was this piece constructing a fiction but was rather generated from diaristic practices.

I was employed as musician and recording engineer, and this team travelled all over Europe making films, so I recorded for them and also for myself. I recorded anything that took my fancy, things which probably weren't much use to anyone... I stockpiled an enormous number of sounds I later started to compose with for "Music Promenade" [Warburton 1998, 6].

This distinction between the anecdotal and the narrative is important, though not generally noted⁶. This is no doubt due to difficulties in interpreting Ferrari's scattered writings and interviews, not all of which are translated clearly or even correctly (the use of the word "anecdotic" quoted above is but one example). It is also the case that Ferrari is not always consistent in distinguishing these terms. But this point is nonetheless critical to understanding Ferrari's contribution to environmental music.

Ferrari's official website reproduces artist notes for his catalogue⁷. The notes for *Hétérozygote* refers to the piece as anecdotal but, notably, don't use the word "narrative" [Ferrari 2019c]. By way of comparison, the notes for *Music Promenade* (1969) use neither term [Ferrari 2019d]. The later piece *Les Anecdotiques* (2002) is subtitled as an exploitation of the concept of the anecdotal. It appears from this source that Ferrari differentiates clearly between anecdotal

⁶ For example, Wishart elides the anecdotal with a description of *Presque riens*, which, as demonstrated below, does not fall under this method [Wishart 1996, 136].

⁷ Most of these appear to have been taken from the original liner notes for album releases. However, many have different wordings and line breaks from the original musical releases, perhaps due to differences in translations.

and narrative methods, as used in different compositions. Here is the clearest formulation:

Finally, if I have worked a lot on the anecdotal or the narrative, which are also time-related subjects, I have used this data in an intuitive way. The exploitation of concepts is my way of being more... "conceptual." And so I show how "Les Anecdotiques" have nothing to do with the narrative and how this work is explicit in fact, in the difference between narrative and anecdotal [Ferrari 2019e].

The section on the anecdotal in Caux begins with some terminological confusion, which can perhaps be a result of a translator unaware of the nuances of meaning under discussion here [Caux 2012, 129-31]. Clarification is forthcoming, however.

As soon as I walked out of the studio with the microphone and the tape recorder, the sounds I would capture came from another reality. That led to the unexpected discovery of the social. I listened to all these elements that I had collected outdoors, and I thought these sounds developed a discourse that had something to do with narration [129].

This discovery of the social in everyday sounds, particularly sounds of the human voice, are likened both to soundscape composition and film soundtracks [130]. Rather than storytelling, with its concrete characters, linear development, and moral outcomes, the "anecdotal, which appeared in 'Hétérozygote' (1963), is more akin to flashes; it doesn't necessarily tell a story. It is a poem in sound" [149]. This explanation sets up a dichotomy between the narrative, a prose form in sound, and the anecdotal, a poetic form in sound. Further, Ferrari proposes a visual metaphor:

Starting with *Hétérozygote* in 1963, I thought that the sounds I had recorded were like images, not only for me who could remember them, but also for the innocent listener. They conveyed often contradictory images that catapulted themselves inside the mind more freely than if they could actually be seen. I enjoy playing with sound images in the same way that poets play with words. Certain images can be meaningless and others meaningful; some can be

frail and others powerful. Here I had a full spectrum going from abstract to concrete, so I had the possibility of representing images, making them appear or disappear, I could create a spectacle of absurdity, I could articulate the language of noises. I called it anecdotal music because I wanted to claim the anecdotal in a world dominated by abstraction [130].

The purpose of this appeal to the visual is to emphasise the imagistic aspect of anecdotal sounds. This passage also highlights a key dichotomy. In *Hétérozygote*, Ferrari uses both anecdotal material and material that has been subject to the techniques of *musique concrète*, in order to create a rich synthesis of the two. At root the methods are opposed: *musique concrète* deals in abstractions; the anecdotal (somewhat ironically) in the concrete. Further, the anecdotal does not create a linear, coherent narrative, but is rather a playful, poetic assemblage, based on personal observation. This method is not based on journalism or reportage, which foregrounds the *object* of the research, but instead foregrounds a phenomenological approach that highlights the *subject* of the composition. The anecdotal approach is concerned with specificity — one person holding one microphone at one moment in time — within a social milieu.

The term "anecdotal" can refer to either the sounds being used or the resulting compositions, as in the following passage.

In order to lay claim to the anecdotal in this world dominated by abstraction, I said: "this is anecdotal music." Laying claim to the anecdotal, to these sounds being recognizable as natural sounds, was incongruous [145].

As is evident from the content of *Hétérozygote*, Ferrari's "nature" is not an exclusive formulation, with *homo sapiens* apart from other species. Rather, this term encompasses the human voice and the sounds of our built environment. This is nature as *physis*, a verbal noun meaning "to grow," as employed by Aristotle for the title of his *Physics*. Aristotle's book describes the "different forms of life and the structural relations that they share within an organized whole" [Descola 2013, 65]. In the Aristotlean view, humans are similar to growing plants and the remainder of the cosmos, since these constituent parts are always in motion, always changing. This physics is contrasted with metaphysics, the study of mathematics, the immutable heavens, and the unmoved mover (which

is to say, God). In this way Aristotle defined an *inclusive* nature, one that integrates our species with the life and forces around us.

This is very much Ferrari's approach. "Natural sounds" are so termed to distinguish them from those manipulated in the studio. The primary characteristic of "natural sounds" is their autonomy. "[T]he sounds do not exist for you, they are not there waiting for you. An outdoor sound is fugitive. One wonders, will it return?" [Robindoré 1998, 12]. This is what ties the anecdotal to field recording as an essential practice. The recordist in the field has no control over what sonic events might occur but can ready themselves in expectation of events that are *likely* to happen. Surprises and serendipity play their part in creating unexpected recordings.

With *Presque rien ou le lever du jour au bord de la mer (1967–70)*, we encounter a piece that appears to contain no musical content at all. On the surface, this composition is pure phonography, a location recording made by allowing form and content to be dictated by the events of an unfolding day.

I was in this Dalmatian fishing village, and our bedroom window looked out on a tiny harbour of fishing boats, in an inlet in the hills, almost surrounded by hills-which gave it an extraordinary acoustic. It was very quiet. At night the silence woke me up-that silence we forget when we live in a city. I heard this silence which, little by little, began to be embellished... It was amazing. I started recording at night, always at the same time when I woke up, about 3 or 4am, and I recorded until about 6am [Warburton 1998, 7].

The apparent mimetic nature of the reproduction foregrounds the listening experience itself, rather than the composition or performance. This disruption of the traditional musical hierarchy "evoked an extremely negative reaction from the GRM. Everyone was scandalized by it without exception" [13]. Ferrari recognised that this was a new method of composition.

This was the most radical composition I had ever composed. I was asking myself the question of how a composer can unfold this type of piece specifically without any musical sounds [13].

Presque rien is not a single uninterrupted recording, as it might first sound. Rather, the subjective experience of listening to a morning in Dalmatia has been

interpreted compositionally. Two methods are apparent. First, the time scale has been compressed to a duration of twenty minutes [Wishart 1996, 159]. Second, several nights in the same village have been montaged.

I recorded those sounds which repeated every day: the first fisherman passing by same time every day with his bicycle, the first hen, the first donkey, and then the lorry which left at 6am to the port to pick up people arriving on the boat. Events determined by society. And then the composer plays! [Warburton 1998, 7]

Presque riens is hence a concretion of lived experience, rather than some indexical representation of an objective reality. Nonetheless, the piece has no apparent edits, and can be heard as though events are unfolding in linear time. This marks the composition as distinct from anecdotal music, that imagistic assemblage of poetic sound. Rather than the bricolage of Hétérozygote, assembled from many sources without regard for the verisimilitude of the whole, the sonic material in Presque riens derives from an integrated recording session in one environment.

I regard this composition as being narrative rather than anecdotal. It tells something distinctly realistic, since it doesn't contain a single sound that doesn't belong to the event in question [Caux 2012, 151].

The contrast between the terms anecdotal and narrative are important for Ferrari since they indicate different recording practices, intentions, and structures in the finished composition. Nonetheless, both have in common the use of field recordings, unplanned sounds encountered at hazard, to which the composer must be sensitive. Ferrari encounters ready-made sonic material in the places he records; he must in the first instance be a sensitive listener. Especially in pieces like *Presque riens*, his listening experience provides the model for his eventual listeners⁸. While this is no doubt true to some degree in all composition, what is notable here is the degree to which the composer must relinquish

⁸ In chapter five we will see how Dallas Simpson approaches the same task, adopting a binaural recording method in order to model listeners' ears with his own.

control, not to mention the lack of a role for a musician in this process (characteristics presaged by Cage's aleatoric compositions).

The term "environmental music" is proposed to encompass both approaches. Environmental music is made from field recordings, from sounds encountered at hazard, that the composer has little control over, and must experience first as phenomena and then as a listener. This term will be useful when discussing how a place is approached and recorded, and how this material is used in composition. Most significantly, the term signals that the way in which places are approached and represented by the recordist / composer is an explicit concern in their work. The emphasis in this dissertation will be on the creation of compositions, from the composer's point-of-view. But it's recognised that environmental music also shapes how the results are packaged, consumed by the customer, and apprehended by the listener.

Some objections will now be considered since it's acknowledged that the word "environmental" has certain problems. When used in the phrase "environmental science," it might sound cold, or indicative of scientism. Other readers, familiar with the phrase "environmental movement," might consider the term too political. It is true that this word is over-burdened with meaning, but no more than "nature" and "landscape." The main problem with "environmental" is epistemological. It assumes a model of place in which objects occupy an environment that pre-exists their presence, where object and surround can be readily distinguished, and where objects are shaped and defined by their environment, but not the other way around. David Dunn addressed this problem:

My use of the term "environmental" refers to the interactive nature of my music as distinct from the construction of an "environment" in which the observer merely maintains a relational stance. The resulting compositions have been not only descriptive of their environmental context but are residual evidence of unique interactive systems [Dunn 1984, 7].

An important distinction must be made between "environmental composition," as used herein, and "environmental performance works," as used by Dunn. The latter are scored, or at least premeditated by musicians in the field.

Over the past twenty-five years most of my creative work connected with the relationship of sound and nature can be described as fitting into two fairly separate categories. In the first category are environmental performance works intended for outdoor performance. The second category consists of tape compositions derived from environmental sounds that are a hybrid between electroacoustic composition and soundscape recording [Dunn 1997, 4].

It should be clear that since such outdoor concerts involve premeditated sounds, they are not environmental compositions as defined here.

To conclude this section, a final objection will be considered. Why use a new term when "soundscape" exists? Schafer's *The Soundscape* was valuable in shaping a new perspective of our place in the sonic environment, for fostering a realisation that this could be an important topic to consider in the first place. Nonetheless, the book has been rightly criticised for its nostalgic and reactionary tone [Toop 1995, 253; Goodman 2010, 191-2]. Barry Truax attempted to put the same material on more rigorous, scientific grounds with *Acoustic Communication*, even if he maintained similar terminology ("hi-fi" versus "lo-fi" sound, "schizophonia," etc.) [Truax 2000, 23, 134]. It's worthwhile to consider the similarities of his formulation with what has been developed in the current section.

In conclusion, the principles of the soundscape composition are: (a) listener recognizability of the source material is maintained, even if it subsequently undergoes transformation; (b) the listener's knowledge of the environmental and psychological context of the soundscape material is invoked and encouraged to complete the network of meanings ascribed to the music; (c) the composer's knowledge of the environmental and psychological context of the soundscape material is allowed to influence the shape of the composition at every level, and ultimately the composition is inseparable from some or all of those aspects of reality; and ideally, (d) the work enhances our understanding of the world, and its influence carries over into everyday perceptual habits [240].

There is nothing in this comprehensive list that couldn't also be considered environmental composition. However, this structuralist program, though couched in more neutral language by Truax, masks problems of ideology that are inherent in Schafer's soundscape. The primary problem is a foundation in an exclusive nature, one in which humanity is apart from (and even superior to) the natural world [Parmar 2018c]. This contrasts with Aristotle's inclusive nature,

that Ferrari took as the basis for using "natural sounds." Further, Truax relies on models of sound taken from physics (the energy transfer model) and electronic engineering (the signal processing model) [Truax 2000, 5, 9]. But no phenomenology was developed for this account. Indeed, the word "phenomenology" does not occur in either *The Soundscape* or *Acoustic Communication*9. Soundscape composition need not always be so unaware of its own ideology, so unable to engage with the world of phenomena it wishes to represent. But a clean start free of these disadvantages was deemed appropriate and justifies using an alternative umbrella term for the practice.

Tim Ingold presented further objections in the essay "Against Soundscape," warning against both the "scaping" of phenomena and the splitting of the senses into separately apprehended phenomenological fields (see chapter 4.8). Of the artists being considered, Curgenven critiques the soundscape as being a concept both too unstructured and universalising, antithetical to his own approach to sound as something socially-constructed and highly specific (chapter 6.4). For writers and practitioners such as these, the term "soundscape" has become too problematic to use comfortably.

"Environmental music" is a descriptor with several advantages. It's free of the ideologies of soundscape composition, recognising instead the need for a consistent phenomenology. Unlike acousmatic music, this phenomenology is not based on the *epoché* (chapter 4.5) but instead recognises the central importance of individual, specific experiences of the world. Neither does environmental music promulgate an exclusive definition of nature, but is rather based on an inclusive formulation, one that recognises our species' place in the Earth System. This is a theme in the work of both Simpson and Curgenven. This term is compatible with their ethos and hence appropriate for the current study.

⁹ The word "phenomena" is used profusely in Truax, but only in the most general sense, as an occurrence or something that is perceived.

¹⁰ The Earth System is the entire complex of biotic and abiotic agents that make up our planetary system, closed to material exchange, open only to energy input from the sun [Earth System Sciences Committee 1986].

1.4 Methodology and literature review

This section will describe the approach to the current research, the development of the research question, and specifics of the systematic literature review. It details how the need for such a review was identified, how the research question was determined, which search strategies were employed, and how practitioners were engaged. Two documents were used as guides for this study: DMU Libraries & Learning Services 2013 and Kitchenham and Charters 2007. It should be emphasised that the process was an iterative one, involving research, reading, and investigation over the first three years of research.

The first year of research was based on an initial informal survey of existing books, papers, journals, conference proceedings, and online fora, starting with those already known to the author and immediately available. It was soon apparent that a systematic literature review was required, for several reasons.

- 1. The extant writings on field recording span many disciplines, including bioacoustics, film sound, soundscape studies, acoustic ecology, anthropology, ethnomusicology, human geography, psychogeography, and electroacoustics. Of these, the material relating to field recording as composition is the *least* prevalent. The adoption of formal research methods is necessary to narrow the search to those works that pertained to the researcher's specific area of interest. This is no doubt a common problem with cross-disciplinary research. The more disciplines that are included, the more difficult it is to determine a useful intersection set that relates to the topic at hand.
- 2. The author had limited knowledge of several of the disciplines in which potentially relevant papers had been published. Hence there was a greater than usual likelihood of overlooking important works. Here "important" might simply be taken as synonymous with the influence that a work has had on subsequent thought; one metric is citation count.
- 3. Even apart from the cross-disciplinary nature of the research, the initial research question was soon recognised as being too broad. A literature review was required to narrow the scope.
- 4. A systematic review would highlight areas in which there was little prior work, hence where further investigation might be beneficial to the research community. At the same time, the author could avoid duplicating work in areas where thorough research had already been undertaken.

Before beginning a systematic review, the author had knowledge of relevant topics, through previous work on research papers and his Master's studies. This background was used to establish a core bibliography, consisting of key works that could be used to guide the remainder of the research. This prior work was taken as the mapping study for the research described here. The primary method used to identify key texts was to examine bibliographies from books already sourced, supplemented with reading lists published online from relevant courses of study. The core bibliography includes three collections on field recording and listening: Autumn Leaves [Carlyle 2007], On Listening [Carlyle and Lane 2013], and In the Field [Lane and Carlyle 2013]; four books on geographic and anthropological approaches to place: Senses of Place [Feld and Basso 1996], Getting Back into Place [Casey 2009], The Fate of Place [Casey 1997], The Perception of the Environment [Ingold 2000]; the core texts on acoustic ecology, The Soundscape [Schafer 1994] and Acoustic Communication [Truax 2000]; and key philosophical works: Being and Time [Heidegger 1996] and Phenomenology of Perception [Merleau-Ponty 2005].

Given the iterative research process, it is not surprising that this primary bibliography was not static. Instead, it was both augmented and trimmed through the process under discussion. In particular, online bibliographies were added as core material. The most important of these are the "Cultural landscape bibliography" [Rector 2001], *Research on Place and Space* [Janz 2015], and "Acoustic ecology and the soundscape bibliography" [Kapelanski 2003].

Using this core, the scope of study was quantified by counting bibliographical entries (or end notes where a bibliography did not exist). Between Casey's two volumes there are 231 pages of notes; Ingold's book has 620 items in the bibliography; *Phenomenology of Perception* has 150 references; Rector 2001 has 290 entries; Janz 2015 lists thirteen key works amidst thousands of references; Kapelanski 2003 has 150 references. Besides these sources, targeted keyword searches were carried out in available library systems (De Montfort University and University of Limerick).

The large number of results demonstrated the need for greater specificity in the research question, which underwent significant refinement. On initial registration for research, the following aims were identified:

- 1. To analyse the history of field recording practices in terms of phenomenologies of place, identifying approaches from different fields of study (e.g. bioacoustics, film sound, soundscape studies).
- 2. To investigate contemporary field recording practice in this context, by way of first-person interviews with practitioners and analysis of specific works (e.g. electroacoustic composition, sound installation, nature recordings).

These aims were taken as defining a scope for the initial literature review. As the process unfolded, the research questions were clarified through several iterations. The first of these bound the two original points together, so that their relationship was more tightly defined.

How do the differing conceptions and phenomenologies of place – deriving from such disciplines as bioacoustics, film sound, and soundscape studies – inform the work of those who creatively use field recordings as primary material?

Though this de-emphasised the historical research, the lack of material on this topic meant that the author nonetheless had to spend considerable time determining the timeline and historical precedents for contemporary field recording activity. This material is no doubt an important contribution but must await future publication.

In the second year of research a list of specific practitioners was compiled. The goal at that point was to disseminate a structured questionnaire, to perform a broad examination of the methods, materials, and approaches used in contemporary environmental music. This survey was, in fact, carried out. But the sample was not large enough in size, nor diverse enough, to present a thorough overview of contemporary practice. As the research question was constrained further, a decision was made to limit the practitioners under study. Instead of a broad overview, a detailed and targeted analysis of a few composers was seen as a more suitable way to deal in depth with the phenomenological matters under examination. Francisco López and Hildegard Westercamp were considered, but these artists already have considerable presence in the literature. After much research into other practitioners, Dallas Simpson and Robert Curgenven were chosen, for several reasons. First, because their work has not, as of yet, received

detailed analysis, despite their extensive and intriguing practices. Second, because both were open to a prolonged collaboration. Both could be contacted in person, as well as through electronic means. This allowed for a more extended interaction that might have a more mutual benefit. That is, the artists in question could learn from the ongoing study and might hopefully develop insights into their own work. Mutual conversation and enrichment were viewed as a more lasting contribution to the field than a mere survey could achieve. Third, since both artists work in and through English, communication would pose no issues. Fourth, because their work did, in fact, reflect variously and extensively on the phenomenology of place under research. The depths to which this was true was only slowly revealed.

The author's practice also being tied intimately to this research, it was judged appropriate to include a chapter on recent praxis. This has been structured to introduce the research themes.

The result of the systematic literature review was a bibliography, which was used as the basis for the readings undertaken for this dissertation. The further result of this iterative process of research, investigation, questionnaires, and listening was a research question that was both specific in its scope and definitions, while broad enough to be effectively applied across a range of practice.

How can *platial thinking* – asserting the primacy of place as milieu, a responsive context that shapes, and is shaped by, *being-in-the-world* – be applied to critique contemporary environmental music practitioners? This ontological approach to phenomenology is derived from the works of Martin Heidegger and Maurice Merleau-Ponty, borrowing from the field of human geography and anthropology (Tim Ingold). Platial thinking was born in both *topos* (Aristotle) and *khōros* (Plato), models of place that emphasise contingency, process, and embedded subjectivities. These contrast with *geos* (Ptolemy), an ocular centric model that, reinforced by Alberti's perspectivism and Cartesian rationalism, became the dominant way of looking at place. Foregrounding the platial asserts ideological multiplicity and diversity of practice.

This summary contains a great deal of terminology to define and concepts to unpack and integrate. It was only formulated after three years of research, when enough work had been accomplished to define each of the included approaches.

1.5 Overview of this study

This chapter presented a history of audio recording technology, in order to demonstrate ongoing developments in both electroacoustic music and field recording. Luc Ferrari's development of anecdotal and narrative approaches to composition preceded Schafer's formulation of soundscape composition. Ferrari's work leads us to define environmental music as aesthetic products utilising unexpected sounds, those originally encountered in natural settings. This practice requires that the composer engage with the ontology and phenomenology of place, relationships that will be explored in the remaining chapters.

The author's own practice will be examined in chapter two by way of the fixed composition "Caged Birds (Augmentation)," which poses questions arising from the history of nature recording, in particular our relationship with animals in our built environment. This will be explained in terms of the history of bird recordings and their relationship to music. Attention will then turn to the installation *In that place, the air was very different* which integrates practices of field recording, site-specific installation, and embedded residencies with interests in memory, recording technology, and algorithmic processes.

Chapters three and four will borrow important concepts from disciplines such as ancient history, philosophy, ethnomusicology, and human geography, laying the groundwork for what will follow. It is acknowledged from the start that the topics in these introductory chapters each require a book-length study to explore in detail. Constraints on both breadth and depth have been imposed to highlight ideas most pertinent to the study of environmental music that follows. The focus is on Western European thought, specifically that derived from Ancient Greek culture¹¹. No doubt there are rich conceptual formulations and philosophies of place in other traditions. But since the artists to be discussed come from a predominantly Anglo-Saxon, Western European tradition, it has been useful to establish similar constraints here.

Chapter three will describe in detail four concepts of place: *geos*, *topos*, *choros*, *khōros*. The richness of these concepts is reflected in our everyday life and how we perceive the world, even though only one of the concepts (*geos*) has mainstream currency. The term *topos* has been used by numerous authors to

¹¹ It should be noted that the Greeks were, in many cases, codifying and compiling knowledge known even before their own society, though these sources are lost to us.

mean place in a general sense. Several of these formulations, especially those dealing with *topophilia*, will be explored before fixing on one specific definition that suits the current research. The remaining two terms, *choros* and *khōros*, are in fact the same word, but a spelling distinction has been retained so this polysemous term might be used for different purposes. By considering concepts outside the strictly geographic, this study pluralises place, acknowledging important minority contributions and "outsider" philosophical practices. This reflects an ethos that sustains this dissertation.

Chapter four explores the phenomenology of place. This chapter starts with Descartes and modern science, describing the system of Cartesian rationalism and ocularcentrism that has dominated ontology until the recent "sonic turn." Heidegger's phenomenology of Da-Sein and his formulation of active dwelling will be examined in some detail. Husserl's phenomenological reduction will be considered as the basis for Schaeffer's acousmatic listening. Merleau-Ponty's insistence that knowledge of the lived world is generated by a living body will allow a consideration of Casey's formulation that place precedes space as "the first of all things." Finally, Tim Ingold's extension of Heidegger and Merleau-Ponty provides a definition of landscape as a dwelling place.

The remaining chapters will describe the environmental music of two contemporary composers, in order to provide examples of how to apply the models of place developed in the initial chapters. Each composer was chosen for the distinctive qualities of their work, and the relative lack of critical writing that has so far been devoted to their practice. It is recognised that these individuals might disagree with the approaches to their work taken herein, although significant dialogue has established that the author is not taking undue liberties. The fact that the terminology developed in this study has significant utility in describing their work validates the central thesis, that a platial approach using the terminology developed here does indeed have useful descriptive power.

The models of place outlined in chapter two, along with the phenomenology of chapter three, are necessary but not sufficient to describe the range of practice under consideration. Further, the interpretations put forward here are not meant to exclude others that might exist or be formulated in the future. Quite the opposite; it's hoped that these tentative steps will stimulate future work.

Chapter five was developed from extensive interviews and a site visit with Dallas Simpson. It considers how his work implements ideas of *topos* and

khōros, while relying on a relational model of sound as potentialities that can be elucidated through Heidegger's phenomenology. A detailed examination of the track *aquapump* demonstrates how Simpson's recordings document a living, creative practice. The artist labels his work "sonic choreography," to highlight the movements which shape his engagement with his surroundings. The similar phrase "sonic chorography" will be justified as an alternative description, to acknowledge the platial principles involved in his practice.

Chapter six examines three important works by artist Robert Curgenven: *Sirène, Climata*, and *They tore the earth and, like a scar, it swallowed them*. Curgenven is interested in the politics of colonialism, how landscape is inscribed and described by our activities, and how approaches to field recording map the subjectivity of the recordist onto the listener. His practice will be described, with reference to Merleau-Ponty and Ingold, as treating sound not as object but as milieu, an emergent property of a meteorological system, in which the properties of the air itself, including weather patterns, are foregrounded.

The conclusion will summarise the key themes of this research, examine the utility of the models developed in this study, and point to future work.



Chapter 2: Sounding place: the author's practice

2.1 Introduction

This chapter will document the author's engagement with field recording as both process and compositional material. The goal is to situate this research within a living practice, to demonstrate that these investigations arose from very real practical and ethical questions. This first section will introduce these issues. Section two will outline a history of birdsong and music, which performs a dual function: it provides a (partial) chronology of field recording while framing one specific composition, *Caged Birds (Augmentation)*. Section three explains how growing understandings of the phenomenology of place were instantiated in the installation *In that place, the air was very different*.

Since 2007 Robin Parmar (1963-), has created audio works for dance, theatre, video, and radio, alongside concert curation, soundwalks, sound installation, and solo and group performances12. By the early years of the millennium the author had deep ethical concerns regarding field recording, a practice he had been engaged in for two decades. These concerns stemmed in part from the proliferation of recordings that technologies of miniaturisation had made possible. When recordings were rare documents of novel sounds it was easy to justify them on this basis alone. As recordings became ubiquitous (through mobile phone technology, for example) the question "why record" became more pointed. Was a recording a mere extension of ego (the "selfie")? Was it a token of consumption (the "wish you were here" postcard)? What did it mean to occupy a place and record it? Social and political dimensions are never far from consideration. How did the profusion of field recordings partake in colonial ideologies? Did a recording of a market in Islamabad, for example, not promulgate the spectacle of Orientalism, that "Western style for dominating, restructuring, and having authority over the Orient" [Said 2003, 3]?

To guard against any possibility of exoticism, a decision was made to focus exclusively on the local, the milieu inhabited by the artist daily. In an artist's talk, the following declaration was made:

¹² A discography is available as Appendix 2.

I follow Edward S. Casey's declaration that "[t]o live is to live locally, and to know is first of all to know the places one is in." My recordings are largely of my neighbourhood, the St. Mary's parish of Corbally, Limerick City, Ireland. I am less likely to record foreign or exotic locales I might visit while travelling, although I allow serendipity to create exceptions [Parmar 2014b, 1].

This self-imposed restriction lasted for some years, allowing the slow development of a deeper understanding of field recording. The first piece that reflected this constraint was, in fact, made some years prior to the public announcement. *The Garden of Adumbrations* (2009) is a multichannel environmental composition, created in fulfilment of a Master's degree at what was then The Centre for Computational Musicology and Computer Music¹³ at the University of Limerick. The process by which this was created demonstrated close attention to Katharine Norman's self-intended and composer-intended modes of listening [Norman 1996].

So, instead of using geographic proximity to dictate the *space* that would source the composition, my own embodied presence as I went about regular day-to-day activities was used to generate a subjective mapping of *place*. Sound material was gathered from family outings, travel to and from places of work and, most significantly, my own home. This sound world was first apprehended in an unmediated fashion, which is to say acoustically, *in situ*. Furthermore, this listening was unpremeditated, in that it preceded any compositional intent. This initial appreciation was later supplemented by close listening in the usual mediated fashion, by way of transducers (microphones and headphones) [Parmar 2012, 207].

Though the vocabulary present in the current dissertation had not yet been developed, it was clear that this piece utilised an individuated approach to place as *topos*. Research concerning how this practice reflected on various ideologies of nature continued [Parmar 2018c; Parmar 2019a]. The result was the fixed composition *Caged Birds (Augmentation)* (2012) and a conference paper on the history of field recording [Parmar 2016a]. Further research into phenomenology and historical concepts of place formed the bedrock for this dissertation [Par-

¹³ Now named the Digital Music Arts Research Centre.

mar 2014a]. These understandings led to a second environmental composition, *In that place, the air was very different* (2016). This presents itself to the public as a site-specific sound installation, but from the perspective of the artist is a long-term project that incorporates residencies and extensive field recording, embedding understandings of *topos* and *choros*, as they will be explained in future chapters.

The following sections will present the context necessary for understanding the impetus behind these works, along with descriptions of the methods and result. Section two provides a history of human relations with birds, focusing on ecological themes, specifically how we have shaped these animals, both overtly and otherwise. This history highlights how our interest in birdsong has driven field recording practice. This is the background to "Caged Birds (Augmentation)." This section develops an understanding of certain historical impulses behind environmental composition, especially those activities known as "nature recording."

2.2 Caged Birds and the recording of birdsong

Humans have long been intrigued by birdsong. Aristotle and Pliny both described the Nightingale's call, and references in classical literature abound [Ranft 2001, 65]. This fascination exists for many reasons. First, bird song is more palatable to the human ear than other animal sounds. It is notably pitched, unlike the noisier spectra of, say, insects. And these pitches are arrayed in phrases, themes, and variations, structures a listener will be well used to parsing. In terms of intensity, the sounds are scaled to the human ear, being designed to penetrate other sounds that might otherwise mask the calls. The frequencies are neither ultrasonic, as the bat, nor infrasonic like some of the sounds of large mammals (the elephant or rhino, for example).

Finally, birds are commonly encountered and easily obtained; two practical aspects that have helped their calls become commonplace knowledge. The capture of birds for their song was common practice for centuries; species such as the chaffinch were popular pets from the Middle Ages [Birkhead 2013, 38]. But it was only with the introduction of the canary that this practice reached mass popularity. In the 1580s Sir Walter Raleigh presented Queen Elizabeth I with birds harvested in the Canary Islands [81]. This species was of no special appearance, being small and mottled green, but had a disproportionately loud and

pleasant call. The species spread throughout Europe, Italian nobility being among the first to be "completely infatuated" [86]. But it was in Germany that methods were devised to breed canaries in captivity, both for their song and plumage. Special provisions were made for transporting canaries to avid audiences throughout the continent. By the mid-1600s the canary was known as a German bird and by the late 1700s the Harz Mountain region in northern Germany was the leading producer [38]. By the 1880s the breed known as the Harz Mountain roller, with the characteristic yellow colour, was selling in quantities exceeding 150,000 per year.

The search for brighter plumage continued, leading to some unusual practices. In 1873 Edward Bemrose, a breeder from Derby, stunned the judges at The British National Cagebird Show by presenting a bright orange canary [273]. This was an immediate success, winning Best in Show, but it also stirred suspicion. The mystery of its plumage was eventually solved: Bemrose fed the birds red peppers before each molt, ensuring the new feathers took on this pigment. This practice was impermanent and so did not quench the desire for birds with stunning plumage.

Hans Duncker (1881-1961) was born in the Harz Mountain region and hence grew up in an environment rich with birdsong. Birkhead's extended description is informative, since it paints a picture of a milieu quite unknown to contemporary life.

Everywhere he went there were caged birds, a colourful, vociferous array of wild-caught birds and roller canaries; in doorways, hanging outside houses, in shops and in cafés there were singing birds. His grandfather encouraged his interest in birds and took Hans to family friends who had aviaries full of native finches and canaries – wonderful combinations of colour and voice. There were siskins and serins, wild canaries and greenfinches whose plumage was as bright as fresh foliage in dappled sunlight; there were chaffinches, redpolls, linnets and bullfinches whose breasts were as pink as the blushes of teenage girls; and then there was the favourite, the multicoloured goldfinch – a blaze of crimson and gold, black, white and beige – twisting and turning almost like a clockwork toy [Birkhead 2013, 38].

Duncker took on an avid interest in ornithology, obtaining a doctorate in biology at the University of Göttingen [Birkhead et al. 2003, 253]. In 1906 he settled into a job as high-school teacher in Bremen. On 2 August 1921 he was walking through the city when he heard the distinctive song of the nightingale, an impossibility for the season and the urban setting [Birkhead 2013, 10]. The next week he met the owner of the bird, Ernst Karl Reich (1885–1970), who ran a hardware store on Fedelhörenstrasse [Birkhead et al. 2003, 256]. Reich had a strain of canaries that he'd taught the nightingale's song, a previously impossible feat. His distinctive technique used a nightingale model instead of an adult canary to train young males. The offspring would then be back-bred until they had inherited the new song pattern [256-7].

Duncker, a committed Darwinian, developed "a novel Darwinian/Mendelian explanation for how Reich's canaries acquired their songs" [253]. The two men then obtained financial backing and, recalling Bemrose's impermanent but startling specimens, began a project to breed a red canary. This investigation required new research in genetics. They achieved success by cross-breeding the Red Siskin (Carduelis cucullata) with the yellow domestic canary (Serinus canaria), thus creating the first transgenic (genetically modified) organism, commonly called the red factor canary [Birkhead 2013, 15].

Birds were also the earliest animals to be recorded, using the novel technologies of the time. Ludwig Karl Koch (1881–1974) was born in Frankfurt, into a privileged Jewish family who had, in their home, a personal menagerie of almost seventy animals [Burton 1974]. At the age of 8, he was given the impressive gift of an Edison wax cylinder recorder, that his father had purchased at the Leipzig fair. He immediately set about recording political figures (Bismark) and other social luminaries from his family circle. He also recorded one of his pets, the white-rumped shama (also known as the Indian shama) and in so doing made the first known animal recording. This was not properly a *field* recording, as the animal was captive. But it was nonetheless the first recording to extend the subject matter of sound recordings beyond the confines of human society. Koch went on to host "The World Goes By" at the BBC in 1936 [Ranft 2001, 69]. His unmistakable voice and naturalist passion made him a household name in the UK, his fame being on par with that of David Attenborough today. His work inspired the first natural history programme, Desmond Hawkins' radio series

"The Naturalist" (initiated 1946). This led directly to the formation of the BBC Natural History Unit.

The first field recording of an animal was likely made in 1900 by Cherry Kearton (1871–1940) [Ranft 2004, 456]. Recordings of the Song Thrush and the Common Nightingale have not survived, as audio recording was only an adjunct to the innovative photographic methods that Cherry and Richard Kearton (1862–1928) had developed. While Richard Kearton's books *With Nature and a Camera* and *At Home with Wild Nature* demonstrate unusual attention to the sounds of the animals they studied, they don't explicitly mention any sound recordings [Kearton 1898, Kearton 1922].

How Reich's own recordings were made is a matter of debate. It is sometimes reported that he trained one of his nightingales to sit on a gramophone horn, so that its song would be picked up more clearly by the recorder [Petrusich 2016]. In other accounts, derived from contemporary promotional material, a cage "was placed directly before the recording horn and the bird was allowed to sing" [Stanley 2013]. In any case, Max Hampe, an engineer from The Gramophone Company, cut a disk of a captive bird on 5 March 1910. When this was issued as a shellac disk as "Song of a nightingale" it became the first commercial release of any animal sound (see the Reich discography in Appendix 3)¹⁴.

The success of this recording was swift. Gramophone quickly issued the recording throughout Europe and licensed to Victor in the USA. Recording engineer Franz Hampe returned to Bremen in May 1913 and made four more recordings, issued on Gramophone in Germany as "Song of a sprosser" (field nightingale), "Song of a thrush," "Canary and thrush duet," and a full six minutes of "Song of a nightingale, no. 2." In the USA, Victor paired these on dual-sided disks. The longer nightingale recording made history as the first to be required by a musical composition (as discussed in chapter 1.3).

The previous history documents the degree to which our species has shaped the environment and genetic disposition of songbirds. Our willingness to do so was not predicated on any utility value the birds might have, but instead for aesthetic ends, to produce superior song. As soon as audio recording technology was available, it was pressed into service as a means of preserving such music. It

¹⁴ Reference information for Reich's releases have been taken from the Discography of American Historical Recordings.

is notable that "Song of a Nightingale," the first commercialised field recording, was issued on Victor Red Seal, a label otherwise reserved for "famous opera singers and classical instrumentalists" [Stanley 2013]. With this disc, the nightingale was placed on par with singers like "Caruso, Tetrazzini, [and] Melba," birdsong being equated to the finest exponents of human vocalisation. The birds are conceptualised as soloists, performers on a stage set by the recording engineer. Such anthropomorphism was the dominant ideology of the time. Publishers Heinroth and Heinroth demonstrated this by naming a record *Feathered Master-Singers*. Koch expounded the same doctrine throughout his memoirs. For example, one photograph is captioned "Interviewing a young grey seal" [Koch 1955, 96 facing]. The seal is here afforded the same status as a human interview subject.

This realisation became motivation for the composition *Caged Birds (Augmentation)* (2012). This title can be read in several ways. First, it's a direct reference to the history of caged birds, which indeed are augmented through genetic engineering, as outlined above. Second, it's a punning reference to John Cage, the piece being devised specifically for the Cage centenary. The piece premièred at The White Box, New York City, as part of the festival "100x John: A Global Salute to John Cage in Sound and Image" [Ear to the Earth 2013]. Following this, a new version of the composition auditioned at the Hilltown New Music Festival (2013, Castlepollard, Ireland), where the piece was played so that the sounds might merge with those from outside the recital hall. The third playback was at the Symposium on Acoustic Ecology (2013, University of Kent, UK). Finally, a four-channel version debuted in 2014 at Invisible Places: Sounding Cities (Viseu, Portugal). On that occasion this description was provided:

For this piece the source material is a dawn chorus recorded a few hundred metres from my home, in what might be termed a suburban setting, but which I prefer to call "para-urban," since it does not partake of the topological or ecological aspects one might associate with suburbia. A disused canal feeds an offshoot of the Shannon River, near a marshy lake. On various sides are single family dwellings, modest apartments, the tallest only seven storeys, and some farm buildings and livestock fields, mostly also disused. In Ireland such mixed land use, in which city and country are conjoined, is quite common [Parmar 2014b, 1].

This description of the place in which the recording was made marks out its intermediary status, neither urban nor rural, partly disused. The birds recorded are not caged in the literal sense, but are, like their habitat, hybrids of the "wild" and "captive," overwhelmingly shaped by their contact with the built environment. The title of the piece draws a parallel between animals like the canary, explicitly dominated by our will, and those like the blackbird which nonetheless must find ways to adapt to the urban ecosystem we have created. This understanding draws on extensive ecological research. Male nightingales (Luscinia megarhynchos) sing louder at noisier locations [Brumm 2004]. The great tit (Parus major) and the blackbird (Turdus merula) are not only louder, to overcome masking effects, but have also shifted their song to a higher pitch [Nemeth and Brumm 2010]. Anthropogenic noise is not the only factor in these adaptations. The physical structure of the built environment also plays a role in signal adaptation [Mockford and Marshall 2009]. Such changes are not benign but instead take a toll on the birds. Urban house sparrows (Passer domesticus) have been found to be smaller and in worse health than rural birds [Liker et al 2008]. Hence, birds in urban environments are bound by human influence, constrained by their relationship with our species. Regarding a dawn chorus as being representative of some untouched "nature" is hence a naive position.

Caged Birds begins with a single continuous field recording, but several electronic processes augment the original, playing with the naturally recorded reverberation. Towards the end of the piece, the birds take on an increasingly "electronic" timbre and finally fade out into a noise field. This is a direct comment on their ontology. The birds adapt to a digital processing environment and in the process lose variety and, like those wasting sparrows, "body."

The piece could be interpreted as a metaphor for such ecological concerns, though the fact that the aesthetic affects are derived from electronically-generated transformations belies any easy nostalgic interpretation. The intent is to highlight, rather than resolve, any paradox inherent in this mediated engagement with what might naively be called "nature." The title "Caged Birds" is indeed a play on John Cage, but it's also a reminder that a recording is a sound no longer at liberty [Parmar 2014b].

The creation of this piece did not resolve the problematic of nature recording, even if it managed to find one way of presenting the issues in sharp relief. Part of the reason for this is that it didn't embed platial understanding, a process that would take several more years of praxis to develop.

2.3 In that place, the air was very different

For many years the author has developed software systems that combine algorithmic methods with pre-existing sound recordings. Developed in software such as Reaktor from Native Instruments and Max from Cycling '74, these applications combine source material with modulation, filtering, amplification, feedback, granular synthesis, and other processes. Dissatisfaction with fixed works has led to pieces that can only be realised through a process of improvisation with such systems. The results have been documented in group recordings and solo works (Appendix 2). One particular software system, Wheatfield 15, has slowly been adapted for the specific purpose of reconstituting field recordings. Over time the sound processing features have been stripped out of the program, leaving a Max patch which is responsible only for sequencing sound playback. Wheatfield selects files from designated folders on disk, each of which has been populated with recordings from a specific place.

The resulting piece is entitled *In that place, the air was very different*. This phrase is designed to elicit place as a site of imagination, a seat of the poetic, in the same way Bachelard explored topophilia (chapter 3.8). This piece was first presented at ISSTA 2016 (Derry-Londonderry, Northern Ireland, UK) at Echo Echo Dance Theatre. In 2017 it was reconfigured for Invisible Places: Sound, Urbanism and Sense of Place, which took place on São Miguel Island (Azores, Portugal). The installation was at the contemporary art gallery Arquipelago, located in Ribeira Grande. The roots of the material go back further, however, the system mixing sound pools, each of which is "a curated collection of recordings made on residencies in Slovenia, Catalonia, and so on" [Parmar 2018b, 575].

The work begins by framing the experience of the artist in residence. The resituating of daily life to a new locale, generally sustained for two or three weeks, permits a leisurely encounter with the new environs, while not falling into some of the structural traps of tourism. There is no itinerary or schedule, instead the artist traces daily patterns of living, from café to shop to home, and so on. Time

¹⁵ The name puns on the process: "field" refers to field recordings and "wheat" to the granular synthesis that was applied to the source material.

is taken for research into local history, random conversations, and other encounters. Several hours a day are reserved for documentation of this experience through text, image, and sound. These products are shared through a daily blog, without any outcome imperatives constraining the activities. Some days a photograph might be shared, another day a poem.

This pattern doesn't pretend that the artist is not a visitor to this new place; the artist's situation is not the same as that of a person who lives there. But this approach does at least break with the surface engagement of a tourist, a path that takes someone from monument to museum to snack shop. Instead, the willingness for open and unpredictable encounters recalls the *dérive* (chapter 3.6), although with several differences. The practice of walking is here not political, in the sense of the *flâneur's* attempt to subvert the sensory bombardment of capitalist excess. Neither are the actions necessarily predicated on being in an urban environment, as predecessors such as the Situationists were. Sound pools from Slovenia, Catalonia, Portugal, and Ireland were made in rural environments: small villages or towns. Only two pools have been gathered from urban environments (Derry-Londonderry and Cork).

Nonetheless, the residency is explicitly conceived in terms of *topos*, in that the approach highlights the experiential nature of the encounters, open to all the senses. The artist describes these encounters as *soundings*.

I specifically choose "sounding" as an acoustic metaphor, with the understanding that it applies not only to hearing, but across our integrated sensorium. The sounding reflects back to our senses qualities of the milieu, allowing us to gather knowledge of topology, dimensionality, and materiality. At the same time, the particular intentions and attentions we expend, as both individuals and societies, encodes meaning in the milieu. Place may be understood as both this activity (here "place" is a verb) and the tentative, everchanging product of this reflexive and discursive process ("place" as a noun). Further, this encoding can never in fact be an original process, free of influence, since there is always already a milieu in place. Every sounding is, in fact, a recoding [Parmar 2014a].

Two terms deserve attention here. The word "sounding" has also been used to describe Hildegard Westerkamp's work, a subject that will be dealt with in the conclusion to this chapter. The use of the word "recoding" highlights a long-

standing interest in transformation and re-situation. This is the very essence of audio recording technology, that it allows a sound to be put into a different place at a different time. More specifically, a recoding is what occurred in *Caged Birds (Augmentation)*, as a dawn chorus was transformed through electroacoustic means. To refer to a fixed trace of place as a "field recoding" guards against a recording being taken as unmediated documentation [Parmar 2014b].

Rather than any sense of confrontation or challenge, the artist's walks channel Bachelard's topophilia (chapter 3.8), exploring with a sense of intimacy that highlights individual subjectivity. This can be a challenge in a new location, and generally requires some repetition of course or activity. For example, if a coffee is taken in the same café every day for two weeks, one adapts to the rhythms of that place, as one gets to know the inhabitants and rituals. How exactly does one order? What is the correct protocol? What path through the café is usual? Where to sit? How does one acknowledge other patrons? These small details are significant. With repetition the regular occupiers of this place can become accustomed to the new face in their midst. In this way, rhythms change and adapt, impacting every aspect of the milieu, including the sonic. Such a description evokes choros, accounts of place made by those who are intimately familiar with a place (chapter 3.2). This is perhaps the ideal position of the artist-in-residence: to become part of the oikoumene, the everyday inhabited world. This form of dwelling is a relational model that binds Heidegger's Da-Sein to place. As we will see (chapter 4.4), such a relationship is always in the process of being negotiated through difference and differentiation. The hidden goal of *In that place*, the air was very different is to foster this process. In other words, the piece is designed as an experience for the artist in relationship to other people, in the place of (potential) audio recording.

A further template for this engagement can be found in ethnography, concerned as it is with direct observation and qualitative research.

The first stage in ethnographic study is participant observation, where the researcher goes into the field, acquiring first-hand experience by actively or interactively participating in that society's day-to-day life. In practice, this means looking and listening, but it may even involve actual participation in whatever is going on. The ethnographer may also collect documentary material such as photographs and sound recordings, as well as writing down the observa-

tions. Ordinarily, this would be conducted over an extended period of time in order for the society to get used to an outsider observing and enquiring into their day-to-day activities [Drever 2002, 23].

Echoing the author's own concerns with Orientalism, Drever notes the "problems with standard ethnographic practice" that arise in the context of post-colonial critique [23]. He proposes that ethnographers might follow Johannes Fabien and "rethink themselves as communicators, not scientists," with activities "primarily about speaking and listening, instead of observing" [24]. In the domain of soundscape studies, Drever recognises the difficult in balancing musical and representational concerns [26], proposing Steven Feld's practice as an exemplar [25]. As it is indeed pertinent to the current research, Feld's ethnomusicology will be described in chapter 3.5.

The discussion has so far focused on the experience of the composer as a listening subject. But *In that place* presents itself to the public as an installation, a constrained location containing sounds for visitors. This experience will now be described from that perspective.

The listener enters a room that has not been modified extensively from its usual deportment. Only the speakers are visible as signs of the piece. The sound pools are diffused using sets of stereo speakers, each pair corresponding to a different sound pool, the individual sound within each pool being selected using a stochastic process. In the case of Derry, the positioning of these stereo sets was symmetrical about the open studio space. But at Arquipelago in The Azores, the room was a cellar with vaulted stone arches. Line of sight was blocked after a couple dozen metres in most directions. This enabled three speaker sets to be positioned in asymmetrical arrangements throughout the volume. But in both cases a similar effect is created.

Different regions of the room contain different admixtures of the sound pools. As a visitor traces a path through these zones, they actively create their own mix. This mirrors my own experience in recording the sounds in the first place. The recordings are not intended to represent any veridical truth but are rather tokens of an ongoing process of creating place [Parmar 2014a].

The path-tracing *topos* and zone-creating *choros* of the artist's residence period is mirrored in the installation. Participants wander through the sound

pools, which are also changing in time. Sometimes a stay in one place is rewarded. At other times an intriguing sound will call the listener to a different position. At one moment bells might chime from three different zones. Or the sound of wind in the trees (recorded at a tea plantation on The Azores) might combine with a gate creaking (at the Lough Gur stone circle, County Limerick) to present a synchronous experience of a storm in a forest.

There are similarities between the methods employed here and the matrix system implemented by Curgenven (chapter 6.2). By defining clearly and precisely the method by which sounds are obtained, and then constraining the ways in which these sounds might be combined, pieces like Climata and In that place, the air was very different can articulate subjective experience within boundaries that give form to the pieces. The artist curates the overall experience, but the particulars are unpredictable. This process serves to "maximise the potential for accidents of listening" [Parmar 2014a]. Embedding this concept in the installation makes explicit the desire of the composer to prevent over-determination of the sonic results. Rather than foregrounding the composer's intentions, attention turns to the listener's subjective position. Their provisional encounters with the sounds are shaped by stochastic processes, but also by the particulars of the acoustic surround, including reflections and reverberations, acoustic shadowing from other participants in the installation, and so on. There is no predicting the phenomenological result, and no attempt is made towards this goal, since this would fix the piece into arbitrary experiences.

This description makes clear that this installation aims to create a space with the characteristics of Plato's *khōros* (chapter 3.3). This region is a container, but an active one, modified with each step or turn of the head. Its material enters, mixes, and leaves again, in a flow that cannot be readily anticipated. It has no hard and fast boundaries, but rather is porous to regions beyond its umbra. Within its matrix an enfolding principle operates, creating material from that which is always already present. Such phenomena present themselves to the Dasein, in the process of self-showing to be elucidated in chapter 4.4. Heidegger's *being-in-the-world* is also *world-made-by-being*, a mutual construction that occurs at every inflected moment.

Discovered accidentally in a moment of poetry, the title of the installation makes explicit these aspects. The phrase "in that place" reaches out towards the *other*, the place not yet occupied, still forming. The emphasis on "air" evokes

Curgenven's conception of sound as weather, a medium that we inhabit, rather than an object that we apprehend¹⁶. And if the air is "very different," this acknowledges the continual negotiation of difference between world and the Dasein that constitutes place formation. Difference is to be expected, acknowledged, and respected. In this way, the artist's works embed an ethos within a phenomenology of place. It is to these models of place that attention will now turn.



¹⁶ It should be noted that, despite the parallels with the works of Curgenven, the title and methodology for *In that place, the air was very different* was formed prior to the study of his work, as presented in this dissertation. Yet the parallels between the artists are more than happy accidents, rather stemming from the similar phenomenological bases that anchor each artist's works.

Chapter 3: Models of place: geos, topos, choros, khōros

3.1 Introduction

This chapter establishes definitions of place that will act as foundation for this study. It must be noted from the start that "place" and "space" are highly contested terms. There are almost as many definitions of place as there are authors, some of whom make a sharp distinction between place and space, others who do not, and still others who use "space" where other writers would commonly use "place." This chapter will define terms in certain specific ways, to establish a consistent grounding for later chapters. This is not to assert that these are the *only* definitions, rather the most fruitful for the task at hand. It should be understood throughout that language is connotative; meaning is formed in the gaps between words, and in the social context in which these words are used [Barthes 1967, 89-90].

In contemporary discourse the study of place is most often incorporated under the discipline of geography, the study of the world and its effects. This discipline takes its name directly from *geos*, which is but one of several approaches to place known to the Ancient Greeks. The other approaches have largely been forgotten, maintaining a vestigial presence in words that no longer acknowledge their meaning, or in the margins of obscure philosophical treatises. So too, the meanings of these words have changed dramatically over time [Curry 2002, 503]. If we refer to a map in contemporary discourse as "topographic," this is not in accordance with *topos* as Hellenistic¹⁸ society might have understood the term (instead, the topographic map is an instantiation of *geos*, as shall be demonstrated). To avoid confusion with contemporary (or indeed any other) usage, the italicised forms of these Greek words will be used throughout this paper.

So too there was not one *topos* in Hellenistic society. Famously, the Greeks had no word for space, and so *topos* was often pressed into service for a variety

¹⁷ Examples of this usage include Henri Lefebvre [1974] and Doreen Massey [2005].

¹⁸ Technically the fourth and fifth centuries BCE are referred to as the classical era, while the third century BCE is the Hellenistic period. This is not such a fine-grained study as those devoted to history, and so such terms will be used to refer to Greek thought BCE in the main, and even some later commentators.

of purposes [Heidegger 1959, 66]. Despite the fluidity of terms, a general definition is useful as a starting point, to anchor the following discussion. The *Oxford English Dictionary* distinguishes between three terms in the entry for "chorography":

The art or practice of describing, or of delineating on a map or chart, particular regions, or districts; as distinguished from geography, taken as dealing with the earth in general, and (less distinctly) from topography, which deals with particular places, as towns, etc. [OED 2016a]

In short, *topos* is related to specific places, *choros* with regions, and *geos* with the entirety of the planet [Curry 2002, 503]. This overly-simplistic template (which considers only scale) will be elaborated in this chapter.

Though chronologically his work was most recent, Ptolemy's contributions to our understanding of place will be discussed first, for the simple reason that it has become normative. His *Geographica* established an analytic geography that catalogues place by position, providing geometric views (maps), depending on the projection chosen. The term *geos* has become cognate with our contemporary view of place. In another major work, the *Apotelesmatika*, Ptolemy codified centuries of chorographic thought. He defined *klimata*, distinctive regions on the earth that are defined in terms of symbolic exchange between the earth and the heavens, man and the gods. This metaphorical definition of place will be referred to as *choros*.

In section three, Plato's concept of *khōros* will be examined, through a detailed reading of a section of the *Timaeus*, his dialogue on cosmology. Here he describes *khōros* as not just material, not only container, but both at once. The *khōros* is a generative matrix, described as a nurse administering a birth, or a womb. Recent writers (Derrida, Kristeva) returned to this profoundly generative concept, which defined a site of instability and unknowability.

Section four will examine Aristotle's definition of place as the boundaries of bodies, a concept most important for putting place prior to things. For Aristotle the world is "the sum total of the places of adjacent bodies, which constitute, in their totality, a three-dimensional material continuum" [Sambursky 1977, 173]. The world is always already fully emplaced; it is never without those determinate *topoi* which embrace all things that we encounter.

Section five describes the *peripli*, fantastic stories of travel and adventure, exemplified by the epic poetry of Homer. These narratives exemplify a model of place that foregrounds individual subjectivity. This will be used as the primary definition of topos in this study. Section six discusses walking in more detail, explicating Walter Benjamin's *flâneur* and Guy Debord's *dérive*.

The three sections that follow examine topophilia, a neologism that has achieved a degree of currency in contemporary writings about place. Curiously, it seems to have been independently coined by three very different writers. The structuralist approach of Yi-Fu Tuan may not be compatible with some of the other phenomenologists under consideration in this study but has nonetheless proven popular in human geography. By contrast, Gaston Bachelard's *The Poetics of Space* explores topophilia in terms of the ontology of the poetic image itself. Auden was likely the first to coin the term, doing so to characterise a fixation on place itself as signifier, rather than an attraction to a specific place.

The conclusion summarises the four models of place (geos, topos, choros, and $kh\bar{o}ros$) in the context of sonic activities.

3.2 Geos, choros, and klimata in Ptolemy

This section will assess the contribution of Claudius Ptolemy (c. 100–c. 170 CE), whose books synthesised the work of ancient philosophers (people who were also, variously, mathematicians, historians, poets, and astronomers), creating the discipline of geography as it is known today. Of these predecessors, Eratosthenes of Cyrene (c. 276–c. 194 BCE) was the first person to calculate the circumference of the Earth. Hipparchus of Nicaea (c. 190–c. 120 BCE) developed trigonometric techniques for calculating position on the globe. Strabo (c. 64 BCE–c. 24 CE) provided a descriptive history of different regions and their peoples. Marinus of Tyre (70–130 CE) created a gazetteer of places and their coordinate positions. Ptolemy compiled and corrected data and descriptions from these and other sources, producing three authoritative works: *Geographica* on map creation, *Almagest* on astronomy, and *Apotelesmatika*¹⁹ on what we might now call astrology, but which more precisely translates as "effects" or "influences." Rather than outline each accomplishment and innovation,

¹⁹ This work is also known as the *Tetrabiblos*, since it is structured in four books.

this section will focus on how these thinkers developed knowledge about place, in particular the concepts of *geos*, *choros*, and *klimata*.

Eratosthenes was the first to combine the Greek words for world (*ge*) and written or pictorial representation (*graph*) to coin the term *geographia* [Connors 2011, 140]. His approach to geography was mathematical; data was compiled from astronomical observations and trigonometric calculations. From the beginning this was contrasted with *chorographia*, descriptive accounts of *oikoumene* (the inhabited world), emphasising the differences between regions [141]. Instead of an abstract perspective written by a distant scholar, *choros* foregrounds personal accounts by those who are intimately familiar with a place. Following this template, this dissertation will use the term *geos* for abstract, mathematical models of place, and *choros* for the emplaced study of regions. Further distinguishing characteristics of these models will become evident in time.

Early observation, based on a geocentric cosmology, placed prime importance on the passage of the sun around the Earth. Places on the Earth were specified by this circuit, in two ways. The first calculations produced the zodiacal signs, the second set of observations resulted in the *klimata*.

First, it was apparent that the sun rises at different points on the horizon as the year progresses, from west to east, at a rate of about a degree a day. Indeed, the Egyptians divided a circle into 360 degrees for just this reason. (The difference between this number and the number of days in a year results in a rounding error.) The ecliptic traces the sun's passage through the twelve constellations that make up the zodiac. The most northerly point of the ecliptic is in Cancer, and so the line of latitude that intersects the ecliptic at this point is called the Tropic of Cancer. Similarly, the most southerly point of the ecliptic is in Capricorn, and the corresponding line of latitude is the Tropic of Capricorn.

Second, it was clear that the sun did not always pass directly overhead of a location, not even at noon. Those who travelled realised that the angle of the sun to the point directly overhead varied as you went north. To attain accurate measurements, a stick of given length might be placed in the ground and its shadow measured at key times (for example, the shortest and longest days of the year). Using such measurements, still only approximate, Hipparchus formulated

the *klimata*²⁰ [Dicks 1955, 248]. *Klimata* means "inclination" or "slope," this term deriving from the "gradually increasing slope of the polar axis of the celestial sphere to the horizon" [249]. A *klimata* was a "narrow belt or strip of land, 400 stades²¹ wide, on each side of a parallel of latitude." This term was useful in a practical sense, since within each *klima*, the length of the day would be much the same. So too the climate would be generally similar [248]. In fact, the English words "clime" and "climate" both derive from the word *klima*.

Combining these two measures, the surface of the Earth could be defined by the twelve zodiacal signs and the seven classical *klimata*, even though, it should be emphasised, this was not a rigid scheme with distinct borders²². Each region was governed by the temperaments of different gods, and these defined the character of the peoples who lived within them. For example, those who live in the south are "hot" in character, since they are strongly influenced by the sun. Sunrise and sunset have their effects, as do the planetary bodies. This *klimatic* model of place was long-standing, extant for eight centuries before being codified by Ptolemy [Tuan 1977, 97]. It was used as a means of divination, predicting an individual's behaviour based on their place of origin and time of birth. This use of Ptolemy's model has persisted in the horoscope pages of newspapers, an indication of the long-standing influence of the *klimatic* on culture.

The *klimatic* model is a mythic realm. Events in life are described in terms of recurring patterns, governed by hidden forces. For example, the budding of trees (an event) is observed every spring (a recurring pattern) and signifies fruition and bounty (an outcome). The hidden governance that "makes sense" of this cycle is Persephone returning from the Underworld. Such relationships express a poetic view of the world, rooted in metaphor. These circuits of symbolic exchange are complex and interwoven. Gods and other mythic figures engage in activities on the earth, but are then abstracted into the heavens, represented by configurations of stars. These constellations become aspects that influence the

²⁰ Though his treatise is lost, it's known from Strabo and other writers.

²¹ Though measurements varied, it was commonly taken that there were eight stades to one Roman mile [Dicks 1960, 42] and hence 8.72 stades to the English mile [43]. A stade was hence about 185m in length.

²² The classical klimata are "Meroë, Syene, Lower Egypt a little south of Alexandria, Rhodes, the Hellespont, mid-Pontus, and the mouths of the Borysthenes, i.e. the Dnieper" [Dicks 1955, 250].

zone under their sway. This continuous flux between particular and generalised patterns, between the observable and the unseen, and between different metaphorical registers, is characteristic of the *klimata*.

There is a potential contradiction here, between the derivation of *klimata* from calculation and its metaphorical and prescriptive use. But Dicks notes that the *klimata* were not directly related to mathematical lines, instead being defined on a practical basis.

[T]he seven *climata* did not arise from deliberate design according to a well-conceived plan, but from the fact that they happened to be the seven parallels which passed through the best-known regions of the inhabited world²³ [Dicks 1955, 251].

This region-based model was challenged by Ptolemy's and his lines of latitude, which were more granular than those that came before. He used quarterhour increments until reaching a latitude where these became too narrowly-separated to be practical, after which half-hour increments were used [Berggren and Jones 2002, 9]. This resulted in "39 parallels of latitude, of which 29 were associated with named localities" [Dicks 1956, 244]. This would seem to be too complex and mathematical a scheme to support a chorographic approach. Nonetheless, Apotelesmatika continued to describe the characteristics of different peoples as being determined by the *klimata*, even if ten of the regions had no known inhabitants. In Geographica, on the other hand, Ptolemy is less interested in human behaviours, more concerned with creating a uniform and homogeneous space that allows the definition of locations (loci). Nonetheless, even here the map data is not free of chorographic influence. Tribal districts are denoted, even if these are now inferior to lines of latitude and longitude [Schütte 1917, 12]. These tensions between *geos* and *choros* in Ptolemy's books illustrate an ongoing dynamic between modes of representation. They are not a contradiction, as such, since Ptolemy did not position them as opposing models. Similarly, different concepts of place will be used throughout this dissertation, as a means of providing a more complete descriptive model.

²³ Throughout this study, emphasis in quotations is from the original source. Likewise, original spellings have been retained.

Though only small parts of Eratosthenes' work are extant, one fragment from the didactic poem *Hermes* is of interest. This describes a bird's eye view of the Earth, five²⁴ latitudinal bands arrayed in different colours [Connors 2011, 140]. These *klimata* are described in aesthetic terms, but to see them, we need to be positioned outside the globe. This same external viewpoint was used by Strabo, who emphasised that the method of *episkopein* was "the proper practice of geographical inquiry" [Connors 2011, 143]. This word has strong political associations:

Elsewhere used of a god (Sophocles *Antigone* 1135) or of a ruler overseeing a city (Plato *Republic* 506b), the verb *episkopein* connotes inspection and examination from a vantage point of power [Connors 2011, 143].

This viewpoint would seem to deny the embedded, subjective experience required for chorographic study. It is yet another example of the contradictions inherent in making any definitive summary of these terms. For our purposes the *episkopein* will be associated with *geos*.

Ptolemy's *Geographica* now deserves extra attention, and not just because it is the only cartographic work to have survived from antiquity. In this volume, Ptolemy improved on the incomplete maps of Marinos of Tyre, in part by prioritising astronomical observations over reportage from the field [Berggren and Jones 2002, 3]. Ptolemy implemented the methods of Hipparchus, but with unprecedented accuracy and scope. The resulting calculations maintained their superiority for fifteen centuries [Schütte 1917, 12 and 15]. Significantly, *Geographica* does not contain maps, but instead provides the necessary materials from which maps can be created. The book is in three parts. Book one contains instructions on how to create the map projections, two of which were of Ptolemy's own devising. Book two is a gazetteer of place names with their coordinates. Book three is a catalogue of captions to be written below the map (*hypographē*) [Berggren and Jones 2002, 4]. Algorithms are provided for twenty-six regional maps plus one global map.

For his lines of longitude, Ptolemy divides the circumference of an idealised sphere using a method based on meridians. A meridian is an imaginary line on

²⁴ Before Ptolemy the number of *klimata* varied between five and seven.

the globe from north to south, connecting places that observe noon at the same time. These he drew "at intervals of a third of an equinoctial hour," which is to say, every five degrees, from the westernmost part of the known world to the east [Berggren and Jones 2002, 11]. While the degree as a unit of angular measure had been in use since Hipparchus, Ptolemy established a uniform method of defining the two data points necessary to locate places on a sphere. He also broke with the convention of using the ecliptic, not the equator, as the defining plane through the Earth.

The *geos* model posits an ideal observer in a superior position above the globe, abstracted from the realms they measure using the method of *episkopein*. This person requires only the sense of sight to fill the empty grid with places. Vision is here equated with mathematical reason and rationality in general. In this way, *geos* instantiates an ocular regime that was reinforced by Alberti's perspective theory (chapter 4.3) and Cartesian rationalism (chapter 4.2). *Geos* attained dominance over alternative models of place, becoming the normative definition for centuries, until the "sonic turn" in contemporary European society (chapter 4.3).

3.3 Khōros in Plato's Timaeus

A cosmology is an explanation of how the world – and hence its places – came into being. Edward Casey (1939–) begins *The Fate of Place* by considering creation myths from different cultures, in order to demonstrate how the creation of the world/universe (in general) and places (in particular) are inextricably linked [Casey 1998, 3-22]. The void that precedes creation is the negation of our every-day experience of the world, but this very absence allows, even demands, that places appear [9]. "To create 'in the first place' is to create a first place," writes Casey [7]. One such cosmology, Plato's *Timaeus*²⁵, has been described as "one of the foundational formulations of spatial thinking in the West" [Kymäläinen and

²⁵ Robin Waterfield's 2008 translation of Plato's *Timaeus* has been chosen for its clarity and vernacular language. Citations will be provided using two systems. First, the Harvard scheme of page numbers in Waterfield. Second, the Classical notation of page number and section letter from Henri Estienne's edition of 1578.

Lehtinen 2010, 251]. This section will provide a close reading of this text, examining in detail Plato's concept of $kh\bar{o}ros^{26}$.

Plato (c. 427-c. 347 BCE) was the foundational figure in Classical philosophy. The *Timaeus* is one of his "late dialogues," written around 360 BCE, about twenty years after the *Republic*. Though it is purportedly a Socratic dialogue between the titular figure, Socrates, Critias, and Hermocrates, the text soon settles into a long monologue. Here Timaeus, as Plato's avatar, sets out his cosmology. The central premise is that the universe "manifests goodness because it is the handiwork of a supremely good, ungrudging Craftsman, who brought order to an initially disorderly state of affairs" [Zeyl and Sattler 2017]. The account is therefore teleological, the demiurge (a word that means "craftsman") acting to maximise beauty and order in the cosmos [Waterfield 2008, ix]. The text has three main sections: the first is concerned with "achievements of Intellect," the second with the "effects of Necessity," and the third demonstrates "how Intellect and Necessity cooperate in the production of the psychophysical constitution of human beings" [Zeyl and Sattler 2017].

The first section proposes that four elements (fire, water, air, and earth) comprise the universe [Plato 2008, 39; 48b]. But Timaeus also wishes to explain how these elements were themselves created, and so introduces the concept of a "wandering cause." This factor is placed in opposition to teleological necessities.

Reason prevailed over necessity by persuading it to steer the majority of created things towards perfection, and this was how the universe was originally created, as a result of the defeat of necessity by the persuasive power of intelligence. Since this was the manner and means of the creation of the universe, then an account of how it actually came into existence has to include the wandering cause as well, and how it is in its nature to cause movement and change [39; 48a].

To more properly tell his creation story, Timaeus must rewind his narrative to the beginning. The previously ordered explanation worked on the basis of two forms of existence [Kymäläinen and Lehtinen 2010, 251]. The first is the *model*, which presents immutable, universal laws that only reason can understand. The

²⁶ Alternatively rendered as khōra.

second is the *copy*, which exists in the veridical world, apprehended by the senses. But now this dialectic will be disturbed with something mysterious and ill-defined, an errant cause.

For this fresh start of ours, we need to take account of more than we did before. Earlier we distinguished two types of things, but now we have to disclose the existence of a third kind, different from the others. Our earlier discussion required no more than the two – the model, as we suggested, and the copy of the model, the first being intelligible and ever-consistent, the second visible and subject to creation – and we didn't distinguish a third at the time, on the grounds that these two would be sufficient. But now the argument seems to demand that our account should try to clarify this difficult and obscure kind of thing [Plato 2008, 40; 48e-49a].

Timaeus admits this third factor (*triton genos*) begrudgingly; it is necessary but not beautiful. Plato realises his audience will have a hard time accepting the radical notion he wishes to prose. Indeed, the passages to follow are commonly regarded as the "most philosophically challenging concept in *Timaeus*" [Waterfield 2008, xlix]. Plato pre-empts this doubt through a rhetorical device that makes explicit the logical difficulties from the start.

How, then, should we conceive of it? What is its nature – what capacity or capacities does it have? We wouldn't be at all far from the mark if we thought of it as the receptacle (or nurse, if you like) of all creation. This is a true statement, but it doesn't tell us everything we need to know about it [Plato 2008, 40; 49a].

The receptacle ($hupodoch\hat{e}$) of all creation is described in terms of procreative capacity, a nurse administering a birth, a womb that forms the "matrix for everything" [Casey 1998, 32], later explicitly a "mother" [Plato 2008, 43; 51a]. Despite the similarities, note that the terms used to describe this third factor have distinctly different agencies: "receptacle" denotes a passive container, "nurse" is an active agent, "matrix" is a substrate or enfolding principle. No one term will "tell us everything we need to know," but rather we must accept several simultaneously.

Alongside this radical thought we must also accept another: that the four elements are not what we thought they were. Earth, air, fire, and water are no longer foundational, unchanging elements, but mutable.

The point is that it's hard to say, with any degree of reliability and stability, that any of them is such that it should really be called "water" rather than "fire," or that any of them is such that it should be called by any particular name rather than by all four names, one after another [40-41; 49b]

There is another difficulty in describing the receptacle. This is to be the mixing place of the four elements, combined in different proportions to create all forms and attributes that exist in the world. If the receptacle had characteristics of its own, it would bias the mixing process by tainting the formative materials [42-43; 50d-e].

That is why, if it is to be the receptacle of *all* kinds, it must be *altogether* characterless. Think, for instance, of perfumery, where artisans do exactly the same, as the first stage of the manufacturing process: they make the liquids which are to receive the scents as odourless as possible. Or think of those whose work involves taking impressions of shapes in soft materials: they allow no shape at all to remain noticeable, and they begin their work only once they've made their base stuff as uniform and smooth as possible [43; 50e].

The receptacle is elsewhere compared to lumpen gold, able to be formed, but significantly not *yet* formed, into a given shape [42; 50a-b]. Since Timaeus cannot describe the receptacle and its characterless nature, he resorts to analogy. But the examples are consistent in suggesting the receptacle has the key ability of being able to shape malleable contents [Zeyl and Sattler 2017]. The receptacle is therefore not material itself, but must maintain a strange ontological status that Timaeus acknowledges:

And so we won't go wrong if we think of it as an invisible, formless receptacle of everything, which is in some highly obscure fashion linked with the intelligible realm [Plato 2008, 43; 51b].

Timaeus then makes a further attempt at explanation. First, he repeats the first two factors, describing the model as "unchanging, uncreated, and undying" and the copy as "perceptible, created, and in perpetual motion" [44-5; 52a]. The third genus is then described using a new term.

Then, third, there is space, which exists for ever and is indestructible, and which acts as the arena for everything that is subject to creation. It is grasped by a kind of bastard reasoning, without the support of sensation, and is hardly credible. In fact, when we take space into consideration we come to suffer from dreamlike illusions, and to claim that every existing thing must surely exist in some particular place and must occupy some space, and that nothing exists except what exists on earth or in the heavens [45; 52a-b].

In this key passage the receptacle is not (only) material but (also) *space*, though a very particular type of space, *khōros*. Its function is to provide an arena²⁷, a forum where elements (or their constituents) can enter, mix, and leave. Subsequent passages refer to the receptacle as a place in which things happen, or a sieve that can sort material through agitation [46; 52e].

How can we reconcile the fact that the receptacle is described repeatedly in the text as both malleable material and a spatial medium that enfolds the material? We must accept, as Plato urges, that the receptacle is both at the same time. Waterfield claims that the receptacle "provides the space in which perceptible phenomena can occur, and also is the substrate from which phenomena are generated" [2008, xlix]. Similarly, Zeyl and Sattler conclude that it's "not clear that these two roles are inconsistent – indeed, they appear to be mutually necessary" [2017]. Casey asserts that *khōros* is not space (as receptacle) *or* region (as form) individually, but space *and* region intimately bound together [Casey 1998, 44]. Derrida claims that "[o]ne cannot even say of it that it is *neither* this *nor* that or that it is *both* this *and* that" [1995, 89]. To reduce the term to any oppositional duality is to deny the richness of the third genus itself. Let the receptacle remain a profoundly generative concept; a site of instability and unknowability.

²⁷ In other translations the arena is instead a "seat."

3.4 The topos of Aristotle

According to Algra, Aristotle (384–322 BCE) "implicitly presents himself as the first Greek philosopher to notice the real nature of the problems of space and place" [Algra 1997, 119]. This is nowhere more notable than in his $Physics^{28}$ (350 BCE), which expounds his concept of place (topos). Aristotle's primary objection to Plato is that the concept of $kh\bar{o}ros$ is unable to explain physical motion [119]. He wishes to remedy this, while providing a physical theory based on empirical evidence, as opposed to Plato's metaphysical theory [192].

Physics Book IV begins with two premises. First, Aristotle notes that "things which exist are somewhere," in contrast to non-existent things (for example, "the sphinx") which are "nowhere" [208a29-31]. Second, motion, as "change of place," requires first that places exist, for how else can motion *change* place [208a31-32]. He returns to his formulations for the natural elements (from Book I), each of which bear their own innate properties, including motion. Aristotle observes that flame dances towards the sky (motion upwards) while a stone falls to the ground (motion downwards).

It is not every chance direction which is up, but where fire and what is light are carried; similarly, too, down is not any chance direction but where what has weight and what is made of earth are carried – the implication being that these places do not differ merely in position, but also as possessing distinct powers [208b12-22].

This passage distinguishes between a spatial consideration of position and motion, which defines qualities through a coordinate system, and the view that places, through the bodies that occupy them, have distinct features and effects ("powers"). Three dimensions (length, breadth, depth) bound a body, "but the place cannot be body; for if it were there would be two bodies in the same place" [209a5-7]. Instead, a body must, in some way, be *in* a place. In, *Physics* Section 3, Aristotle considers various ways in which one thing can be said to be in an-

²⁸ For references to Aristotle, the *Princeton Complete Works* [Barnes 1991] will be used. This revises the 1950 Hardie and Gaye translation of *Physics* and the 1956 J. L. Ackril translation of *Categories*. Citations will be given using an approximate Bekker line number range.

other [210a14-210b31]. In Section 4 four possible definitions of place are considered, before three are ruled out: place is not the shape of a thing [211b10-13], nor an extension of a body [211b14-29], nor matter itself [211b30-212a2].

The argument is considered difficult even among scholars of Aristotle [Algra 1997, 177; Mendell 1987, 221]. There are several complicating factors. First, the Greek *en* does not have exactly the same meanings as the English *in*. Second, the argument must sift through various commonplace usages of the word *topos* [Algra 1997, 181]. Third, the argument seems contrary to Aristotle's previous reasoning in *Categories* [Mendell 1987]. Fourth, Aristotle's use of topos here differs from *Meteorology*, where *topos* was used geographically [Algra 1997, 183]. Nonetheless, the argument does proceed logically. At the end of the discourse only one of the four candidate definitions remain: *topos* must form the boundary of a body [181].

A further subtle distinction is necessary, to distinguish between a vessel and a place. A vessel can move but a place cannot.

So when what is within a thing which is moved, is moved and changes, as a boat on a river, what contains plays the part of a vessel rather than that of place. Place on the other hand is rather what is motionless: so it is rather the whole river that is place, because as a whole it is motionless [212a14-19].

This results in Aristotle's definition of place: "the place of a thing is the innermost motionless boundary of what contains it" [212a20-21]. (The proviso "motionless" is required to distinguish between vessel and place.)

This definition is not without its problems, even on its own terms, and these were discussed by Aristotle's followers for several centuries [Algra 1997, 192-260]. From our contemporary perspective the idea of a place being a boundary of a body lacks both ontological richness of expression and phenomenological grounding. Though Aristotle's *topos* will not be the definition used in the current study, it is nonetheless vital to understand the development of the philosophy of place. For example, Aristotle had much bearing on Descartes' formulation of "external place" (chapter 4.2).

But even on its own terms, there is one important way in which *Physics* signalled a fundamental contribution to thinking on place. This is highlighted in a

passage that quotes the mythical cosmogony *Theogony* by the poet Hesiod (c. 750–c. 650 BCE):

At least he says: First of all things came chaos to being, then broad-breasted earth, implying that things need to have space first, because he thought, with most people, that everything is somewhere and in place. If this is its nature, the power of place must be a marvellous thing, and be prior to all other things. For that without which nothing else can exist, while it can exist without the others, must needs be first; for place does not pass out of existence when the things in it are annihilated [208b29-209a2].

This states the axiom that underpins Aristotle's thinking on this topic: "the power of place must be a marvellous thing, and be prior to all other things." For Aristotle the world is "the sum total of the places of adjacent bodies, which constitute, in their totality, a three-dimensional material continuum" [Sambursky 1977, 173]. The world is always already fully emplaced; it is never without those determinate *topoi* which embrace those particular things that we encounter. This is the key thought to which this study will return, once a thorough grounding in phenomenology has been laid.

However, Aristotle's definition of *topos* as a two-dimensional manifold surrounding bodies will *not* be followed in this study. The term *topos* will be defined quite differently, in the following section.

3.5 Topos and the wandering subject

The *Tabula Peutingeriana* is the only existing map of the Roman Empire road network. It was created by a monk in Colmar in 1265 but is likely based on a map prepared almost thirteen centuries prior, by Marcus Vipsanius Agrippa (64/62–12 BC) for his friend the emperor Augustus [Schütte 1917, 15]. The map has pictorial elements but neither the linear scale nor areas are represented accurately. Unlike Ptolemy's work, it has no regulating grid or scale. Instead, this map functions as an *itinerarium*, a "register of road-distances, meant for wrapping up and transporting in a traveller's bag" [15]. It's not a tool for measurement, but instead is designed to aid a traveller's passage from one waypoint to the next.

This map is emblematic of *topos*, a model of place first heard in the *peripli*²⁹, stories of circumnavigation taken from the journals of the Carthaginian Himilco, the Persian Scylax of Caryanda, the Greek Pytheas of Massalia, and others. These narratives of sea voyages trace coastlines, both in time, as one locale follows another in a sequence of days travelled, and in space, as greater distances are put between the traveller and home [Curry 2002, 506]. Places are experienced by an individuated subjectivity; it is difficult to trace the same path twice. Not only are new places found with every journey, but the places themselves are inconstant.

A famous literary example of *topos* is *The Odyssey*. Composed circa 700 BCE, and attributed to Homer, this epic poem is often described as the voyage of Odysseus from Troy back to his home in Ithaca. But in fact, the story only provisionally concerns the journeys of the titular hero, whom we do not even encounter until Book Five. The first journey is instead made by his son Telemachus, and this is as much about his maturation as it is about traversing territory. Known locations largely do not figure in the account; instead the places described are "sheer fancy," based on "bits and pieces of solid unassimilated fact" [Lattimore 2007, 15]. Places are described largely through the distinctive peoples who inhabit them: The Lotus-Eaters, Phaiakians, Laistrygones, and so on [9]. *The Odyssey* is typical of *topos* in having wandering heroes, divergent narratives, and a reliance on the experiential.

A contemporary encounter with *topos* occurs when your smart phone is out of satellite range and you become lost in non-Cartesian space, "off the grid." At such disorienting moments, you might ask a stranger for directions. You will then receive an account of how to get from "here" to "there," told from the narrator's point of view. In Ireland, the sequence of directions would go something like this: "Continue down to Fennessy's, take a left up towards St. Anne's. Then turn right and walk towards Kelly's Bar." In the case of this specific country, directions are given in terms of pubs and churches, landmarks that reveal much about the concerns and interests of this particular community. Both pubs and

²⁹ The singular *periplus* is the Latin form of the Greek *periploos*, literally "a sailing-around." Though the first preserved *peripli*, transcribed by writers such as Pliny the Elder, are from the 6th century BCE, the oral tradition is likely to be much older.

churches have traditionally been buildings of importance to social activity, and are also practical locators, in that they persist for generations. In a different social milieu, you would be given different landmarks to orient your journey. *Topos*, then, is about individual experience constrained by the characteristics of places, that are themselves in the continuous process of formation by the social.

R. Murray Schafer had something similar in mind when he coined the term "soundmark":

The term soundmark is derived from landmark and refers to a community sound which is unique or possesses qualities which make it specially regarded or noticed by the people in that community. Once a soundmark has been identified, it deserves to be protected, for soundmarks make the acoustic life of the community unique [Schafer 1994, 10].

Navigation by soundmarks occurs when people follow bells to church, demented children's tunes to an ice cream van, or a distant thundering roar to a waterfall in the forest. Indeed, *topos* is especially strong in cultures which have well-developed non-visual sensibilities. A particularly striking example is provided by ethnomusicologist Steven Feld (1949–), based on his extensively research with the Kaluli people of Papua New Guinea. His fieldwork began in 1975 [Feld and Brenneis 2004, 464] when the culture consisted of about twelve hundred people [Feld 1984, 388]. Though this remote society had already been contacted by missionaries, they were largely isolated by their location "in the tropical rain forest of the Great Papuan Plateau in the Southern Highlands Province of Papua New Guinea" [388]. In the dense forest, vision gave little information, so the Kaluli navigated by sound more than sight.

Sounds give indexical information about forest height, depth, and distance. The time it takes a sound to travel through various kinds of bush; the echoes through land formations, waterfalls, and rivers; the layers of bird sound in the canopy and at forest openings – all these provide clock and spatial information to the accustomed inhabitant of the rainforest. Daily cycles of bird presence, migration cycles throughout the year, as well as cycles of cicadas and insects are taken by Kaluli as indicators of location, season, and time of day. These signals have different auditory appearances from the village longhouse, from the forest edge, from the gardens, from the

trails, or from forest depths. Rather than counting months or moons, Kaluli conceive seasons and cycles largely in terms of changes in vegetation, changes in bird presence, sounds of high and low water accumulation, or white water runoff in relation to rainfall. Numerous sounds then are continually available and interpreted by Kaluli as the clocks of quotidian reality in the forest [Feld 1984, 394].

For the Kaluli "sonic sensibility is basic to experiential truth" [Feld 1994]. Despite their keen appreciation of sonic specifics, the Kaluli conceived of all sounds as the same *type* of thing, whether made by biotic or abiotic agents, animal or human. In particular, they had no distinct word for "music." For them, "acquisition of skill in song, weeping, whooping, cheering, humming, drumming, bird call and animal identification, as well as environmental sound recognition, are all fundamentally related" [Feld 1984, 389].

3.6 Walking and place-making

Though the Kaluli might be an extreme example of place-making through sound, this relationship is not unknown in Western European traditions. For example, it manifests in walking, an activity that encourages engagement with one's own body, as it facilitates close encounters with environments both natural and constructed. Rebecca Solnit's *Wanderlust* provides a wonderfully nuanced reading of the various purposes to which walking has been put, and how this activity has been framed through cultural prohibitions, aesthetics, and morality. She credits Wordsworth with founding "the whole lineage of those who walk for its own sake, and for the pleasure of being in the landscape" [Solnit 2014, 82].

Urban walking finds its exemplar in Walter Benjamin's study of Charles Baudelaire. He is described as a *flâneur*, a person of leisure and means, who wanders the arcades of Paris. This engagement with the city is special in having no specific goal, being conducted without maps or guides. But this should not be taken as an innocent attempt to engage with the urban environment on its own terms. Rather, the *flâneur* explicitly formulates walking as a means of subverting the sensory bombardment of capitalist excess.

(T)he man of leisure can indulge in the perambulations of the flâneur only if as such he is already out of place. He is as much out of place in an atmosphere of complete leisure as in the feverish turmoil of the city [Benjamin 1955, 172-3].

This perambulation was taken up by the Situationists in the form of the *dérive*, defined by Guy Debord as "a mode of experimental behaviour linked to the conditions of urban society: a technique of rapid passage through varied ambiances" [Debord 1958]. The aim of this "drift" is to derive a new personal experience in an otherwise oppressive urban environment, by means both disruptive and revolutionary.

These excursions are like the *peripli*, in that specific destinations and social encounters are not entirely known beforehand, even if the scope of such activities is constrained. Though Odysseus had a specific goal in mind, his route was circuitous in the extreme, directed both by his own intent and that of various interfering gods. In short, *topos* is less concerned with directed travel than peripatetic wanderings. It is the experiential nature of the journey itself, its openness to all the senses, and the physical actions required, that marks out this approach to place.

It is this exact meaning of *topos* that will be used in the remainder of this study. But it should be explicitly noted that for most contemporary writers "topos" is synonymous with "place" in the main. It does not necessarily have the same relationship to a journeying subjectivity. This difference and specificity will be emphasised by retaining the italicized form of the word.

3.7 Tuan and topophilia

Topophilia is a neologism that has achieved a degree of currency in contemporary writings about place. Despite this, the term is not found in the Oxford English dictionary, though perhaps this is only a matter of time and further adoption. The next three sections will present an overview of this concept, using the work of Yi-Fu Tuan (1930–), Gaston Bachelard (1884–1962), and W. H. Auden (1907–1973). Each used the term topophilia having believed they invented it. And each used it in different ways, which are worth surveying.

In 1974 Yi-Fu Tuan published *Topophilia: A Study of Environmental Perception, Attitudes and Values* to "unexpected success" and acclaim [Tuan 1990, xii]. The book proposed a humanist ethos, an ontological approach to geography

based on affect, how humans emotionally respond to place. Writing in the preface to the 1990 edition, Tuan considered that the book "does – perhaps for the first time – present a general framework for discussing all the different ways that human beings can develop a love of place" [xii]. The foregrounding of the affective put Tuan "in opposition to the alienation produced by 'placeless' modern environments" [Duncan and Duncan 2001, 41]. This new "sense of place" became associated with the growing field of humanistic geography. Here, his influence could hardly be greater. Take the 2001 anthology *Texture of Place* as a typical example [Adams et al 2001]. Six of the chapters are indebted to Tuan and mention topophilia explicitly, as does the introduction [Duncan and Duncan 2001, 41; Howarth 2001, 61; Olwig 2001, 93; Relph 2001, 158; Cosgrove 2001, 326; Entrikin 2001, 430].

Tuan defined topophilia quite simply, as "the affective bond between people and place or setting" [Tuan 1990, 4]. He spent few words on the term itself; rather, topophilia seemed indicative of his project, an umbrella term that could be used to knit together the different topics he wished to consider.

He argued quite cogently that this bond varies greatly in intensity from individual to individual and that there is cross-cultural variation in its expression. Topophilia manifests itself most often in attachment to home places, places that vary in scale from the nation to the bedroom. Tuan suggests that such attachment can be based, among other things, upon memories or pride of ownership. He argues that in Europe and North America topophilia often takes the form of an aestheticization of place and landscape, that the aesthetic is one of the principal modes of relating to certain environments [Duncan and Duncan 2001, 41].

Sensory perception is primary in Tuan's formulation of place. After an introductory chapter, the book articulates "common traits in perception," considering vision, tactility, hearing, smell, and sensory integration in turn [Tuan 1990, 5-10]. The goal is to delimit the constraints on human perception while at the same time acknowledging that "[no] two persons see the same reality" [5]. Despite social variety, "human beings share common perceptions, a common world, by virtue of possessing similar organs" [5]. Although Tuan should be credited with exploring different sensory modalities, he falls into the ancient bias of priv-

ileging sight over sound when it comes to detail and acuity, reserving for sound the emotive domain.

The eyes gain far more precise and detailed information about the environment than the ears but we are usually more touched by what we hear than by what we see. The sound of rain pelting against leaves, the roll of thunder, the whistling of wind in tall grass, and the anguished cry excite us to a degree that visual imagery can seldom match. Music is for most people a stronger emotional experience than looking at pictures or scenery [8].

Tuan is making two different points, both of which are debatable. First, he supports his assertion that the eyes are "more precise and detailed" with reference to the range of frequencies humans can hear, relative to other animals. The upper range of hearing reaches "20,000 cycles per second" while cats and bats manage "50,000 and 120,000 cycles per second respectively" [8]. Three objections can be raised to this argument. First, in terms of a more appropriate logarithmic (musical) scale, this difference in range amounts to only two or three octaves on an existing 10 octave hearing range. Hence the magnitude is not nearly so great as the raw numbers in cycles per second make it appear. Second, this difference in extent says nothing about frequency discrimination, directionality, dynamic range (loudness), timbral discrimination, or other perceptual factors. In these areas, humans perform admirably well. Finally, do these figures compare poorly to vision? The frequencies of the visible spectrum range from approximately 400 to 800 nm (nanometres), a span of only one octave. Hence, one could make the opposite argument: that our hearing is ten time "better" than sight. But any such statement is nonsensical; measurements of the range, scale, or acuity of a sense does not necessarily translate into the experiential.

Tuan's second point is that music provides a "stronger emotional experience than looking at pictures or scenery." Yet a photo of a lost loved one, the first crayon drawing from a child, photographic documentation of a wartime atrocity – these are but a few cases that might argue against such a simplistic formulation.

This passage has been treated in some detail since it bears on Tuan's approach in general. He is too willing to make simplistic assertions that do not bear scrutiny. These are not necessarily requirements for the points he wishes to

make, but instead reflect his methodology, which follows a structuralist project of classification, compartmentalisation, and dichotomy. Consider the claim of human exceptionalism that opens chapter two.

The tendency in modern research is to narrow the gap between human and animal mental processes. The gap remains because human beings boast a highly developed capacity for symbolic behavior. An abstract language of signs and symbols is unique to the species [13].

Here Tuan makes a reactionary statement against "modern research," asserting the primacy of human abilities to deal with abstractions. This seems too strong a statement, considering the facts of tool use among birds, language acquisition in chimpanzees, and so on. Even if Tuan's statement can be taken as true, it contradicts the argument he wishes to develop in the following sections. He claims that "[t]he objects we perceive are commensurate with the size of our body, the acuity and range of our perceptual apparatus, and purpose" [14]. This is illustrated with examples from non-industrialised societies. But surely the extension of our symbolic realm into tools has extended the reach of our perceptual apparatus (pace Marshall McLuhan). Telescopes bring close the distant; microscopes magnify the small; the train reduces time travelled, hence compressing distance; telephones make instantaneous audio communication a reality. Resorting to the Kalahari Bushmen as exemplars of perception in a mediated world seems inappropriate. There seems to be a disjunction between the simplistic facts Tuan is willing to boldly state as universals and his desire to explicate a world in which "No two persons see the same reality" [5].

Again, this can be explained by the structuralist approach. Much of the book is dedicated to developing an account of perception in different cultures, related to the environment in which the peoples under consideration are found. The introduction to chapter six allows that "[t]he concepts 'culture' and 'environment' overlap" but then Tuan continues to treat them separately and without formal definition [59]. Though he explicitly acknowledges this artificial dichotomy, the extent to which he allows this over-simplification to shape his work is considerable [92]. This method only works, because of the limited definition of "environment" Tuan applies, which can be determined from the examples he uses. A section of chapter six addresses cultural attitudes towards mountains [70-74].

Chapter seven contains an extensive section on "riverine environments" [85-91]. In chapter nine the seashore, valleys, and islands are all considered in some detail [115-120]. It can be deduced that when using the term "environment," Tuan means only the gross physical landforms in which people live. So constrained, his project of analysing how "environment" impacts "culture" is made possible. If environment had been taken to mean any subtle inflections of milieu, the analysis could not have been as decisive. Dichotomies between the interpretation of different cultures (Chinese versus European views of mountains, for example) would not have been as stark.

The next term that requires explanation is "perception." Chapter seven typifies Tuan's approach to this topic. It opens with a discussion of rectilinear shapes, again creating a simple dichotomy. This time the division is between the environments of "primitive cultures," containing rounded shapes, and the "rectangular environment" of cities [75-76]. For Tuan, perception is structured and quantifiable. His definition is illuminating:

Perception is both the response of the senses to external stimuli and purposeful activity in which certain phenomena are clearly registered while others recede in the shade or are blocked out. Much of what we perceive has value for us, for biological survival, and for providing certain satisfactions that are rooted in culture [4].

Tuan follows phenomenology as far as being interested in qualia and how these form experience. But his understanding of perception is distal, situated firmly in the senses themselves and their response to "external stimuli." Tuan is an empiricist in his appeal to quantitative facts in the world, for example, the frequency range of human hearing. Though he is willing to admit the "purposeful" aspects of perception, he does not address this aspect in any detail, or give this sufficient weight. This passage demonstrates that for Tuan, qualia translate directly into value, and the results can be known, for a given culture. If Tuan is a phenomenologist, he practices a very different phenomenology to the existential and philosophical discipline discussed elsewhere in this paper.

Throughout most of the book, Tuan relies on examples from pre-industrial, traditional societies, no doubt because it is easier to make simple, totalising statements about cultures other than one's own, which can be more readily viewed in simple terms. When he returns to explicitly consider topophilia (in

chapter eight, "topophilia and environment"), he relates love of place to aesthetic evaluation, familiarity, and patriotism [92-112]. But the longest sections are reserved for considerations of nature, the countryside, wilderness, and other aspects of non-urban or pre-urban environs. Even within an industrial culture, love of place is often reserved for these indicators of nature and pre-industrialisation. By making this his main point, Tuan firmly associates himself with the Romantics (whose work is explicitly referenced throughout³⁰).

Despite any shortcomings in terms of phenomenology, Tuan has contributed significantly to understandings of topophilia. However, Tuan's structuralist project may not be compatible with some of the other phenomenologists under consideration. The following section will continue examining the concept of topophilia through a writer who could not be more different to Tuan.

3.8 Bachelard and topophilia

A casual reader of human geography would be forgiven for thinking Tuan invented the term topophilia. But in *The Poetics of Space*, first published 1958, French phenomenologist Gaston Bachelard writes explicitly about this word. The book is not obscure, and in fact has been as influential as Tuan's work, though in different fields of study. It's commonly referenced in phenomenological works and more recent popular studies of place, for example Robert Mc-Farlane's *Landmarks* [2016, 323]. So, it must remain an open question as to whether Tuan was aware of any precedent; the most that can be said is that he did not make explicit reference to any prior work.

The initial definition has something in common with Tuan, since both are explicitly using the Greek roots for (specific) place and love.

[T]he images I want to examine are the quite simple images of *felicitous space*. In this orientation, these investigations would deserve to be called *topophilia*. They seek to determine the human value of the sorts of space that may be grasped, that may be defended against adverse forces, the space that we love [Bachelard 1994, xxxv].

³⁰ Among other writers, there are references to William Wordsworth [94], Thomas Traherne [98], and Emily Dickinson [102].

Despite a common etymology, Bachelard's practice could not be more different than Tuan's. *The Poetics of Space* is bereft of tables, diagrams, or other visual comparisons. It does not map cultural meanings into neat compartments, but instead explores the poetic image as an integral *being* with a life of its own [xvi]. The introduction states clearly that the subject of the study will be ontology, but not the ontology of a subject, rather the ontology of the poetic image itself. This is a difficult course, and the book takes its own time to develop the requisite language, shading in presence rather than delimiting and categorising.

Much of the study is devoted to the house, as home for the imagination. The first two chapters, explicitly devoted to this subject, comprise fully one-third of the book's length. Even thereafter the chapters on "Drawers, Chests and Wardrobes," "Nests," "Shells," and "Corners" must be read in terms of detailing residential spaces. Why, when the book has the more generalised title of *The Poetics of Space*, is this subject of the house so central?

The house, quite obviously, is a privileged entity for a phenomenological study of the intimate values of inside space, provided, of course, that we take it in both its unity and its complexity, and endeavor to integrate all the special values in one fundamental value. For the house furnishes us dispersed images and a body of images at the same time. In both cases, I shall prove that imagination augments the values of reality [3].

It is the fact of intimacy that privileges the house, that specific place in which we, as individuated beings, grew up and apprehended the world³¹. Yet Bachelard is not interested in familial life or sociology. He does not write of family relationships, developmental psychology, or other processes that we might otherwise expect in such a study. Indeed, though he relies on psychological research, he disparages psychology as a limited disciple, characterised as "timidly causal" [xxiv], ignorant of poetics [xxix, xxxiv], concerned only with "the mundanely unhappy soul" [xxx] rather than the positive [89]. The house is a space of intimacy and an entire cosmos for an individual subjectivity. Bachelard explores this idea

³¹ It is certainly the case that Bachelard is assuming a certain bourgeois upbringing in which a family had their own house, a plenitude of "nooks and corners," attics and cellars, that was not shared [15].

through countless literary references (Rilke, Rimbaud, and Baudelaire being some of the more prominent).

There are also veiled references to other phenomenologists. The phrase "Das Dasein ist rund" is quoted from Karl Jaspers [134]. But there is no direct reference to Heidegger, even though that writer's ethos of care and formulation of dwelling are very much incorporated into *The Poetics of Space* (chapter 4.4).

For Bachelard the house is not important as a container for the development of psychology. Instead, the house functions as a site of imagination, of the poetic process. It is hence not the house itself, as physical object, or social space, that is central to the book, but rather the presence of the house in the symbolic realm. In the second passage where he explicitly evokes *topos*, Bachelard writes that "the house image would appear to have become the topography of our intimate being" [xxxv]. The words "image" and "appear" emphasise the phenomenological orientation of this statement. A further passage emphasises this point, by bringing in the subject of reverie.

[T]he house shelters daydreaming, the house protects the dreamer, the house allows one to dream in peace. Thought and experience are not the only things that sanction human values. The values that belong to daydreaming mark humanity in its depths. Daydreaming even has a privilege of autovalorization. It derives direct pleasure from its own being. Therefore, the places in which we have experienced daydreaming reconstitute themselves in a new daydream, and it is because our memories of former dwelling-places are relived as daydreams that these dwelling-places of the past remain in us for all time [6].

Bachelard's use of "dwelling-places" is an implicit evocation of Heidegger, even if that name does not occur at any point in the text. In the chapter on roundness, Bachelard will write of *Da-sein*, and though he does so through a passage from Karl Jaspers, this with the assumption of the reader's familiarity with the larger Heideggarian context [232-9]. The word "dwelling" is itself used countless times throughout the book. Sometimes, the use is a simple description of a structure where people live, and at others it retains a rich analogic evocation. For example: "But we still have books, and they give our day-dreams countless dwelling-places" [25]. Bachelard's "dwelling" extends Heidegger's *be*-

ing-in-the-world, to a mode of *being-in-the-imagination*. And it is this that relates our dwelling in intimate spaces with poetry.

The great function of poetry is to give us back the situations of our dreams. The house we were born in is more than an embodiment of home, it is also an embodiment of dreams. Each one of its nooks and corners was a resting-place for daydreaming [15].

Heidegger's formulation will be explored in more detail in the next chapter. What must be established here, to ground the use of Bachelard in the current study, is the affinity Bachelard has for the auditory. This is most profoundly stated in the introduction, in a passage that rewards close examination.

Very often, then, it is in the opposite of causality, that is, in reverberation, which has been so subtly analyzed by Minkowski, that I think we find the real measure of the being of a poetic image. In this reverberation, the poetic image will have a sonority of being. The poet speaks on the threshold of being. Therefore, in order to determine the being of an image, we shall have to experience its reverberation in the manner of Minkowski's phenomenology [xvi].

Eugène Minkowski (1885-1972) was a French psychiatrist who based his methods in phenomenology [Urfer 2001, 279]. Minkowski was profoundly influenced by Henri Bergson's doctoral dissertation in philosophy, in particular his emphasis on consciousness as a continuing process of becoming (*devenir*) [280]. Bergson's phenomenology was rooted in *durée*, a term that expressed the unfolding experience of being in time. This was taken up by Minkowski in a section on reverberation in his *Vers une cosmologie* [1936]³². Minkowski describes reverberation as "an essential phenomenon of life," while at the same time using the term explicitly as a metaphor [Bouchette 2014, 1].

[W]e would see the world come to life and fill itself, apart from any instrument, apart from any physical property, with penetrating and deep waves which, in order not to be sonorous in the sensorial

³² Minkowski's book has not been translated into English, so the editor of *The Poetics* of *Space* provides a brief excerpt in a footnote. A more substantial translation of this passage, by independent researcher Deborah Bouchette, will be referenced here.

sense of the word, will not be any less harmonious, echoic, melodic, susceptible to determine all the tonality of life. And this life itself will reverberate, to the depth of its being, through contact with these waves, sonorous and silent at the same time, will permeate within, will vibrate in unison with them, will live through their life, intermingling with them all the while [1].

Reverberation, then, is the very process by which life is filled with phenomena. Because sound touches on and is changed by everything it encounters, through this process of reverberation, it is impossible to separate the sonic event from our perception of the event, nor indeed our perception of the environment which houses this event.

For what is at the forefront, is neither the propagation of the sound, nor the sound progressively diminishing as it moves away from the sonorous spring, but, on the contrary, the event of the sound, an abstraction made to fit the breath of the horn, in reflecting and in echoing in all parts, filling the forest, by making it quiver and vibrate in unison with it. Thus the plenitude (fullness) has here a pure qualitative character. It would not be a question of filling more or less, nor of traversing the intermediate stages, nor of overflowing. There does not exist any direct relationship between the fullness and the intensity of sound. One murmur hardly perceptible can fill the silence of the night[...] [2]

This description finds an echo in the phenomenology of Dallas Simpson, who also describes a listening context that is highly referential. For Simpson the propagation of sound events occurs through a "principle of potentialities" [Simpson 2016a]. His concept of the "cascade" will be explained in chapter 5.8.

3.9 Auden and topophilia

The third historical invention of "topophilia" precedent has largely been ignored. Harriet Atkinson, writing about the impact of the 1951 Festival of Britain, notes that the designers were "shaped by a particular attachment to landscape and environment, a topophilia" [Atkinson 2012, 6]. She traces this term to W. H. Auden's introduction to *Slick But Not Streamlined*, a book of poetry by John Betjeman. Published in 1947, this seems to be the earliest use of topophilia. The

context marks this term as poetic in origin, and so compatible with Bachelard's thesis in that regard. However, Auden's usage is quite different.

Topophilia differs from a farmer's love of his home soil and the litterateur's fussy regional patriotism in that it is not possessive or limited to any one locality; the practised topophil can operate in a district he has never visited before. On the other hand, it has little in common with nature love. Wild or unhumanised nature holds no charms for the average topophil because it is lacking in history; (the exception which proves the rule is the geographic topophil). At the same time, though history manifested by objects is essential, the quantity of the history and the quality of the object are irrelevant; a branch railroad is as valuable as a Roman wall, a neo-Tudor teashop as interesting as a Gothic cathedral [Auden 1947, 11]³³.

Topophilia in this passage is a generalised ability to fixate on *place itself* as signifier, rather than an attraction to a *specific* place. This definition is contrary to both Bachelard's highly subjective accounts of specific types of places, and Tuan's detailed analysis of particulars. Tuan would not recognise a topophilia that "has little in common with nature love," since that is the primary aspect he considers (only late in his book extending the term to cityscapes). Auden explicitly states the opposite:

The American landscape, therefore, must probably be left to the farmers and the nature lovers, and topophilia will flourish chiefly in the cities where it is possible to walk; moreover it is more likely to be found among ward bosses than among literary men [Auden 1947, 12].

Auden's text is brief and was written to frame the work of one particular poet. The fact that this introduction has not resonated with subsequent writers is therefore unsurprising. The most that can be determined is that Auden's topophilia conveys an interest in historicity and the love of place as a concept, rather than an interest or engagement with specific places. His usage, contrary to those of Bachelard and Tuan (themselves very different) will not be used in the re-

³³ This passage, including the presence of a stray semicolon, is reproduced verbatim.

mainder of this paper. Nonetheless, it was presented here, as a previously unexamined definition, and for the sake of completeness.

3.10 Conclusion

This section will recapitulate the key characteristics of the four models of place (*geos*, *topos*, *choros*, *khōros*) while placing these in the context of sonic art practice. Specifically, *geos* and *topos* have been expressed in activities such as sound mapping and soundwalking, as developed by Schafer and the World Soundscape Project (WSP)³⁴.

The discipline of geography studies the world and its effects. The word itself embeds a definition of place as *geos*, as derived from the algorithms and measurements in Ptolemy's *Geographica*. This approach to place requires *episkopein*, an elevated viewpoint from a position of power. As will be documented in chapter 3.2, this approach found full expression in Alberti's perspectivism, a geometric scheme which places the viewer in a strict topological relationship to their subject, and in Descartes' principle of rationalism, which reduced place to a mere locus in grid-bound space. In this way, *geos* initiated the long-standing dominance of the visual sense over the other sensory modalities, a bias expressed through both language and epistemology. This model extends into sonic practice, most evident in activities that involve mapping.

The WSP initiated the practice of sound mapping, the canonical example being a sound pressure map of Stanley Park (Vancouver, British Columbia) [Schafer 1994, appendix one]. A sound event map and other graphical representations are also included in the same volume. Projects such as *European Sound Diary* and *Five Village Soundscapes* made extensive use of these techniques [Schafer 1977a; Schafer 1977b]. The principle of *episkopein* was embedded in this practice from the beginning. In a section of *The Soundscape* entitled

³⁴ In 1969 Schafer became professor in Department of Communications at Simon Fraser University, British Columbia, Canada [Torigoe 1982, 43] and established The World Soundscape Project, initially as a personal initiative [45-6]. In September 1971 a Sonic Research Studio was created to facilitate activities [50-1]. In spring 1972 Howard Broomfield and Bruce Davis joined Schafer's team [51]. Peter Huse, Barry Truax, and Hildegard Westerkamp also became core members of the WSP, working on various projects (field recording, composition, research, dissemination) until the *de facto* dissolution of the WSP in 1977 [76].

"Aerial Sonography," Schafer declares that "[t]he best way to appreciate a field situation is to get above it" [Schafer 1994, 131]. The tabulation and visualisation of sonic events as data acted as a template for future work in disciplines as diverse as ecology, noise abatement, and auditory display³⁵. The popularity of the World Wide Web and access to shared cartographical tools (e.g. Google Maps) encouraged the development of online sound maps, some of the earliest being representations of New York City, Toronto Island, and Montréal [NYSAE 2006; Sinclair 2004; Stein and Stein 2008].

These projects generally following Schafer in the desire to raise awareness of sonic environments, with an emphasis on encouraging social interaction through sound. For example, the goals of the Portland Sound Map are stated as follows:

This sound map serves as a means to increase the public's sound-scape awareness and profile the acoustic uniqueness and character of the city's neighborhoods, spaces and places. In addition, this map functions as an audible time capsule with the goal of preserving sounds before they become extinct. Sound maps are in many ways the most effective archival tool of the cultural, historical, artistic, political and technological characteristics of the soundscape since the soundscape is constantly changing. Soundmapping promotes active listening and the Portland Sound Map offers an interface for users to explore and listen to the sonic fabric of the city with purpose and attention that is not often given to sound phenomena of our environment [Williams and Stein 2013].

There are tensions here between the data gathering and visualisation functions of a sound map and the degree to which the resulting "archival tool" can promote "active listening" in a social situation. It remains an open question the degree to which sound mapping is an aesthetic activity. But it should be noted that Max Stein, the instigator for the Montréal Sound Map, Portland Sound Map

³⁵ This oxymoron demonstrates the degree to which sound has been cast within a template defined by the visual. An early chapter on sound mapping struck an almost apologetic tone for being included in a book entitled *Visualization in Modern Cartography* [Krygier 1994].

and many others³⁶, does not describe himself as an archivist, ecologist, or geographer, but rather a "sound + media artist" [Stein 2019]. Sound mapping might indeed fall within the scope of environmental composition, as this term might be broadly construed.

The second model of place known to the Ancients was the *topos* of the *periplis*, an approach to places predicated on the perambulations of an individuated subjectivity. It is the experiential nature of the journey itself, its reliance on an integrated sensorium, that marks out *topos*. This approach is demonstrated by the soundwalk, though Schafer's original definition is, somewhat unexpectedly, also a form of map.

The soundwalk is an exploration of the soundscape of a given area using a score as a guide. The score consists of a map, drawing the listener's attention to unusual sounds and ambiances to be heard along the way [Schafer 1994, 213].

However, this definition is unpopular, in the sense that few have followed up on its possibilities. Instead, most practitioners follow WSP member Hildegard Westerkamp in defining a soundwalk as "any excursion whose main purpose is listening to the environment" [Westerkamp 2001]. (Schafer terms this activity a "listening walk" [212].) In 1978 Westerkamp began a radio program named Soundwalking, broadcast on Vancouver Cooperative Radio [McCartney 1999, 226]. This show was comprised of field recordings made throughout Vancouver, traces of places she had encountered through her own subjectivity. Sometimes these were overlaid with self-conscious commentary on the recording process or phenomenology of listening. A prime example was formalised as the composition Kits Beach Soundwalk (1989). Westerkamp also leads group soundwalks, where she acts as a sonic guide to places, sometimes explicitly pointing out acoustic features, at other times promoting open listening, free of constraints. The social aspect of such walks is paramount. But even a solo walk must recognise the already-constituted social instantiated in places, most especially urban places, with their predetermined functions.

³⁶ Stein has also produced sound maps for the SF Bay area, Tsikaya (Angola), Belfast, Stockholm, Inukjuak, and other places. These are created in collaboration with local agencies, and so the reasons and goals for each project may differ.

The salient concern in soundwalking is everyday life. Bringing into play the everyday suggests a shared tacit knowledge, whilst validating individual's behaviour, perception and interpretation [Drever 2009, 164].

These characteristics of the soundwalk could not be more different from the measurements, tabulation, categorisation, and comparisons of sound mapping, as practised by the WSP. The fact that there are such obvious distinctions between outcomes demonstrates the utility of recognising place models. Different models encourage different activities and results. *Geos* tends to structuralist projects of knowledge using visual representation. These encourage universalism, the premise that the same measurement methods and classification schemes can be applied to every place encountered. Whereas *topos* recognises the social formation of knowledge from individual expressions with, and within, that place. Knowledge encountered in one place might not be applicable to another place³⁷. Hence soundwalking emphasises the receptive characteristics of the listener. And though Schafer might provide a suite of tools (the "ear cleaning" exercises) that can be applied in each instance, these are approaches, techniques, or personal disciplines, not categorisation structures or nominative schema.

Compared to the rich sonic explorations of *geos* and *topos*, that have been ongoing for some decades, the concepts of *choros* and *khōros* remained relatively under-developed in sonic practice. The model of *choros* defines an approach to place sensitive to psychic zones of influence and mutable presence within porous boundaries. We find *choros* expressed in the *klimata*, regions of difference that define community.

The word *chora* ($\chi\dot{\omega}\rho\alpha$) was richly polysemous in Hellenistic culture, variously meaning "place occupied by someone, country, inhabited place, marked place, rank, post, assigned position, territory, or region" [Derrida 1995, 109]. So, it is not surprising to find it used by Plato in a very different manner. As both receptacle and material, region and form, $kh\bar{o}ros$ is a site of instability and un-

³⁷ Again, *The Odyssey* provides wonderful examples of this. "Locations" such as Scylla are defined anthropomorphically, or in relationship to other landmarks (Charybdis). The emphasis is on how the individual encounters these as challenges in the world. Their location within the overall journey is not defined positionally.

knowability. Neither entirely noun or verb, container or contained, *khōros* gives place to things, through an ongoing act of creation [Derrida 1995, 95].

The central thesis of this paper is that *geos*, *topos*, *choros* (as metaphorical exchange), and *khōros* (as generative site) together provide a rich framework for considering how composers approach recording a place. The neglected terms in this composite have much to offer both the practice of field recording and the subsequent analysis of environmental composition. This is the case not only because *topos*, *choros*, and *khōros* have been obscured by a dominant approach. Rather, it is the inter-relationship of the four models that provides a rich descriptive framework. Though care has been taken in this chapter to distinguish the terms, it should now be clear that the primary motivation is not to set these four definitions in opposition to one another, but rather to encourage pluralistic engagements with place that borrow from each concept as required, within a context that recognises that this very attention to place is of primary importance.



Chapter 4: The phenomenology of place

4.1 Introduction

The aim of this chapter is to provide a historical survey of important contributions to the phenomenology of place. These have been chosen so that they contribute towards a *platial* understanding, a term that will be defined near the end of the chapter. The sections do not consider writers in strict chronological order, but rather follow the flow of the argument.

Section two begins with René Descartes. His rationalist formulation of space and place requires close attention, due to its profound and far-reaching impact on Western philosophy. Many important phenomenological practices, including those of Heidegger and Merleau-Ponty, have been shaped by his work, even if in opposition. Section two defines Cartesian rationalism, as it will be used in this study, through a close reading of key sections of *Principles of Philo sophy*.

Section three considers the work of Alberti and the birth of perspective in the fifteenth century. His methods for painting ushered in an ocularcentrism that, cemented by modernism, become the dominant metaphor in philosophical investigation and language. Even now this persists, though a movement in the late twentieth-century towards the sonic arts has given contemporary practitioners alternative formulations. This "sonic turn" will be described through the terminology of Marshall McLuhan. Sections two and three act as a frame and foil for what will come.

Section four focuses attention on Martin Heidegger's phenomenology, first by defining phenomenology itself on his terms. Consideration is given to Da-sein, his foundational concept of being-in-the-world, especially regarding how existential space is created by the twin processes of de-distancing and orientation. Attention then turns to Heidegger's concept of *Buan* or "dwelling," as a relational model binding personal identity with place. Reading his "Building Dwelling Thinking" through Jeff Malpas highlights the fact that such a relationship (person to place) is not static, tending towards nostalgia of place and fixed identity-formation, but instead dynamic, always in the process of being negotiated through difference and differentiation. This thought provides the core for Merleau-Ponty, Ingold, and others to follow.

Husserl and the phenomenological reduction will be discussed in section five, through the lens of Pierre Schaeffer. This highlights the topic of musical composition, which will be central to the remaining chapters in this study. It's impossible to over-estimate the importance of Schaeffer on twentieth-century music, as he provided both the methods of *musique concrète* and the theory of acousmatic listening. This section will examine his acousmatic reduction as an instance of Husserl's phenomenological reduction. Key to this is the *epoché*, the "bracketing" of the world that suspends judgement on how phenomena are related to empirical reality.

Husserl's *epoché* promotes a transcendental phenomenology that was explicitly rejected by Merleau-Ponty. Section six will show how *Phenomenology of Perception* rejects both rationalism and idealism (Descartes and Husserl), instead developing Heidegger into the core concept of *body-in-the-world*. For Merleau-Ponty space is not universal but relational. The phenomenal field is not a matter of ideation but is instead the flow of experience. Place is co-extensive with the body; our experience of a place and the place itself are created through a mutual process of accretion and differentiation.

Section seven proposes the term "platial" to knit together the preceding philosophies into a theory that prioritises our entanglements with place over any view of space as object container. The proposition that place is prior to space as "the first of all things" is in direct opposition to the models of Descartes, Leibnitz, et. al. Prior use of this term is investigated and happily turns up in an essay by Heidegger, which considers some of the same Greek concepts of place discussed in the previous chapter. Since Edward Casey has formulated a similar theory under the name of the "Archytian Axiom," due attention is given the textual support for that moniker. The platial model is "common ground" for many of the writers (Heidegger, Bachelard, Merleau-Ponty, Ingold) discussed in this study.

Following Heidegger, Tim Ingold develops a definition of landscape as dwelling place. Section eight explores his important contributions, made from the perspective of anthropology and human geography. For Ingold, a place owes its character to the experiences it affords to those who spend time there – to the sights, sounds and smells that constitute its specific ambience. And these, in turn, depend on the kinds of activities in which its inhabitants engage. It is from this relational context of people's engagement with the world, in the activity of dwelling, that each place draws its unique significance. Central to Ingold's thesis

is an integrated view of the senses. The conclusion will review platial thinking in the sonic arts.

4.2 Space and place in Descartes

The influential ideas of René Descartes (1596–1650) deserve attention before other thinkers, if only because his rationalism formed the bedrock of modern thought, providing a philosophy that remains dominant in the popular imagination. Descartes' contributions will be described through close reading of key passages, cleaving to interpretations particularly useful to the argument developed herein.

Descartes' *Principles of Philosophy*³⁸, published first in Latin as *Principia philosophiae* (1644), was the summation of his thinking on nature and its laws [Descartes 1983]. It was the first comprehensive account of the cosmos as mechanism, and is generally considered the founding text of modern physics [Slowik 2017]. *Principles of Philosophy* rejected the Aristotelian ontology of form and matter, along with concomitant teleological explanations. Nonetheless, Descartes continued the "isomorphism thesis" of Aristotle, declared in *Physics* IV and VI, which holds that "space, time and motion are continuous magnitudes, which are divisible into ever divisible parts" [Palmerino 2011, 299]. Hence, Descartes' book is more of a bridge *towards* the modern than it is a total break with Aristotelian thinking.

Matter is conceptualised in two categories: thought and extension.

I do not recognize more than two principal kinds of things: one is intellectual or cogitative things, that is, things pertaining to the mind or to thinking substance; and the other, material things, or things pertaining to extended substance or body. Perception, volition, and all modes of perceiving and willing pertain to thinking substance; while size (or extension in length, width, and depth), figure, motion, situation, divisibility of its parts, and such, pertain to extended substance [Descartes 1983, 21; I.48].

³⁸ References to this volume will include both the page number in the Miller and Miller translation [Descartes 1983], and Descartes' own section and paragraph scheme.

This key principle was important enough to be repeated three paragraphs later, in starker terms:

And substance is indeed known by any attribute [of it]; but each substance has only one principal property which constitutes its nature and essence, and to which all the other properties are related. Thus, extension in length, breadth, and depth constitutes the nature of corporeal substance; and thought constitutes the nature of thinking substance [23; I.53].

And what of the other qualities of a substance that we might perceive, for example colour? According to Descartes, colour is not in the nature of a body because we would still perceive the body if its colour was stripped away, rendering it transparent [44; II.11]. Likewise, hardness is not in the nature of a body since "our senses tell us nothing about it except that the parts of hard bodies resist the movement of our hands when they encounter them"³⁹ [40; II.4]. To a contemporary sensibility, this seems like a strange contradiction. Apparently, for Descartes, the tactile is in a category outside our senses, since touching tells us nothing about a body. Similarly, the weight of a substance and other attributes are not indicative of the body itself. "[T]he nature of body does not consist in weight, hardness, color, or other similar properties; but in extension alone" [40; II.4]. This argument is later applied to space itself, through a leap in logic.

For then we shall clearly notice that absolutely nothing remains in our idea of the stone except that {we distinctly perceive that} it is something extended in length, breadth, and depth; and this fact is also included in our idea of space, and not only of space which is full of bodies, but also of space which is called a void [44; II.11].

The extension of space occupied by a body is exactly the same as the extension of the body itself [43-44; II.10]. Hence, space and the body that fills this space both have the same essential nature. Before continuing, it should be clarified what Descartes means by "void," since he follows Aristotle in not believing in vacuum as absence of substance.

³⁹ This passage clearly indicates the low esteem in which non-visual senses were held by Descartes. This ocularcentrism will be examined in section 3.

That a vacuum in the philosophical sense of the term (that is, a space in which there is absolutely no [material] substance) cannot exist is evident from the fact that the extension of space, or of internal place, does not differ from the extension of body. From the sole fact that a body is extended in length, breadth, and depth; we rightly conclude that it is a substance: because it is entirely contradictory for that which is nothing to possess extension. And the same must also be concluded about space which is said to be empty: that, since it certainly has extension, there must necessarily also be substance in it [46-7; II.16].

Space is, like a body, only *extensio*. Since bodies are comprised of something, space must be comprised of something, and hence cannot be a void. This argument would appear to reduce space to bodies, making the two terms cognate. But care must be taken in judging this argument too abruptly. Descartes originally wrote his treatise in Latin, and in fact used the term *spatium*, not the English "space." These terms both find their root in the Greek *stadion*, which is a standard of length [Malpas 2004, 23]. Descartes is true to this meaning, in that measurable dimensionality makes up his *spatium*. Cartesian *spatium* is everywhere the same, isometric and isotropic, having only the property of dimensionality (extension). And *spatium* is filled with matter that likewise has extension (length, breadth, and depth), but no other essential properties. This is the very meaning of "Cartesian space." The Latin *extensio* will continue to be used to emphasise this usage.

What then of Cartesian *place*? Descartes uses two distinct phrases, "internal place" and "external place." In his argument against the existence of a vacuum, internal place means only the extension of a body (since the body *has* only *extensio*) [43; II.10]. Internal place equates more to volume than anything we would normally call place. Turning then to external place:

For in fact the names "place" or "space" do not signify a thing different from the body which is said to be in the place: but only designate its size, shape, and situation among other bodies. Moreover, in order to determine that situation we must take into account some other bodies which we consider to be motionless: and, depending on which bodies we consider, we can say that the same thing simultaneously changes and does not change its place. Thus, when a ship is heading out to sea, a person seated in the stern al-

ways remains in one place as far as the parts of the ship are concerned, for he maintains the same situation in relation to them [45; II.13].

Extensions in height, width, and breadth define size and shape. To this *extensio* is added "situation," which is explained as relative position between objects. It is only this measurable physical quantity that constitutes Cartesian place. In section II.14, Descartes reinforces this formulation. Place and space differ only in that the former "designates situation more specifically" [45; II.14]. Without strict measurement, place can be seen only as relatively changing distances between objects. Once a Cartesian coordinate grid is applied, place itself can be measured as *locus*.

Descartes' concept of external place is surprisingly like Aristotle's *topos*, since both are defined in terms of the boundary of a body [Algra 1997, 17]. But there is a key difference in priority. Aristotle's physics is platial. Place comes before matter and embraces bodies in its envelope. The universe is the interlocking relationship between places. Descartes' physics is spatial. Place is the product of the relationship between positions of bodies, themselves predicated on extensions in space. This is the fundamental break with Aristotle that ushered in centuries of spatial thinking.

This "narrowing in the understanding of both space and place" was taken up by subsequent writers [Malpas 2004, 28]. Isaac Newton (1642–1726) wrote: "Place is a part of space which a body takes up. I say a part of space; not the situation, nor the external surface of a body" [28]. But while Newton maintained that space and time are actual entities, John Locke (1632–1704) and Gottfried Leibniz (1646–1716) took the relationalist model to its extreme, asserting that space and time were relationships *between* entities, or indeed were formed by entities. For them, "what matters most is not the size or shape of space, its capacity or volume, but the exact positions of the items related to each other in a given spatial nexus" [Casey 1998, 182]. The Cartesian *extensio* at least gave entities volume as a primary attribute that might situate them. But for Locke and Leibniz "place and space were [...] collapsed into their common denominator, position" [Casey 1998, 183].

The influence of these ideas on philosophical thought and scientific methodology was immeasurable, developing the fundamental "characteristic of the modern Western mind" [Casey 1996, 19]. This formulation of place as locus, a loca-

tion identified by coordinates, will be referred to as "Cartesian" throughout this study. This label should be taken as shorthand for the relationalist model developed by Newton and Leibnitz from Descartes.

4.3 Ocularcentrism and the sonic turn

The prevailing bias of language in the Western tradition is to read the world through the ocular [Drobnick 2004b]. Our metaphors associate sight with truth and knowledge, while sound is deceptive and subservient. An "eyewitness" is to be trusted, whereas conversations merely "overheard" are suspect. We know that "seeing is believing" and use the phrase "I see" to denote understanding. As McLuhan noted, our wisest thinkers are called "visionaries," or "seers" [McLuhan and Fiore 2001, 117].

The root of this fixation might be traced to Leon Battista Alberti (1404–1472), a fifteenth-century Italian who wrote on grammar, cryptography, and architecture. His De Pictura (1435), variously published in Italian and Latin, is one of the foremost volumes on painting, the first to consider "composition" as an element of this art, the first to posit a "phenomenological approach to painting as the discipline of the visible" [Ruffini 2011, 4]. Alberti focuses attention on the plane, on how a perspectival view situates the viewer at a fixed point in a strict relational topology to the painting. He wrote that "painting is nothing but the intersection of the visual pyramid following a given distance, a fixed centre and a certain lighting" [in Pallasmaa 2005, 26]. This emphasis became a dominant trope in subsequent art and architecture. The complex system of architectural plans, elevations, and projections that evolved from Alberti are, Auerbach emphasises, illusory devices that "only represent dimensionality" [Auerbach 2011, 8]. But these visual metaphors have proven so attractive that they have left little room for approaches befitting a more integrated sensorium. Alberti's perspectival view is

the prevailing condition in city planning, from the idealised town plans of the Renaissance to the Functionalist principles of zoning and planning that reflect the "hygiene of the optical." In particular, the contemporary city is increasingly the city of the eye, detached from the body by rapid motorised movement, or through the overall aerial grasp from an airplane [Pallasmaa, 29].

The partitioning of space into a rectangular grid is commonly called "Cartesian," after Descartes' coordinate system. But this was a technique devised earlier by Alberti. He used a *velo*, a lattice of netting, to render "any object that is round and in relief" as flat from the perspective of the viewer [Friedberg 2006, 39].

One of Alberti's most famous statements in *De Pictura* concerns the window. "On the surface on which I am going to paint, I draw a rectangle of whatever size I want, which I regard as an open window through which the subject to be painted is seen" [Masheck 1991, 35]. This has often been mistakenly interpreted to mean that a painting is a "window" out to some world the painter sees, either in their mind's eye, or literally through the opening. But this interpretation is problematic for several reasons, as Friedberg argues. First, there were no transparent glass windows in Alberti's time. Paint was used as fresco, applied directly to a wall surface. Neither were landscapes painted from the model of reality; that was a later innovation. Instead, contemporaries of Alberti crafted *historiae*, "imaginative narrative paintings of great events and classical heroes" [Friedberg 2006, 32].

Thus, the importance of Alberti's conception of the window lies not in the content, but how the picture/window acts to *frame a view*. The window does not specify what is being represented within the frame, so much as it specifies the spatial relationships and point-of-view to be adopted. In Friedberg's words, "Alberti's metaphorical 'window' was a framing device for the geometrics of his perspective formula" [35]. She traces how the predominance of this Renaissance view has deeply influenced our conceptualisation of television, cinema, and computer screens. All partake of what David Michael Levin has termed a "frontal ontology"; our orientation in the world is predicated on binocular vision [Pallasmaa 2005, 30]. This ocular hegemony persists in our touchscreens, mobile phones, and television media systems.

But recently there has also arisen a movement against Cartesian rationalism and Alberti's perspectivism. Visual art in the twentieth-century has actively reconfigured our perception of depth, vantage point, and the frame itself. The paintings of Joseph Mallard William Turner⁴⁰ continue the elimination of the picture frame and the vantage point begun in the Baroque era; the Impressionists abandon the boundary line, balanced framing and perspectival depth; Paul Cezanne aspires "to make visible how the world touches us"; Cubists abandon the single focal point, reactivate peripheral vision and reinforce haptic experience, whereas the colour field painters reject illusory depth in order to reinforce the presence of the painting itself as an iconic artifact and an autonomous reality [Pallasmaa 2005, 35].

Contemporaneous with changes in modern visual art were rapid developments in audio recording and playback technologies, as well as a relaxation of rules and normative behaviours surrounding music. As documented in section 1.3, the twentieth-century saw music breaking out of its constraints of content and formal modes of production. The introduction to the anthology *Audio Culture* provides a description of this sea change:

A new audio culture emerged in the late twentieth-century, a culture of musicians, composers, improvisors, sound artists, scholars, and listeners attentive to sonic substance, the act of listening, and the creative possibilities of sound recording, playback, and transmission. This culture of the ear has become particularly marked since the late 1990s, as evidenced by interrelated phenomena [Cox and Warner 2017, xiv].

Jim Drobnick has labelled this the "sonic turn" in the arts. In this new regime, practices of sound-making and listening affirm "sound's heterogeneous significance," reaching towards understandings the eye alone cannot attain [Drobnick 2004b, 10]. Volumes such as *Autumn Leaves* attest to the range of artistic practice through which sound is currently being interrogated [Carlyle 2007]. The diverse praxis of contemporary field recordists is revealed by the eighteen interviews collected for *In the Field* [Lane and Carlyle 2013].

The sonic turn had been anticipated in the 1960s by media theorist Marshall McLuhan (1911–1980). His famous phrase "the medium is the message" is generally misunderstood, and understandably so, since he was using both terms in

⁴⁰ Turner in particular has a bearing on material to be discussed in chapter six.

idiosyncratic fashion. Normative definitions would have it that a medium is some technological substrate, a carrier like radio or television. A message is either the informational content or its received meaning, depending on whether one follows an information theory or semiotic account. In this framework, McLuhan's statement appears nonsensical. But McLuhan had already explained in *Understanding Media* that "message" means "the change of scale or pace or pattern that [a technology] introduces into human affairs" [1994, 8] while a medium is "any extension of ourselves" [7]. Hence, the famous phrase is "merely" (McLuhan's own word) a declaration that technology should be studied for its impact on individual and society.

Technology cannot be considered apart from its societal context, even if there are no strictly causal relationships that would explain how a given technology might be patterned. Context is all-important to McLuhan's studies. His son, Eric McLuhan, has noted that the term "medium," as used in *Understanding Media*, is synonymous with usage of the term "milieu" [McLuhan 2011, 67]. This word is distinctive enough to avoid terms like "environment," already overburdened with meaning, while also avoiding some of McLuhan's less orthodox semiotics. We will return to this point in the conclusion of this chapter.

McLuhan fights against ocularcentrism by considering the tactile senses and hearing explicitly in his works. He notes that we encounter sounds as dispersed into a phenomenological field that foregrounds simultaneity and intimate interrelationships.

We hear sounds from everywhere, without ever having to focus. Sounds come from "above," from "below," from in "front" of us, from "behind" us, from our "right," from our "left." We can't shut out sound automatically. We simply are not equipped with earlids. Where a visual space is an organized continuum of a uniformed connected kind, the ear world is a world of simultaneous relationships [McLuhan and Fiore 2001, 111].

While recognising a "sonic turn," it's important to avoid establishing a facile dichotomy between the aural and the optical⁴¹. We cannot transcend the dia-

⁴¹ It is also useful to problematize normative ideas of sound as being immersive, direct, interior, tactile, event-based, etc. [Kim-Cohen 2016].

lectic that once held the visual to be superior by merely inverting the priority of the terms. Such a formulation ignores the inherent integrity of the phenomenological field, as demonstrated in cross-modal sensory "illusions," such as that of the ventriloquist⁴². This dialectic also over-simplifies hearing as a sense that utilises the ear alone, ignoring the embedded relationship of hearing in the haptic senses of vibration and touch. As Tim Ingold insists, our perception cannot be "sliced up along the lines of the sensory pathways," but rather must be considered as a whole [Ingold 2007a, 10]. This will be considered at greater length in chapter 3.8.

It would also be incorrect to assume that contemporary sonic activities are free of ocularcentrism or a frontal ontology. Indeed, many field recordists, including practitioners of acoustic ecology, follow Cartesian rationalism in viewing space as isometric, homogeneous, and universal. For them, space is an empty medium waiting to be filled with sonic events. Consider that sound itself is conventionally defined as a disturbance in an otherwise featureless medium. It follows that sounds can be catalogued as autonomous objects with independent qualities. We can measure which sounds are loudest, worry over the loss of soundmarks, complain about the dominance of "noise," and map sound events as though all other factors were equal. It is also true that the standard configuration for listening to recorded sound is "stereo," that is two loudspeakers placed in front of the listener. Even "surround" systems, such as those found at movie theatres, reinforce the dominance of a frontal ontology by situating the majority of the speakers, and the sonic material they bear, in the direction of the gaze. This issue will be revisited in the discussion of the binaural recordings of Dallas Simpson (chapter 5.5).

In short, it is not enough to overturn ocularcentrism by elevating the sonic to a heightened position of authority and truth value, even if this value is now to be located in the resonating body and not in the dissociated mind. A more radical sonic turn would also turn away from such narratives of hierarchy and exclusion. It is also incorrect to assume that, by the mere fact that they work with sonic material, a sound artist or field recordist might somehow be an exemplar of a philosophical shift away from Cartesian rationalism. Their practice must be

⁴² Even knowing that the ventriloquist is creating the vocalisations we hear, we "see" the sound as issuing from the mouth of the dummy.

examined more deeply, for structures and processes that speak to underlying philosophies. This is the goal of later chapters.

4.4 Martin Heidegger's phenomenology

The works of Martin Heidegger (1889–1976) present many problems, especially for those who read them in translation. He coined numerous neologisms and used commonplace words in a manner that contradicted or expanded their usual sense [Stambaugh 1996, xiii]. This section will provide an insight into Heidegger's philosophy, focusing on those aspects of his vast, detailed work most pertinent to developing a phenomenology of place. The section will begin by examining Heidegger's 1927 volume *Being and Time*, specifically Division 1. This work is generally considered one of the most significant texts of Continental Philosophy [Wheeler 2011, §1 ¶3]⁴³. Magda King will be the primary guide through this text, which will also use the work of Jeff Malpas and the entry in the *Stanford Encyclopedia of Philosophy*.

This section will present Heidegger's definition of phenomenology, before discussing Da-sein, that foundational idea of being; the concept of *being-in-the-world*, the spatial relationship of Da-sein to the world, and subjectivity. The discussion will then turn to a consideration of dwelling, by way of the talk "Building Dwelling Thinking" [Heidegger 2001]. Certain objections and shortcomings in Heidegger's work will then be addressed. The section concludes by aligning Heidegger's *space* with *place* as used more generally in this study.

For Heidegger, phenomenology was primarily a method of investigating "the guiding question of the meaning of being" [Heidegger 1996, 24]. This definition was distinct from Husserl, in that it doesn't distinguish *what* is to be investigated [King 2001, 109]. Heidegger's etymology of the Greek root of the word emphasises two meanings. First, "*phainomenon* means what shows itself, the self-showing, the manifest" [Heidegger 1996, 25]. Second, *phainomenon* means semblance, which emphasises the act of "self-showing" itself [29-31]. A phenomenon is the thing revealing itself, not mere "appearance," a veil with nothing

⁴³ Throughout this study, works without page numbers will be cited using section number and paragraph designations, where this significantly aids the reader. Given the sheer number of unpaginated sources, the usual citation standard of indicating "np" will be omitted, lest it become tiresome.

behind. This denies the "Kantian account, whereby we only grasp the appearances of things and not their real being" [Koskela 2012, 117]. For Heidegger, meaning must be found in the phenomena of the thing itself.

Things don't merely "appear," they make themselves manifest to a subject, the Da-sein. The declaration "Ontology is possible only as phenomenology" ties any knowledge of being to these observed phenomena [Heidegger 1996, 31]. Further, this phenomenological investigation is hermeneutic, meaning that it is constructed through *interpretation*, a word Heidegger italicises for emphasis [33]. In short, we are defined through the Da-sein's interpretation of phenomena in the world, as these are revealed to us by the things themselves.

To understand phenomenology we must hence turn to explicating this most famous neologism. Written as *Dasein*, the word might commonly be understood to a German-speaker as meaning "existence." But for Heidegger, with his preferred hyphen intact, this word is explicitly a compound of *sein*, meaning "to be," and *Da*, indicating a place [King 2001, 47]. The place in question has no definite location, so Da-sein can be understood as both "being-here" and "being-there" [48]. Da-sein is restricted to describing human beings, since, according to Heidegger, only humans have a reflexive awareness of the being of being. For this reason, existential inquiries apply only to humans, while the term "ontological" *can* be used to describe inquiries about the being of beings *other* than humans [43].

The place in which Da-sein is formed is of special importance to Heidegger, who uses the phrase *being-in-the-world* to describe these existential properties. Critically, this phrase must be understood as a unified term and not broken down into its linguistic components [Heidegger 1996, 49]. The world doesn't come first and then have Da-sein in it, since the world cannot be constituted without Da-sein. Neither is the "in" to be taken as a spatial predicate; it is instead an existential "in" [50]. Hence *being-in-the-world* contrasts quite starkly with the *res extensa* of Descartes (chapter 4.2). In fact, Heidegger reserves numerous pages to a discussion of the limitations of Cartesian thought [83-94].

Heidegger emphasises the "nearness" and "presence" of the encounters Dasein has with the world using the term "de-distancing" [97]. This process doesn't necessarily involve any reduction in measured distance, but rather expresses nearness in terms of availability for an activity. In our everyday lives we don't measure precisely, but instead use approximations. Even when using explicit

numbers, as in the phrase "it takes half an hour to get to the house" (Heidegger's example), the duration "is always interpreted in terms of familiar, everyday 'activities'" [98]. Again, this description denies any simple formulation of Cartesian space.

The second spatial characteristic of Da-sein is that of directionality. "As useful things, signs take over the giving of directions in a way which is explicit and easily handled" [100]. It is useful to read this in parallel with the previous discussion of *topos* as a wandering through places (chapter 3.5). *Periplis* are also unmeasured and unmeasurable encounters that intimately link the subject with the world with which it is entwined.

Such spatial relationships start from the body. In the first instance, things are oriented in terms of left and right [101]. For Heidegger, such orientations are not subjective but "in a world that is always already at hand." He uses an example from Kant, where a person encounters a darkened room filled with familiar objects. For our purposes this thought experiment is intriguing, since it removes the privileged sense of sight, in order to make a larger point about how we apprehend objects in the world. Kant used this example to demonstrate that "all orientation needs a 'subjective principle'," but Heidegger emphasises that there is no *a priori* "determinate character" before it is emplaced in the world [102]. Everyday objects are already in the world, and the way they can be discovered is inscribed in their readiness-to-hand, which includes how we are already accustomed to using them. The apple from the tree is "in itself" handy for eating, and this is discovered by Da-sein subjectively. We must be cautioned against dismissing such descriptions merely because they concern, and even prioritise, subjectivity.

It is only from long tradition and habit of thought that we almost automatically dismiss what we call "merely subjective" as untrue. If we could not discover things "subjectively" – if we could not let them touch us, concern us, be relevant to us – we could not discover them at all [King 2001, 72].

Here it might be relevant to emphasise the difference between the *ontic* and the *ontological*. The ontic domain characterises empirical things that exist in our experience. We can point to a large oak tree standing in a field. This tree exists as "a thing completely independent of us, a thing in its own right" [142]. It

sprouted before we were born, grew leaves for many seasons before we encountered it, and will out-live us. Its existence is in no way predicated on our subjectivity. The tree endures and changes. However, if we are not there to observe the tree, "it will no longer have the chance of manifesting itself as enduring and changing, that is, as being in time"⁴⁴. This manifesting is part of the ontological encounter with Da-sein, which concerns not just the simple fact of existence, but what it is to *be* in the world. This reading makes it clear that there is no need to fear that Heidegger's subjectivity results in any sort of denial of external reality. Quite the contrary.

On returning from this aside into subjectivity, a summary of Heidegger's approach to space is in order. As mentioned, existential space is created by two processes: de-distancing, which brings the world close to hand, and orientation or direction. These two operations occur within a "region" in which "the context of useful things at hand possibly belong" [Heidegger 1996, 103]. Da-sein *takes care* of things within a comprehensible and approachable region. This is done by *giving space*, "free[ing] things at hand for their spatiality." This formulation contrasts with prior definition of space, especially the universal *res extensa* of Descartes, in being *personal*, deriving from the individual and its community. Though he doesn't use the word, Heidegger is writing about a profoundly *intimate* exchange between the Da-sein and the world. This entangled relationship is comprised of mutual processes in which existent objects shape expectations about possible use, as concurrently prior knowledge of space and orientation frame how the Da-sein can possibly become an actant in its region. This formulation is key to how place will be conceived in this study.

Justification must now be provided for relating this theory to *place*, since *Being and Time* doesn't significantly employ the word. Instead, Heidegger uses a constellation of terms of his own invention, to express both space and region. Nonetheless, Heidegger is "one of the principal founders of such a mode of place-oriented thinking" [Malpas 2012, 6]. This statement encourages us to think that Heidegger's terminology can be mapped onto place without compromising his thought. For example, Section 24 of *Being and Time* provides a

⁴⁴ This passage uses the phrase "being in time" since it is a gloss on Division II of *Being and Time*, which concerns time. The same principle applies to being in space, or *being-in-the-world* in general.

very useful definition of place by way of what Heidegger continues to name as *space*.

Space is neither in the subject nor is the world in space. Rather, space is "in" the world since the being-in-the-world constitutive for Da-sein has disclosed space. Space is not in the subject, nor does that subject observe the world "as if" it were in space. Rather, the "subject," correctly understood ontologically, Da-sein, is spatial in a primordial sense [Heidegger 1996, 103].

Place, the "discovery of locality," is ontologically prior to any use of objects in that place [King 2001, 286]. It is "primordial," which is to say "an irreducible phenomenon that cannot be deduced from or explained by anything other than itself" [284].

As further justification for replacing Heidegger's space with place, consider the passage in *An Introduction to Metaphysics* where *Timaeus* is discussed.

The Greeks had no word for "space." This is no accident; for they experienced the spatial on the basis not of extension but of place (*topos*); they experienced it as *chōra*, which signifies neither place nor space but that which is occupied by what stands there. The place belongs to the thing itself [Heidegger 1959, 66].

This place, that "belongs to the thing itself" cannot be taken as identical with Heidegger's formulation of space from *Being and Time*, but neither does it present any insurmountable contradictions. That $kh\bar{o}ros$ is both space and the things within it, both container and contained, was explored in chapter 3.3. This $kh\bar{o}ros$ has an ongoing generative property that is compatible with a Da-sein that incorporates and brings space with itself, while apprehending space as constituent of the world.

Attention will now turn to Heidegger's understanding of dwelling. As we've seen, *Being and Time* developed the fundamental concept of being-in-theworld. Heidegger explains that the "in" in this phrase "stems from *innan*-, to live, *habitare*, to dwell" [Heidegger 1996, 51]. Furthermore, "Ich bin' (I am) means I dwell, I stay near... the world as something familiar." Hence the phrase *being-in* is synonymous with *dwelling-in*. As mentioned above, the preposition "in" does not specify inclusion or position within spatial limits.

Da-sein dwells in the world in such a way that his own dwelling manifests itself to him always as an already accomplished fact; he can never go behind the "already" to originate his own being [King 2001, 99].

The groundwork so laid, Heidegger returned to explore the topic in greater detail for a lecture delivered in 1951 at the Darmstadt Colloquium II on "Man and Space" [Hofstadter 2001, xxiv]. Perhaps due to the fact the audience was predominantly made up of architects, not fellow philosophers, "Building Dwelling Thinking" presents his ideas in a clear, concrete manner, largely free of obscure terminology.

The way in which you are and I am, the manner in which we humans *are* on the earth, is *Buan*, dwelling. To be a human being means to be on the earth as a mortal. It means to dwell. The old word *bauen*, which says that man *is* insofar as he dwells, this word *bauen* however *also* means at the same time to cherish and protect, to preserve and care for, specifically to till the soil, to cultivate the vine [Heidegger 2001, 145].

For Heidegger our relationship to place, the way in which we are in the world, cannot be defined in terms of simplistic locations and topological relationships. Instead, our dwelling is predicated on *care*. This is why "not every building is a dwelling" [143]. "Bridges and hangars, stadiums and power stations are buildings but not dwellings" since we do not cherish these locations, developing *with* them in a mutual relationship characteristic of Da-sein. In contrast with *Being and Time*, throughout this talk Heidegger is explicit in using *place*, sometimes as "the place of dwelling" [145]. His consideration of the word space ("Raum" in the German language) is also platial.

Raum means a place cleared or freed for settlement and lodging. A space is something that has been made room for, something that is cleared and free, namely within a boundary, Greek *peras*. A boundary is not that at which something stops but, as the Greeks recognized, the boundary is that from which something *begins its presencing* [152].

With this last phrase, Heidegger wishes to implicate place in the very process of ontology, of coming into (knowledge of) being. He uses the example of a bridge, which spans the banks of a stream. The bridge "does not just connect banks that are already there" but creates these banks as locations by the act of bridging [150]. There is a mutuality of being in the bridge and the banks. The language is quite wonderful:

With the banks, the bridge brings to the stream the one and the other expanse of the landscape lying behind them. It brings stream and bank and land into each other's neighborhood. The bridge *gathers* the earth as landscape around the stream. Thus it guides and attends the stream through the meadows [150].

An intriguing aspect of this passage is that it seems to attribute to an ontic thing (the bridge) some of the properties of Da-sein that might have been denied to it in *Being and Time*. For it is humans who created landscape by applying a conceptual framework for "nature" and a mode of seeing derived from perspective. Such actions are reserved for the Da-sein. But in this passage, it is the bridge itself that gathers and creates the landscape in an ethos of care. Further, the bridge is not even a dwelling, but mere building, according to Heidegger's previous definitions. This point deserves further investigation and a dedicated study.

Regardless, for Heidegger "place cannot be reduced to the concept merely of location within physical space" even if locations, and the physical space they occupy, constitute that place [Malpas 2004, 34]. This idea will be developed later in this chapter.

Before concluding this section, certain significant objections to Heidegger's spatial formulation must be considered. Foremost among these is how Division 2 of *Being and Time* follows Kant in treating "spatiality as always secondary to, and derivative of, temporality" [Malpas 2004, 42]. Malpas sees this as a problem since "the concept of place cannot be divorced from space, just as space cannot be divorced from time." Malpas hypothesises that the contradictions arising from Heidegger's prioritisation of temporality explains why *Being and Time* was left incomplete. Malpas' account is here compatible with that under development in this dissertation.

If we are to take account of the complexity of spatiality as it arises in relation to a creature's involvement in the world, then we must look to a way of thinking about spatiality that sees it as embedded within the larger structure, not of a single space, but of a unitary and encompassing place [43].

In any case, this shortcoming in *Being and Time* is not a fatal problem for the current study, since Heidegger's later writings turn away from the emphasis on temporality to that of dwelling [Wheeler 2011, §3.2 ¶1]. The discussion of "Building Dwelling Thinking" in this section demonstrates the congruence of Heidegger with the thesis of this study.

A second problem is noted by Wheeler. Though Da-sein's "existential spatiality somehow depends on its embodiment," this remains unexplained [Wheeler 2011, §2.2.5 ¶2]. Heidegger admits this when he writes that "The spatialisation of Da-sein in its "corporeality" [...] contains a problematic of its own not to be discussed here" [Heidegger 1996, 101]⁴⁵. But this is not to say that embodied actions are ignored by Heidegger, only that they are not explicitly considered with the same rigour as the rest of his corpus. The argument is made by Casey that "the human body is an at least implicit or tacit presence" throughout the writings on Da-sein [Casey 1998, 235]. Things (such as the canonical example of the hammer) are described according to their instrumentalism, their suitability to hand, which could not exist without the primary operations of de-distancing and directionality explicated above. Indeed, it could rather be argued that Heidegger presents a strong argument for embodiment. Consider that place doesn't exist without Da-sein. There is no ontology without the being of Being, only the empirical (the ontic). There is no lack of a framework for the body in Heidegger, as Merleau-Ponty realised.

Before considering Merleau-Ponty, however, it is necessary to contextualise phenomenology within a practice of musical composition and musical listening. And in so doing, consider Husserl's important phenomenology of the reduction. This is the task of the following section.

⁴⁵ Following an earlier translation, this is usually quoted as "This 'bodily nature' hides a whole problematic of its own, though we shall not treat it here" [Heidegger 1962, 143].

4.5 Schaeffer, Husserl, and the phenomenological reduction

In 1952, with his journals *A la recherche d'une musique concrète*, and again in 1966, with *Traité des objets musicaux*, Pierre Schaeffer summarised an experimental process that broke with score-based music, instead grounding compositional technique in the "object" of sound production itself.

I have coined the term *Musique Concrète* for this commitment to compose with materials taken from "given" experimental sound in order to emphasize our dependence, no longer on preconceived sound abstractions, but on sound fragments that exist in reality, and that are considered as discrete and complete sound objects, even if and above all when they do not fit in with the elementary definitions of music theory [Schaeffer in Kane 2014, 16].

Schaeffer associated this project with the term "acousmatic," referring to a situation of listening in which the source of the sounds was not apparent. "The sound object is never revealed clearly except in the acousmatic experience," declared Schaeffer [Kane 2014, 17]. This statement of principle asserts the central position of "reduced listening" (*écoute réduite*) in Schaefferian practice, a phenomenology closely based on Edmund Husserl (1859–1938). "Consistently, Schaeffer deploys techniques that are Husserlian in character: the transcendental-phenomenological reduction, the eidetic reduction, imaginative free variation, and the reactivation of originary experience" [Kane 2014, 19].

The task of this section is to explicate Husserl's concepts of the *epoché* and phenomenological reduction, so that Schaeffer's application of these to musical composition may be understood more clearly. But it must be clarified that this is not being done with the intention of measuring practitioners as being more or less doctrinaire vis-a-vis *musique concrète* and acousmatic music. Neither is it because Schaeffer himself will be a central subject of this study. Rather, it is to recognise the lasting impact on twentieth-century compositional practice that Schaeffer's adoption of Husserlian phenomenology had. Whether a composer identifies as working in the field (or with the techniques of) *musique concrète*, whether they label themselves as an acousmatic composer, these matters of categorisation are less important than acknowledging the historical precedence of Schaeffer. Many contemporary composers find themselves working "after Schaeffer," whether intentionally or not. To understand how phenomenology

has been applied to these fields of musical practice, we will begin with Schaeffer and Husserl.

The term *epoché* in Greek thought represents a suspension of judgement. Husserl's use of this term, expressed in *Ideas Pertaining to a Pure Phenomeno*logy (1913) was an attempt to "bracket" experience of the world [Bever 2018, §5 ¶2]. The problem is as follows. A phenomenological description is a first-person account of experience. But in the case of a hallucination, there is no object of perception. Neither is there an understanding of the ongoing perceptual error, else the hallucination would not actually be our experience [§6 ¶1]. More concretely, the experience of hallucinating an apple is the same as if a veridical apple existed. We cannot distinguish between the two cases, from our first-person perspective. Hence, any phenomenological account of this event (our person apprehending the apple) cannot rely on the correctness of our experience but must apply equally to both cases. We must "bracket" or suspend judgement on the existence of the apple, to focus attention on the phenomenon itself⁴⁶ [Beyer 2018, §5 ¶2]. By its nature, this bracketing requires an awareness of the potential to be deceived. This second-order consciousness of the process itself, together with epoché, form the "phenomenological reduction."

This analysis was critical to Husserl's project of creating "an objective, but non-empirical foundation for logic" [Kane 2007, 2]. For Husserl the study of the senses and neurology can be left to the natural sciences. The phenomenologist is instead interested in intentional objects, those held in the mind. The example of the table is canonical. We always see a table from one perspective, which shows us only part of the whole⁴⁷. To reveal the entirety of the table, we must accumulate a stream of perspectival views, what Husserl termed "adumbrations" [Kane 2014, 20]. To get from these views to a unified table (a *noema*) requires an act of consciousness, a synthesising of perception (*noesis*).

In *Traité des objets musicaux* Schaeffer dissects the process of listening into four modes, each of which serves a different function [Smalley 1996, 78-80]. These are all made possible by the "acousmatic reduction" the apprehension of

⁴⁶ How much of perception must be bracketed, and how this relates to the passing of time and other existential considerations are worked out in detail throughout Husserl's writings, but are simplified here.

⁴⁷ The reliance of this model of perception on an ocularcentric ideology is noted in passing.

acoustic sensory data apart from all other. This serves to separate a sound object from its origination in the world. The first two modes of listening are objective, existing outside the listener. Simple listening for information purposes, to gather signs of the world, is expressed in *écouter*. Comprehending sounds for their meaning or signification, expressed in language (including musical language) is the function of *comprendre*.

Following Husserl, Schaeffer then posits a second reduction, that of *l'écoute réduite* or "reduced listening," which allows the listener to reach two further listening modes [Kane 2014, 17]. Passive reception of sound as pure perception is the function of *ouïr*. Attending to the spectromorphological structure of sound, for study or contemplation, is the domain of *entendre*. This listening requires bracketing sounds apart from their origins as events in the world. In this way is discovered the transcendent sound object. "The *epoché* is deployed to distinguish an acousmatic field of listening from the field of acoustics" [Kane 2014, 24]. This serves the Husserlian function of distinguishing phenomenological sound from that studied by the natural sciences. Schaeffer demonstrates a preference for *entendre*, by way of contrast to the other listening modes, as a modality suitable for aesthetic contemplation and composition. Sound objects are not to be treated as indices to veridical events, but as sonic material with inherent features of timbre, duration, register, and so on [Kane 2014, 29].

For the purposes of the current study this phenomenological model is insufficient. The abstraction of a transcendent sound object from its acoustical context also removes it from its embedded situation in a cultural milieu, extracts it from a place that is always in the process of construction. Husserl's phenomenology, in this account at least, is an inappropriate foundation for building the models of place that this chapter is designed to construct.

We have a hint of a solution in Schaeffer's writing about *ouïr*, even if this mode of listening takes up little of his attention. "Strictly speaking, I never cease to perceive [d'ouïr]. I live in a world which does not cease to be here for me, and this world is sonorous as well as tactual and visual" [quoted in Kane 2014, 27]. This passage is notable for attesting to a multimodal sensory apprehension of the world, as well as the assertion that the domain "does not cease to be here for me." Kane notes that this passage "strongly echoes Merleau-Ponty," a phenomenologist who owed a great deal to Husserl but who nonetheless changed the emphasis from a transcendent *epoché* to an engagement grounded in being-

in-the-world (following Heidegger). His thoughts will be explained in the following section.

4.6 Merleau-Ponty's phenomenology

This section will summarise the work of Maurice Merleau-Ponty (1908–1961), whose significant extensions (and refutations) of the phenomenology of Husserl and Heidegger have become ever-more appreciated in the last decades. Merleau-Ponty wrote two major works on phenomenology: *The Structure of Behavior* (1963) and *Phenomenology of Perception* (1962). He died suddenly while writing a third book, published in English as *The Visible and the Invisible* (1968). The readings in this section will cleave close to *Phenomenology of Perception*, generally considered his most significant volume⁴⁹.

Merleau-Ponty's phenomenology begins with Husserl, figuratively and literally. The first page of the preface to *Phenomenology of Perception* already mentions Husserl by name [Merleau-Ponty 2005, vii]. Yet though Merleau-Ponty is satisfied to *begin* with Husserl, he does not wish to *end* with Husserl, but rather to address the limitations of the previous philosophy of perception. It will be informative to consider these differences, as they highlight important aspects of Merleau-Ponty's project. Following this discussion will be a more detailed consideration of his phenomenology.

Traditionally, philosophers have taken either a realist or idealist approach to a problem, and these views are generally regarded as diametrically opposed. Briefly, realism posits that the world exists independently of the mind; objects are ontologically independent of perception, not relying on internal conceptual schemes. Idealism asserts that the mind is a pre-condition of the existence of objects, that all perception is constructed by consciousness. It should be borne in mind when reading Merleau-Ponty that he uses the term "empirical" when

⁴⁸ The older Colin Smith translation has been used in preference to the more recent translation by Donald A. Landes (2012), since the majority of extant scholarship refers to Smith. Mixing the two would present difficulties for readers, since page references would be inconsistent.

⁴⁹ For example, Toadvine describes this book as the work "which was best known during his lifetime and that established him as the leading French phenomenologist of his generation" [Toadvine, 2018, §3 ¶1].

discussing realism and the term "intellectualist" when considering idealism, a vocabulary different from normative usage [Liu 2014, 133].

As we have seen, Husserl wished his phenomenology to be an *a priori* science; as such he was critical of both realism and psychologism, since both are "bound to [a] particular set of experiences or facts" [Kane 2007, 2]. Husserl's phenomenological reduction transforms "the object of perception," by way of the $epoch\acute{e}$, into "the thought of the object of perception" [Flynn 2011, §3 ¶4]. Merleau-Ponty refutes this idealist approach by critiquing the reduction.

The most important lesson which the reduction teaches us is the impossibility of a complete reduction. This is why Husserl is constantly re-examining the possibility of the reduction. If we were absolute mind, the reduction would present no problem. But since, on the contrary, we are in the world, since indeed our reflections are carried out in the temporal flux on the which we are trying to seize (since they *sich einströmen*, as Husserl says), there is no thought which embraces all our thought [Merleau-Ponty 2005, xv].

Husserl's *epoché* performs the valuable function of reminding us we cannot take sensory input as objective truth. But by doing so it privileges thought as *a priori*. Merleau-Ponty responds to this succinctly: "The world is not what I think, but what I live through" [xviii]. We cannot know the world through introspection but only through continual contact with it, since "all consciousness is consciousness of something" [6]. Indeed, Husserl's reduction is a category error, where the thought of a thing is taken for the thing itself.

If Merleau-Ponty expresses dissatisfaction with idealism, he is in accordance with Husserl in denouncing rationalism. The intriguing aspect of his phenomenology is that he critiques both poles without viewing them as a dialectic that requires synthesis. Instead, he formulates a radical new position that is beholden to neither rationalism nor idealism. In this way, *Phenomenology of Perception* performs "a destruction, a dismantling of the modern philosophical tradition" [Clark 2015, 18]. This can occur because although these terms appear contrary to one another, they have an epistemology in common.

Actually, empiricism presupposes a determinate world which exists externally and independently of human consciousness. According to intellectualism, the world is merely the product of the conscious constructive act. In spite of the entirely different metaphysical status of the world, both theories share the same epistemological presupposition concerning "a fixed and determinate world" [Liu 2014, 133]⁵⁰.

Merleau-Ponty breaks with Husserl in another important way. Rather than dismiss the empirical sciences as a domain outside philosophy, Merleau-Ponty's account, starting already in *The Structure of Behaviour*, draws extensively on examples from psychology, especially sensory pathology (e.g. the phantom limb) and gestalt theory. Further, his writings demonstrate "that phenomenology and psychology cannot be sharply distinguished" [Smith 2005, 569].

In his later work, Husserl attempted to deal with the problems of intersubjectivity that his reduction left unresolved. To avoid charges of solipsism, he formulated the concept of *Lebenswelt* as a world of living experience. But this created only contradictions with the primacy of the phenomenological reduction [Merleau-Ponty 2005, 425 footnote]. Merleau-Ponty instead followed Heidegger's emphasis on "being-in-the-world," as explored in chapter 4.4. Subjects are always already emplaced in a shared world that comes prior to the subject. Or rather, more correctly, the subject is co-created with the world.

Despite the points outlined above, there is some debate as to the degree to which Merleau-Ponty broke with Husserlian phenomenology. It has been argued that he accepted the phenomenological reduction and was "closer to the orthodox Husserlian position than has commonly been acknowledged" [Smith 2005, 569]. This matter cannot be debated here. It is enough to note that Merleau-Ponty rejected the transcendental idealist position. If this position is regarded as essential to Husserl, then one would judge that there is a clear break between these thinkers. If this position is instead regarded as merely one interpretation among many of the *epoché*, one might find more common ground between them.

Some of the major proposals found in *Phenomenology of Perception* will now be outlined. Merleau-Ponty's phenomenology begins with "The Body," as part one of this book is titled. The thesis is that the body can neither be taken as just another object in space (realism) or reduced to an "idea" of the body (idealism) [Merleau-Ponty 2005, 81-2]. Following an examination of phantom limbs and

⁵⁰ Internal quote is from Merleau-Ponty 2005, 44.

the physiological reflex, Merleau-Ponty describes the body as bound to the world, constrained by its factors. To have a body is "to be intervolved in a definite environment, to identify oneself with certain projects and be continually committed to them" [94]. Consciousness of our body can only occur because of engagements in the world. The relationship between the physiological and psychological is not one of priority but entanglement, mental acts constrained by "physiological tendencies," physical "impulses" related to "psychic intentions" [101]. Our body always withholds something from us, even from sight, and so does not act as other objects in the world [104-5]. When we touch one hand with another, this is not the experience of touching an object, but instead a "double sensation" that partakes of an ambiguity in the roles of "touching" and "touched" [106]. It is only through "the position of impersonal thought" that our bodily experience can be reduced to "representation," a "fact of the psyche" [108]. This has the parallel effect of reducing bodies to "mechanical things with no inner life," of abolishing experience and universalising thought [109]. An antidote to this tendency is to recall that a body is always a body-in-the-world [115]. We do not experience our body in relationship to objective space but rather embedded in an "intelligible space" [117] that derives from body image and our orientation [116].

This argument relies implicitly on Heidegger's conception of *readiness-to-hand*, as previously discussed. Objects, for example that hammer we might pick up, shape expectations about their possible use. Concurrently, our prior knowledge of space and the body's orientation within space frame how we (the Dasein) might act. This entangled relationship is comprised of mutual ongoing processes.

Apropos of the earlier discussion on ocularcentrism (chapter 4.3), it is relevant that Merleau-Ponty guards against interpreting the term "body image" in purely visual terms.

Psychologists often say that the body image is *dynamic*. Brought down to a precise sense, this term means that my body appears to me as an attitude directed towards a certain existing or possible task. And indeed its spatiality is not, like that of external objects or like that of 'spatial sensations', a *spatiality of position*, but a *spatiality of situation* [114-5].

This is an argument against the Cartesian formulation of space as a universal, homogeneous extent. The body is not *in* space and time, it *inhabits* space and time.

By considering the body in movement, we can see better how it inhabits space (and, moreover, time) because movement is not limited to submitting passively to space and time, it actively assumes them, it takes them up in their basic significance which is obscured in the commonplaceness of established situations [117].

In this view, space and time are not apprehended as "a collection of adjacent points" in a coordinate system, but instead are constituted as "a limitless number of relations" [162]. Furthermore, space and time are not universal, but reconfigured for each body in relationship to others. (Merleau-Ponty explicitly takes up this argument against Descartes later in his book.)

Phenomenology of Perception Section 2 Part 2 is simply entitled "Space." Here Merleau-Ponty confronts both the realist idea of space as container and the idealist position (the text refers specifically to Kant) of space as a non-empirical representation born of intuition in the mind [284]. "Space is not the setting (real or logical) in which things are arranged, but the means whereby the position of things becomes possible" [284]. In other words, space is relational. More than this, space is "already constituted" [293], and our encounters with space are always predetermined by encounters that preceded them. The argument is built through examples of optical trickery, illusion, and depth perception. In the case of a cube perceived in depth, Merleau-Ponty states the empirical (e.g. realist) view that different angles, defined in coordinate space, reveal the depth. His objection is that we do not in fact experience these angles, but know them only as a diagram of possibilities [308]. He then states the view of idealism, which first defines the cube in the mind, before extrapolating depth as a quality. But for Merleau-Ponty the depth comes first, as a primordial given in the world.

From this gloss, it's evident that the phenomenology of space is of fundamental importance to Merleau-Ponty. Spatiality provides a bedrock on which being-in-the-world can be built, since space is defined through our bodily relationships with the world. From this primordial encounter comes "a flow of experiences which imply and explain each other both simultaneously and success-

ively" [327]. This flow *is* the phenomenal field, which Merleau-Ponty is at pains to distinguish from mere sensation, on the one hand, and an "inner world," "state of consciousness," or "mental fact," on the other [66]. Consciousness itself is not constituted in Descartes' "I think" but through Husserl's "I can" [159]. In other words, consciousness relies on an intentional relationship between body and space [Toadvine 2018, §3 ¶7].

In this context it is worth repeating a quote from Heidegger, to emphasise a continuity of thought between the writers that is not often explicitly acknowledged in Merleau-Ponty's text.

Space is neither in the subject nor is the world in space. Rather, space is "in" the world since the being-in-the-world constitutive for Da-sein has disclosed space. Space is not in the subject, nor does that subject observe the world "as if" it were in space. Rather, the "subject," correctly understood ontologically, Da-sein, is spatial in a primordial sense [Heidegger 1996, 103].

The Heideggarian conception of space, developed through Merleau-Ponty, is very much opposed to the Cartesian model of locus, the *geos* that relies on idealised and externalised viewpoints. The "space" of these writers is developmental, relational, and contingent. This illustrates the fluidity of terms that was emphasised at the outset of this study. Merleau-Ponty's "space" is indeed "place" in the sense being argued in this chapter.

4.7 Platial theory and Casey's Archytian Axiom

Given the dominance of *geos* and spatial thinking over the past two millennia, it's not surprising that the English language has a simple adjective, "spatial" that means "of or relating to space." It's noteworthy that there's no similar word that means "of or relating to place." Thus, our very language predisposes us to ways of talking and writing about place. In this section the neologism "platial" will be proposed as a term that has the benefits of simplicity and recognisability. And if the word is a near homophone for "palatial," this is an advantage, a reminder that place is the palace of *being-in-the-world*. This section will explore prior use of this term, before discussing, in some depth, Edward Casey's similar concept of the Archytian Axiom.

Tom Mels used the term "platial" in the field of human geography. It's mentioned first, in passing, in his review of Kenneth Olwig's *Landscape*, *Nature and the Body Politic* [Mels 2003, 385]. Two years later, he makes extensive use of "platial" to highlight the "conflict between a centralized, spatial rationality and a localized, 'platial' imagination of landscape, law and justice" [Mels 2003, 323]. "Platial" is defined as "the engagement with the particular character of certain locations" [328].

The term gained little traction, though a cartographic company named Platial formed in Portland, Oregon in 2005. The firm developed a collaborative mapping tool, "because we adore Places," according to an archive of their website [Platial 2008]. The firm had some success before folding in 2010. Since that time, the term has been used only infrequently in cartography and information science, one example being McKenzie et al. 2016.

Outside of the discipline of geography there is an earlier occurrence of the term, in a paper by Stuart Elden discussing Heidegger's writings on the poet Hölderlin [Elden 1999]. The context is a discussion of *topos* and *khōros* within Heidegger's place theory. "In 'The Rhine' hymn, Heidegger immediately notices that the first strophe of the poem indicates a place, rather than a time" [262]. Elden notes that Heidegger's use of the term "Ort" for place models the Greek use of *topos* and Plato's *khōros*. To mark this usage as distinct from normative spatial formulations, Elden uses "platial" to signify "working with 'place' and 'placing'" [263]. It turns out then, that this earliest use of "platial" is congruent with the current study, both in terms of the specific philosopher under discussion and the roots of the idea in ancient Greek thought. This happy coincidence provides ample historical justification for the use of this neologism in the current context.

Edward Casey has written extensively on place. In parallel to the current study, his project traces an alternative history of place through writers such as Heidegger, Bachelard, and Merleau-Ponty. Casey relies on a translation of Simplicius' *Commentary on Aristotle's Categories* that states "Perhaps [place] is the first of all things, since all existing things are either in place or not without place" [Casey 1996, 47]. Casey returns to this proposition throughout his writings, for example citing the same quote at least three times in *The Fate of Place* [Casey 1998, 4, 46, 71]. Giving prominence to Archytas' contribution, he labels this principle the "Archytian Axiom" [Casey 1996, 16]. This attribution requires

further examination because if this prior work is sufficient, perhaps the term platial is surplus to requirement.

Archytas of Tarentum (428–347 BCE) was a powerful military leader, mathematician, and philosopher. He made important contributions to mechanics and musical harmony, though his work is known through a mere four fragments, plus the writings of those who followed [Huffman 2018]. Thus, it is near-impossible to make any definitive appraisal of his philosophical contributions. Nonetheless, it is notable that Huffman's authoritative volume on Archytas' work [Huffman 2005] makes no special mention of Archytas's views on place. When Simplicius of Cilicia (c. 490–c. 560) wrote his *Corollary on Place* he did not mention Archytas, even though his *Corollary on Time* pays special attention to Archytas's contribution [Simplicius 1992]. Simplicius' commentary on Book 4 of Aristotle's *Physics* contains a gloss on the same passage of Hesiod (quoted in chapter 3.4), but once more without mentioning Archytas [Simplicius 2014]. Each of these examples shed doubt on an Archytian contribution to thinking about place, even if this is only evidence by omission.

Casey's single source for his Archytian Axiom is Samuel Sambursky's 1982 study *The Concept of Place in Late NeoPlatonism*, which is a collection of translations of Simplicius. Archytas is quoted by Simplicius in a discussion of the interpretations of Iamblichus. Two short passages appear twice in Sambursky's book: in the main text on Iamblichus, and in a section entitled "Pseudo-Archytas"⁵¹. The first quotation is from Simplicius' *Categories* 361, 21-24:

Since everything that is in motion is moved in some place, it is obvious that one has to grant priority to place, in which that which causes motion or is acted upon will be. Perhaps thus it is the first of all things, since all existing things are either in place or not without place [Sambursky 1982, 37].

The second passage is from *Categories* 363, 22-27:

It is peculiar to place that while other things are in it, place is in nothing. For if it were in some place, this place again will be in another place, and this will go on without end. For this very reason it

⁵¹ These passages will be reproduced in their entirety due to the difficulty in obtaining this source.

is necessary for other things to be in place, but for place to be in nothing. And so for the things that exist there always holds the relation of the limits of the things limited, for the place of the whole cosmos is the limit of all existing things [37].

It's clear that Casey's quotation derives from the last sentence of the first excerpt. But are there not significant difficulties in making this attribution? As already noted, this section of Sambursky's book is titled "Pseudo-Archytas." In his introduction, Sambursky is clear that these fragments are *not* the work of Archytas.

Two important fragments ascribed to Archytas, but in fact deriving from an unknown Neopythagorean philosopher, give some indication as to how the connection between *topos* and the universe as a whole was established. The first fragment emphasizes the superiority of place for the reason that without it bodies are unable to move. The association of place and movement points to the wider significance of the former as that in which the latter occurs. Since all things in motion are moved in some place, it is obvious that one has to attribute superiority to the place in which things are moving or being acted upon. In the second fragment, *topos* clearly alludes to the pan, the whole material universe of the Stoics [14].

Given the lack of definitive evidence for the precedence of Archytas, Casey's origin thesis remains problematic. Compare these fragments from an "unknown Neopythagorean philosopher" to Aristotle's *Physics*, a work well-documented and exhaustively studied. Aristotle declared, as discussed in chapter 3.4, that "the power of place must be a marvellous thing, and be prior to all other things" [*Physics* 208b29-209a2]. There is no need to invoke Archytas when we already have such a clear formulation of platial thinking. Yes, Archytas would have historical precedence, but the evidence is simply too thin to countenance. Hence this study will *not* adopt Casey's terminology, but instead acknowledge Aristotle with the thought that all things are emplaced from the beginning, that place is "prior to all other things."

This doesn't mean that Aristotle's name will be associated with this belief as an axiom. The preceding exegesis was not designed to attribute "originality" to any one figure or another, but rather to illustrate how difficult these matters are when studying texts from antiquity. It must be acknowledged that many thinkers, including those whose works are lost to us now, might have originated similar thoughts, before or after Aristotle. This is a further reason why a neutral term, such as platial, is preferred to one bearing a proper name.

4.8 Ingold's platial phenomenology

Platial thinking is inherent in numerous contemporary writers. This section will examine the work of Tim Ingold (1948–), whose special attention to sound and hearing brings our discussion back to the sonic.

Ingold is an anthropologist who has incorporated relational phenomenology into his work. His views on place are often constituted under the word "land-scape," which "is the world as it is known to those who dwell therein, who inhabit its places and journey along the paths connecting them" [Ingold 2000, 193]. For Ingold, "landscape" is synonymous with "environment," since neither are givens, but are constructed by those who live there. This position is strongly informed by the phenomenology of Merleau-Ponty but emphasises the effects of human culture (and other organisms) on place. His "dwelling perspective" sees landscape as "an enduring record of – and testimony to – the lives and works of past generations who have dwelt within it, and in so doing, have left there something of themselves" [189]. Each engagement with place requires us to appreciate its embedded history; it is an "act of remembrance." The significance of a given place is given by its history, and our perception of the place is predicated on this context. The following quotation will help tease out some of the subtleties in Ingold's thinking.

A place owes its character to the experiences it affords to those who spend time there – to the sights, sounds and indeed smells that constitute its specific ambience. And these, in turn, depend on the kinds of activities in which its inhabitants engage. It is from this relational context of people's engagement with the world, in the business of dwelling, that each place draws its unique significance. Thus whereas with space, meanings are *attached* to the world, with the landscape they are *gathered from* it [192].

The word "ambience" is important to Ingold's conception of place. First, it acts as a synonym for "environment" or "landscape," in the sense that all these terms represent zones of influence, confluences without border. This is immedi-

ately familiar from the *klimata* of Ptolemy, though Ingold would impose no arbitrary scheme of naming or subdivision. Instead, Ingold uses this term in phrases like "the ambience of our dwelling," as a gesture towards extending definitions [209]. If, in the current study, the word "milieu" is preferred, this does not contradict Ingold, who uses the two terms interchangeably [218]. The above passage continues:

Moreover, while places have centres — indeed it would be more appropriate to say that they *are* centres — they have no boundaries. In journeying from place A to place B it makes no sense to ask, along the way, whether one is 'still' in A or has 'crossed over' to B (Ingold 1986a: 155). Of course, boundaries of various kinds may be drawn in the landscape, and identified either with natural features such as the course of a river or an escarpment, or with built structures such as walls and fences. But such boundaries are not a condition for the constitution of the places on either side of them; nor do they segment the landscape, for the features with which they are identified are themselves an integral part of it [192].

To return to the first quote, there is another point worth elaborating. Ingold writes of "the sights, sounds and indeed smells that constitute [a place's] specific ambience" [Ingold 2000, 192]. An ambience enfolds different sensory registers, so that no artificial distinction need be made between them. This phenomenology follows Merleau-Ponty's insistence on an integrated being-in-theworld but extends the language to explicitly include multisensory perception. There is an apparent contradiction in how Merleau-Ponty himself, through both choice of language and examples, hewed close to a visual representation of the world. For example, in *Phenomenology of Perception*, Husserl's adumbrations of the table are paralleled with a similar encounter with "a ship which has run aground" [Merleau-Ponty 2005, 20]. Elsewhere the "next-door house" is viewed "from a certain angle" [77], a church is viewed through a window [104], and so on. Throughout his oeuvre, perception is discussed as visual, even to the late essay "Eye and Mind," concerned as it is with "light, color, depth" [Merleau-Ponty 2007, 355]. However, Clark has argued that this is a deliberate rhetorical strategy, and that, at a deeper level, Merleau-Ponty's work enacts an "undermining of sight's privilege" since his core phenomenology is "ontologically prior to the 'scientific' characterisation of the senses as discrete (in the mathematical

sense) heterogeneous zones" [Clark 2015, 3]. There is ample evidence for this contention in numerous passages where Merleau-Ponty prefers to characterise our apprehension of the world in terms that don't rely on sensory descriptions. For example:

In the natural attitude, I do not have *perceptions*, I do not posit this object as beside that one, along with their objective relationships, I have a flow of experiences which imply and explain each other both simultaneously and successively [Merleau-Ponty 2005, 327].

Ingold wishes to make explicit this unified sensorium. This is a valuable contribution to, and extension of, Merleau-Ponty's phenomenology which, perhaps despite itself, was explicated within the philosophical tradition of ocular-centrism. In his remarkable essay "Against soundscape," Ingold writes:

[T]he environment that we experience, know and move around in is not sliced up along the lines of the sensory pathways by which we enter into it. The world we perceive is the same world, whatever path we take, and each of us perceives it as an undivided centre of activity and awareness [Ingold 2007a, 10].

This passage recalls Merleau-Ponty's account of bodily space as a way of orientating movement [Merleau-Ponty 2005, 116-7]. But, more, it encourages us to re-read the argument Merleau-Ponty uses when comparing the functions of eye and ear, as they bear on a unified perceptual field.

Living thought, then, does not consist in subsuming under some category. The category imposes on the terms brought together a meaning external to them. It is by drawing upon already constituted language and upon the sense-relationships which it holds in store that Schneider succeeds in relating eye to ear as "sense-organs". In normal thought eye and ear are immediately apprehended in accordance with the analogy of their function, and their relationship can be fixed in a "common characteristic" and recorded in language only because it has first been perceived in its origin in the singularity of sight and hearing [148].

The world is self-evident; "the eye and ear are immediately given"; our experience of the world occurs before we are "able to assert a truth" [149]. These statements are arguments against a Kantian idealism. They imply a unified sensory field, because it is only after we idealise and characterise the senses in particular ways (informed by cultural contexts and historical imperatives) that we can divide the perceptual field into senses. This process comes *after* perception, after the phenomena themselves. Ingold makes explicit how this applies to sound.

Sound, in my view, is neither mental nor material, but a phenomenon of experience – that is, of our immersion in, and commingling with, the world in which we find ourselves. Such immersion, as the philosopher Maurice Merleau-Ponty (1964) insisted, is an existential precondition for the isolation both of minds to perceive and of things in the world to be perceived. To put it another way, sound is simply another way of saying "I can hear." In just the same way, light is another way of saying "I can see" [Ingold 2007a, 11].

This argument will be developed further in chapter six, when the work of Robert Curgenven is considered.

4.9 Conclusion

The purpose of this chapter was to examine how space and place have been constituted in key works of phenomenology. First, the prevailing ocularcentric context was described. Descartes' *Principles of Philosophy*, the founding text of modern physics, was considered in some detail (chapter 4.2). Here Descartes categorised matter in two categories: thought and extension. Space became a homogeneous, universal grid that reduced any idea of place to locus, relative position between objects on a coordinate grid. This system was already inherent in the method of *episkopein* employed by Ptolemy to derive *geos* (chapter 3.2). *Episkopein* was associated with gods and rulers; it's the vantage of power that allows one to transcend an embedded situation in *topos*. Also prior to Descartes, Alberti's *De Pictura* had positioned the viewer in a strict relational topology to the object, space reduced to a lattice grid (chapter 4.3). The prevailing ocularcentrism in the centuries since Descartes incorporates these beliefs: Cartesian

rationalism together with Albertian perspectivism, from a position that elevates and privileges the viewer.

The remainder of the chapter considered the phenomenology of Heidegger, Husserl, and Merleau-Ponty, alongside contemporary writers Edward Casey and Tim Ingold. This developed an extended definition of platial thinking as prioritising the specificity of place over space as generalised container. The authors discussed have emphasised our engagement with an exterior world over transcendent idealism, acknowledging the relational entanglement between the development of the individual and the context they find themselves in. A platial phenomenology posits being as constituted through a mutual relationship with an always already existent milieu. A platial understanding incorporates *topos* as a dynamic of centred experience of a wandering Da-sein, at the same time as recognising the chorographic, a metaphorical register of zones of influence. A platial approach recognises a flow of thought from the earliest philosophy, a river that went underground following the revolution of modernism and Cartesian thought, only to surface in strange pools and eddies.

Platial thinking provides useful descriptive tools for practical analysis, as will be demonstrated in the remaining chapters. The subjects will be aesthetic sound works that incorporate field recordings. For this reason, the current chapter has contained, as refrain, references to listening and sound. This was highlighted in the discussion of Schaeffer's musique concrète and acousmatic listening from the perspective of Husserl's phenomenological reduction. Creating and working with "sound objects" as such, implies a specific type of listening in which the indexical qualities of a sound are ignored, or at least placed temporarily into abeyance. Merleau-Ponty noted the impossibility of a complete reduction, and this critique finds echoes in those practitioners who retain in their electroacoustic or acousmatic works elements of signification, as indeed Schaeffer did with Étude aux chemins de fer (1948). In breaking with the idealism of Husserl, Merleau-Ponty reaffirmed phenomenology as grounded in a spatial engagement of the body with the world. Might this offer an alternative model to the acousmatic? Given the basis of field recording as an active practice, embedded in the world, this must at least be a possibility.

Platial thinking has much to say about how the viewer/listener is constituted as subject. This theme can be developed by once again recapitulating the ocular-centric viewpoint as foil. If the method of *episkopein* required the subject to ad-

opt the position of a god above the earth, this had both an estranging and distancing effect, the viewer now dislocated from their contextual position vis-avis place. If Alberti mandated the subject be in one strict position in relationship to a prism of light rays, then this had the reciprocal effect of objectifying that subject, making them the focal point in a geometry pre-ordained by the laws of perspective. No longer could a fresco be observed from any position the observer chose. Now, with the image framed, only one position is optimal. As Descartes denuded objects of all qualities save extension, they became mere relationships between coordinate points. But it is important to emphasise that we do not necessarily escape this perspectival view by considering sound. Compare Alberti's optimal viewing position to the listening "sweet spot" mandated by a stereo pair of speakers. The listener is now the object of the sound waves and not vice versa. Thus, the way forward is not to idealise an aural approach to phenomena, but to consider, with Ingold, that the world is not in the first place presented to us as sliced into different sensory registers. This provides a challenge for practitioners working with sound as primary material; as shall be discussed using specific examples in the following chapters.

Heidegger's rich account of being-in-the-world did not ignore sound. Section 34 of *Being and Time* concerns language, beginning with a description of listening for signification, the equivalent of Schaeffer's *comprendre*.

It is not a matter of chance that we say, when we have not heard "rightly," that we have not "understood." Hearing is constitutive for discourse. And just as linguistic utterance is based on discourse, acoustic perception is based on hearing [Heidegger 1996, 153].

The text develops a nuanced appreciation for listening as belonging, which incorporates "hearing the voice of a friend whom every Da-sein carries with it." The sound here is both inside and outside at the same time, knowledge implicit in listening and vice versa. This description partakes of Schaeffer's *ouïr*, sound as pure perception that doesn't require conscious interpretation. But Heidegger's listening incorporates far more than any single listening modality can encompass, since it embeds knowledge of the world as part of a rich (coming into) existence. To express this, he uses the word "hearkening."

On the basis of this existentially primary potentiality for hearing, something like *hearkening* becomes possible. Hearkening is itself phenomenally more primordial that what the psychologist "initially" defines as hearing, the sensing of tones and the perception of sounds. Hearkening, too, has the mode of being of a hearing that understands. "Initially" we never hear noises and complexes of sound, but the creaking wagon, the motorcycle. We hear the column on the march, the north wind, the woodpecker tapping, the fire crackling [153].

Schaeffer wished to attain an appreciation of sound through *entendre*, a mode of study or contemplation that considers the spectromorphology of sound, which is to say sound as pure structure. This effort requires Husserl's phenomenological reduction, so that the world itself is bracketed out of the equation, the sound object de-referenced. The very existence of the sound as thing-in-the-world, its birth as energy event, is negated. In the above quote, Heidegger makes the opposite assertion. We do not hear sounds as spectromorphology, as "noises and complexes of sound," but rather, through our constitutive knowledge of the world, as woodpecker and fire. Heidegger is explicit: "It requires a very artificial and complicated attitude to 'hear' a 'pure noise'" [153]. Schaeffer may have wished to attend to the particulars of sound itself, but his method can be considered congruent with the Cartesian project that denies context. Heidegger instead uses listening as a tool of *de-distancing*, stating the dialectic clearly:

Listening to each other, in which being-with is developed, has the possible ways of following, going along with, and the privative modes of not hearing, opposition, defying, turning away [153].

To not listen is to defy the world, to turn away from phenomena, to create the distance that defines matter only in terms of geometric distance, as pure *extensio*. But listening is how the Da-sein *gives space* freeing things at hand [103]. Listening is a process both internal and external, that can only occur within a milieu defined by the listening itself. This is a profound realisation when paired with the understanding that Da-sein's enactment of space is also a *mode of caring*. Da-sein takes care of things within a milieu that can be understood prior to any ideation. Our dwelling in place is an act of care-taking and preserving. Ingold restates this "relational context of people's engagement with the world" as

one which gives to each place "its unique significance" [Ingold 2000, 192]. Place shapes society but in turn is shaped by societal activities over years, decades, or centuries.

Consider a simple path in the woods, which starts when one person forges a way where no others have been. The next person to venture a similar route sees grass slightly bent and branches pulled to one side. This way through the undergrowth is slightly preferable to others. By the tenth person, the soil is compacted and the way is clear. It now takes an effort to choose any other route in this milieu, the path constraining those who come after. But it was the arrangement of rocks and weed, the configuration of trees and branches, that made this the preferred path in the first place. Or it might have been another path entirely, had the first travellers not incorporated their surroundings into the action of walking in exactly this way. Perhaps it was the sound of twigs snapping that keyed the explorer onto a dry path. Or was it the sun through the branches that lit up one route in preference to others? Was the original pathfinder directed by a goal, a poetic impulse, or a song in their head? Did they explicitly consider their impact on the insects, the birds, the flowers? And when will the path become so worn that it becomes hackneyed, encouraging the next adventurer to choose a different way?

This chapter has forged but one path through the thickets of Heidegger and Merleau-Ponty. This trail was forged by others who went before, and will, in turn, provide a way for those who follow. The immediate task now is to apply this platial thinking to individual practitioners of environmental music, those who have blazed their own trails, audio recorders in hand.



Chapter 5: The sonic chorography of Dallas Simpson

5.1 Introduction

This chapter will discuss the work of Dallas Simpson (1950–), a recording artist born in Essex but based in Nottingham (UK). Simpson's practice as a "location performance environmental sound artist" brings to life many of the concepts discussed in the first chapters [Simpson 2016a]. The main source of information will be three conversations with the artist, conducted as primary research using a semi-structured qualitative approach. In the questionnaire, a set of questions was proposed to the subject, but they were free to extrapolate outside those constraints. The interviews granted the subject even greater latitude in subject matter and interpretation. Transcripts of these are found in Appendix 6. Appendix 5 presents a biography as context.

Section two will explain how Simpson's early techniques developed into a practice centred on binaural recording, his primary goal being to represent his own hearing. Section three will consider more broadly practices of mobile listening and headphone listening. In particular, a short history of the Walkman explores how such technologies culturally situate activities that relate to the *flâneur* and *periplis*, discussed in chapter three. Recent developments in portable listening and recording devices have enabled those activities that are vital to Simpson's practice.

Section four will describe the psychoacoustics of hearing, first by describing localisation in the natural world, then when hearing stereo loudspeakers. In this context the characteristics of headphone spatialisation can be discussed. The binaural methods used by Simpson will be explored in the context of localisation of sound sources. Section five forms a bridge between psychoacoustics and a phenomenology of headphone listening. Heidegger's visual horizon of perception finds an analogue in the auditory, where horizon now defines a field in which listening can occur. These concepts provide a way to consider in-head localisation, that signature phenomenological character of headphone listening, not as illusion, but as part of an overtly constructed world of which listeners are aware.

Section six will use Heidegger's "The Question Concerning Technology" to explore ecological thought in Simpson's practice, his relationship to Da-sein, and the core concept of *aletheia*. Simpson uses language that finds direct corres-

pondence with Heidegger, for example expressing the "bringing forth" or unconcealment of truth. That he expresses silence as "uncreation" is an innovation that has been anticipated, in part, by Ihde. The field in which Simpson operates will be compared to Plato's *khōros*, again with remarkable correspondence.

In section seven *aquapump* is described as an exemplar of Simpson's recorded output. A detailed description of the timeline of this piece highlights a structure that reaches outside this recording, connecting this piece with those that precede and follow it. Within the recording, Simpson uses movement and performative elements to articulate the environment. The movement is indicative of the *topographic* approach that Simpson brings to his pieces. It will be proposed that the performative aspect, though core to his praxis, is potentially problematic.

Simpson's phenomenology of the *Soundbody* will be explained in section eight. This will be contrasted to Schaeffer's transcendental *sound object* by explaining how Simpson's "transformation of potentiality" forms a relational web. Katharine Norman's modalities of listening, in particular the concepts of referential and reflective listening, will help describe how this phenomenology works in terms of the listener.

Section nine summarises Simpson's platial practice in two ways. First, the connections with *topos* and *khoros* are re-stated. Second, the correspondence with Heidegger's phenomenology are developed, special attention paid to the concept of de-distancing and how technology is instrumentalised.

Finally, a brief afterword provides a self-reflexive moment that incorporates the current study into the phenomenological field of Simpson's work.

5.2 Approaches to recording

Dallas Simpson first became aware of field recordings through broadcasts of Ludwig Koch, and soon obtained a collection of these nature recordings on 78rpm disk [Simpson 2016a]. Yet he did not see himself as a field recordist, and still doesn't apply this term to his own practice. Nonetheless, Simpson has for almost two decades recorded the world around him, as this section will document. His choice of tools, while modest and quite conventional, are specifically tuned to his recording interests. These reflect a phenomenology that finds compatible expression in Heidegger and Merleau-Ponty, even if the artist himself eschews references to philosophy.

Simpson's knowledge of electronics allowed him inexpensive access to usable equipment. His first microphones were miniature custom-made electrets, condenser microphones that require only a small operating voltage. Besides their convenient size, their primary advantage is that they are readily powered from batteries and are hence portable. Simpson coupled these with bespoke power modules, allowing use in the field. His first recorders were portable cassette devices. Simpson always wished to obtain optimum spatialisation in his recordings. He experimented with a home-made Jecklin disc, which is a boundary plate placed between two omnidirectional microphones, operating on the principle that it creates some of the same reflections as a human head. But the results were not yet as he wished.

In the late 1970s or early 1980s Simpson heard a BBC broadcast of a recording of a cyclist in a tunnel. The clarity of the spatialisation made an immediate impression. "As a keen cyclist, the bicycle chain sounds perceived below, at my feet level, totally blew me away" he recalls. "I was hooked on binaural." For him, this was an obvious improvement on his previous techniques. A further improvement came with a move to Sony D7 DAT recorders (later also a Tascam DAP1 DAT machine). His first released recording, *abha* [Simpson 1996], was made onto DAT with "two pound Maplin electret mic inserts" [Simpson 2016b]. The limitation of this equipment was not sound quality, but reliability. Microphones would "go noisy" or fail unexpectedly. According to Simpson, he has an entire archive of recordings from the 1990s that are poor in one or more technical aspects. He will not release these, no matter how good the subject matter. Simpson's application of this standard of sonic accuracy might well stem from his scientific training. Nonetheless, this is not based on quantitative measurements, but is rather a qualitative expression of his hearing.

The human ear is capable of an incredibly wide range of dynamics. 100 dB is not a problem with transient peaks of loud sounds. By using a particular in-ear binaural technique of recording, I am trying to capture, as accurately as I can, my own hearing. So I want to try and capture that sense of dynamic range as well. So the consequences of that are that I have to record at quite a low level by conventional standards [Simpson 2016b].

However, this quality standard has not translated into any fixation on electronic equipment for its own sake. In conversation, Simpson only mentions specific gear when asked direct questions. Unlike some other artists, he does not list equipment on liner notes. Hence, it is most accurate to read Simpson's sonic standards as a *constraint* on his results, in the sense that insufficient fidelity will prevent a recording from being released. But these standards are not the *goal* of his activities. Simpson is not trying to render a place in the highest fidelity, but instead express the place with a recording that matches his experience, his "own hearing." To understand his intent, it is helpful to go back to his earliest listening experiences.

I have always been fascinated by listening. As a child of 6 or 7 living in Wickford, Essex, I noticed that sounds behind a hedge seemed much closer than they actually were. When you came to a break in the hedge and could see where the sounds were coming from, the sound sources were much further away than they appeared by ear. This was curious. I was hooked on listening from an early age [Simpson 2016a].

What is most interesting here is what is missing from the description. When people are asked to recall an early sonic memory, one that was formative for them, they will typically mention a specific sound: their mother's voice, an airplane, the sound of the sea, etc. But in this passage, Simpson doesn't mention any specific sound source. Rather, it is the phenomenological experience of listening that captures his interest. Specifically, the inability to accurately localise a sound source's distance is noted as something "curious" and worthy of further attention. It is also noteworthy that the hedge has brought sounds "closer" to Simpson. Without the hedge, they are "much further away than they appeared by ear." The hedge has acted to decrease perceptual distance, to create a more intimate aural space.

Simpson's recording techniques directly address both aspects. The emphasis on headphone listening, as opposed to loudspeakers in stereo or some other configuration, makes intimacy the priority. Binaural recording allows us to more accurately locate sounds in the imaginary space of the recording. These considerations will now be addressed in more detail, first by investigating head-

phone listening, second by considering the phenomenology of binaural recordings.

5.3 Mobile listening and portable audio devices

In *The Audible Past* Jonathan Sterne recounts a narrative of headphone listening by analysing historical advertisements for audio products. From their earliest use, headphones are promoted as allowing for an isolated listening experience, allowing the user to focus attention on the sounds and their characteristics [Sterne 2003, 24]. This is true even in gramophone advertisements that picture several people listening to the same sound source, each wearing headphones. It is not that each is getting a personal experience, since they are listening in a group. Rather, they are each getting a heightened experience of the sound, in part through isolation from external noise.

They help create a private acoustic space by shutting out room noise and by keeping the radio sound out of the room. They also help separate the listener from other people in the room. Through this isolation, the headphones can intensify and localize listeners' auditory fields, making it much easier to pay attention to minute sonic details and faint sounds [Sterne 2003, 87].

Headphones are considered in the same way by audio engineers today. Headphones are most commonly used to provide musicians in the studio a "foldback mix" that enables them to play along with other musicians, or previously recorded tracks⁵². They are also useful for increasing a producer's acuity, so that mistakes can be caught before they are recorded. Finally, they are a useful tool for checking a final mix. But almost nothing is said in the audio engineering literature about headphone listening itself, and music is rarely mixed with headphone listeners in mind.

The first headphone, the Koss SP-3 Stereophone, was produced in 1958 [Stankievech 2007, 57]. But it was with the introduction of the Sony Walkman in 1979 that headphone listening became truly mobile⁵³. Prior to this, small mono earbuds were used to audition transistor radios on the move, but this was

⁵² Audio engineering knowledge is here represented by three popular textbooks: Everest 2001; Howard and Angus 2009; Owsinski 2005.

a minority activity. Otherwise, radios and boom-boxes used a speaker to disperse sounds to all in the vicinity. Besides making private listening a commonplace, the Walkman was notable in several ways. First, it displayed feature "devolution," being "a cassette recorder *minus* the recording function and the speaker" [Hosokawa 1984, 168]. Second, it was an example of miniaturisation, small enough to be hidden in a pocket, unlike the previous generation of bulky cassette recorders.

It is easy to read Walkman users as insular, hiding away behind their headphones and mirror shades, in their novel, "mobile, wraparound world" [Chambers 1997, 141]. Indeed, this was a common view at the time, fuelled by an intergenerational distrust of those who might wish to cut themselves off from society, even if this only meant substituting the roar of a subway car for music of their own choosing [Jackson 1997]. Hosokawa presents an opposing interpretation. The technical innovations embedded in the Walkman, once distributed to a mass public, created the possibility of "singularisation," enabling a form of listening that is "more occasional, more incidental, more contingent" [169]. Hosokawa argues, by way of Gilles Deleuze, that "this singularity is radically different from being individual and personal. It is rather anonymous, impersonal, pre-individual and nomadic." Walkman listening is a radical act that repurposes generic and ubiquitous urban sounds into something at once personal, since the individual is the curator of the sounds they wish to hear, and share, in the sense that the device creates a common community of interest.

It intends that every sort of familiar soundscape is transformed by that singular acoustic experience coordinated by the user's own ongoing pedestrian act, which induces an autonomous 'head space' between his Self and his surroundings in order to distance itself from – not familiarise itself with – both of them. The result is a mobility of the Self. Thus the walkman [sic] crosses every predetermined line of the acoustic designers. It enables us to move towards an autonomous pluralistically structured awareness of reality, but not towards a self-enclosed refuge or into narcissistic regression [Hosokawa 1984, 175].

⁵³ Hosokawa 1984 incorrectly notes the launch date as spring 1980 and other writer have followed his lead (for example, Chambers 1997).

We must now consider the name of this popular device. "Walkman" at first glance appears a strange way to label a cassette player. Indeed, Sony was uncertain, and labelled the product the "Stowaway" in the UK and the "Soundabout" in the USA. But quickly the label Walkman caught on globally. Though it says nothing about the audio function of the unit, the name points to the community of walkers, mobile participants in an urban ecosystem, that the Walkman helped create. Indeed, Akio Morita, Sony president, first conceived of the device while walking in New York City [Chambers 1997, 141]. This conception immediately recalls the *flâneur*, that person of leisure and means who wanders the arcades of Paris (chapter 3.6). Chambers updates this image for "a world fragmenting under the mounting media accumulation of intersecting signs, sounds and images" [1997, 141]. The Walkman enables the creative act of determining a personal soundtrack, freeing oneself of the overdetermined sonic environment of Muzak and urban noise. This functions to subvert the sensory bombardment of capital-ist excess, in direct parallel to the *flâneur*.

But if the Walkman so far represents the ultimate form of music on the move, it also represents the ultimate musical means in mediating the media. For it permits the possibility, however fragile and however transitory, of imposing your soundscape on the surrounding aural environment and thereby domesticating the external world; for a moment it can all be brought under the stop/start, fast forward, pause and rewind buttons [141].

The Walkman, then, is a tool that enables a *dérive*, the creation of an internalised narrative that allows a certain degree of control over one's environment. This narrative can be in accordance with the city, emphasising its moods and rhythms. Or it can be used to counter an urban environment received as oppressive. Thus, there is also a political dimension to the use of a Walkman. Since millions of other people are using this tool, for similar or dissimilar purposes, wearing a Walkman takes on all the characteristics of a shared cultural activity. One moves through zones of sonic influence with other travellers, recognising in them, through the overt sign of the headphones, their membership in this community of interest. These *periplis* are encounters that entwine the subject with the world (chapter 3.5), but which also create social threads through parti-

cipants, in part through commonality, in part as a counter-culture resisting the oppression documented in Jackson 1997.

Numerous portable audio technologies have followed the Walkman. First of the successors was the Walkman Pro (1982), which allowed high-quality audio recording. The WM-D6 model was commonly used in concert taping and radio station interviews. DAT, more properly Digital Audio Tape (1987), was a digital recording solution that used a troublesome helical scan head to record to tape. The MiniDisc (1992) was introduced to provide a more robust mechanism and cheaper production costs. However, the MD format failed in the music market, since publishers did not invest in releasing pre-recorded MiniDiscs of music. Nonetheless, MD persisted for many years, due to its adoption in radio and hobby activities such as concert taping. As volatile memory became less expensive, MP3 players with no moving parts gained traction. The most popular of these, the Apple iPod (2001), is still available today. But largely the mobile phone has trumped other devices, since it provides a general-purpose tool for everyday activities. This highlights a very different relationship of tool to individuality and community, when compared with the devolution of function in the Walkman⁵⁴.

Outside of the realm of mass market devices, professionals (field recordists, radio and television crews, etc.) rely on devices specifically marketed to their disciplines. Dallas Simpson currently uses a portable Tascam DR70D and the more capable Sound Devices 744T recorders [Simpson 2016a]. His microphones are a set of DPA 4060 capsules, modified for in-ear use. Despite a highly-technical, specialised, background in audio mastering, Simpson does not use esoteric equipment or recording configurations. His emphasis is not on the gear, but on an experiential phenomenology of place and listening.

Before continuing, one objection should be considered. This section has focused on mobile *listening*, yet it is mobile *recording* that concerns Simpson. The two are dissimilar, in as much as Simpson does not employ headphones while recording [Simpson 2016a]. Indeed, headphones are contraindicated by his binaural recording method, to be discussed in the next section. The material here is nonetheless relevant, since Simpson's listeners must wear headphones to audition his binaural recordings. Even if they are not doing so in a mobile environ-

⁵⁴ No doubt this is a suitable subject for further study.

ment, an understanding of how headphone listening has developed as a cultural product is important to situating this practice. Further, Simpson is producing his recordings with just such a headphone listener in mind. This intentionality points to the importance of this mode of listening to his practice. The position of the Walkman listener in relationship to *topos* is not dissimilar to Simpson's own position as recordist. Further development is required before this topic can be dealt with thoroughly.

5.4 The psychoacoustics of headphone listening

The specifics of headphone listening still require elaboration through psychoacoustics. This will be accomplished by first describing the "natural" listening scenario; second, by considering stereo playback using two loudspeakers⁵⁵; and third, by considering headphone listening. The emphasis will be on the localisation of sounds, since it is this aspect that speaks *to place* and *of place*. Certainly, there are many other aspects to psychoacoustics (frequency discrimination, for example), and these aspects are inter-related in complex ways. For example, distance to a sounding object can in part be determined by the attenuation of high frequencies by atmosphere, and this varies depending on humidity and air temperature. Thus, sound will be heard differently on a foggy night from how it might sound in the clear, dry air at noon. While these factors are certainly important, certain simplifications in considering localisation will be made so that this section does not become too burdensome.

With Merleau-Ponty we begin with the body and how our innate schema shapes our apprehension of the world. Consider first that we are binaural beings: sound sources in the world are localised using two ears. This involves a complex mechanism that is largely (but not only) a combination of three processes: ITD, IID, and HRTF [Howard and Angus 2009, 107-114]. The difference in the arrival times of a sound at each ear is termed the Interaural Time Difference (ITD). ITD is useful for locating sounds to the side of the frontal axis and is strongest for lower frequencies. Similarly, the difference in amplitude between the ears is tracked as Interaural Intensity Difference (IID) [111]. This provides

⁵⁵ *Stereo* (which literally means "solid") technically refers to the use of *more than one* loudspeaker, in other words anything other than monophonic sound [Malham 1998, 173]. But this usage is now uncommon.

us with good information at higher frequencies. The Head-Related Transfer Function (HRTF) is a measure of how the head, external ear (pinna), and other parts of the body filter the arriving sound. High frequencies (above 5 kHz) are dramatically changed by HRTF, depending on their direction of approach to the ear canal. Small movements of our head are used to change this filtering over time, facilitating more accurate localisation [113-4]. It is also true, in case we forget, that localisation is intermodal. We triangulate sources with our eyes as well as ears.

Loudspeaker listening complicates localisation, since we are no longer hearing a point source; instead, each ear hears an admixture of sounds from each transducer [116-7]. In a typical stereo configuration, sounds are localised in a frontal direction, on an axis between the left and right speakers. When a producer mixes music, sounds are "panned" using relative changes in the amplitude sent to the stereo channels. Panning places a sound source on a panorama, a horizontal virtual sound-stage. This allows for greater discernment of individual sound sources, helping to alleviate frequency masking. When it comes to field recording, these production tools are unavailable. Instead, recordists rely on microphone techniques to capture as many location cues as possible, so that these will reproduce in the listener an accurate rendering of the source in a spatial milieu.

With this as context, headphones can finally be considered. A headphone consists of two small speakers, each placed at an ear. The goal is to tightly couple the left channel to the left ear, the right channel to the right ear. In this scenario, unlike the loudspeaker configuration, there is no sound received from the opposite transducer. Neither is there any interference (echoes, reverberation, filtering) from the listening room [Kapralos et al. 2008, 539]. For these reasons, headphones allow the auditioning of sound with greater acuity and discrimination (assuming headphones of suitable audio quality). It has already been discussed how audio engineers utilise headphones for just these reasons.

Consider now the sound-stage when listening on headphones to a recording that was designed for speaker audition (mixed in stereo). The horizontal panorama no longer lies in the frontal direction of the listener, based on loudspeaker distance. Instead, it forms an axis between the ears. Hence, sounds are perceived as being sourced somewhere inside the head, a phenomenon not surprisingly known as inside-the-head localization (IHL) [539]. This creates a virtual

auditory field that doesn't exist in the natural world, nor even with loudspeaker reproduction⁵⁶. This normative form of headphone listening creates a region of sound apprehension confined by a panorama corresponding with the listener's own skull.

Since IHL is viewed as undesirable, the goal of contemporary psychoacoustic research is to "externalise" sound sources, so that they might be perceived as originating from outside the body. But such research faces numerous challenges. Consider first fundamental differences in headphone design [Howard and Angus 2009, 384]. Circumaural headphones encompass the ear, and so incoming sound might involve interactions with the pinnae, though not in the same way as with loudspeakers. Supra-aural headphones sit firmly on the ears, obviating pinnae effects, but the sound still encounters the cup of the ear, or concha. In-ear headphones, or canal-phones, sit directly inside the ear canal, and so bypass the concha. Thus, the different physical designs of headphones mean that the received sound partakes in varying degrees of the HRTF. Even if one has the HRTF to hand as an equation and wishes to externalise headphone sound by applying this to the signal, there is no one method that will work efficiently. Besides this reality, every model of headphone is different from every other, and compensation must be made (through frequency equalisation) for these hardware-based spectral characteristics, before the application of psychoacoustic processing. Such databases of equalisation curves are compiled by headphone manufacturers and other researchers⁵⁷.

The limitations of listening to stereo recordings on headphones, in particular the effect of IHL, have been addressed through several alternative spatialisation methods. The simplest solution is a process known as binaural recording, a confusing term, since all listening conducted with two ears is technically binaural (as already mentioned). The core concept of binaural recording is to place microphones where a listening ear would be. This recording is then played back

⁵⁶ This is not strictly true if experimental scenarios are taken into account. "Although rare, IHL can also occur when listening to 'external' sound sources in the real world, especially when the sounds are unfamiliar to the listener, or when the sounds are obtained (recorded) in an anechoic environment" [Kapralos et al. 2008, 539].

⁵⁷ Indeed, products are available for consumers who wish to equalise their headphones to a normative curve. Sonarworks Reference and Toneboosters Morphit are two.

directly for the corresponding ear, using headphones. Binaural recordings are hence generally considered inappropriate for loudspeaker listening. For this reason, uptake of binaural audio has been quite slow, until recent years. The subject has been revitalised due to the prevalence of gaming systems that incorporate 3D audio, virtual reality (VR), or augmented reality (AR). The research community is actively engaged with techniques such as planar microphone arrays and Ambisonics, designed to create more "realistic" localisation of sound [Zhang et al. 2017].

Binaural recording is the simplest and oldest of spatial recording techniques. Soon after establishing the Parisian telephone network, engineer Clément Ader invented the Théâtrophone (1881). This was the first two-channel sound system, designed so that a performance of the Paris Opera could be transmitted down a pair of telephone lines to a subscriber listening on headphones. The success of this demonstration allowed commercialisation from 1890 to 1932, the incorporation of several additional theatres, and extension to other European cities [Delano 1925, 174].

Contemporary binaural recordings can be made using one of two methods: by way of a "dummy head," or through in-ear microphone placement. A dummy head is built to the topology of a human head, but with microphones inside the ears. Sometimes shoulders are included on the dummies, to model the small effects on the HRTF that this part of the physiology imparts. Dummy heads are created to match an "average" body, and so will not map with complete fidelity onto any one listener. Neumann was the first company to commercialise this process in 1972, with the availability of the model KU-80 *kunstkopf*, as such devices are affectionately known. This was used as early as 1973 to record music, documentaries, and radio plays [Krebs 2017].

Dallas Simpson utilises the second method, which involves recording with small microphones placed directly in his ear canals. This allows a great deal more mobility than when using a *kunstkopf*, which is normally restricted to a fixed position. This mobility factor is of importance to this artist, as shall be discussed in detail below.

In-ear binaural recording has its drawbacks. Every movement made by the recordist risks creating noise: from the friction of clothing on clothing, from hair brushing the microphones themselves, and so on. Sensitive microphones in quiet surrounds will even pick up stomach noises and other bodily processes.

Every cough or sneeze of the recordist, their wheezes of exertion, will be recorded. Simpson calls these "personal accidents" and edits these "inappropriate intrinsic bodily noises" out of his recordings [Simpson 2016a].

A second problem stems from the fact that the details of physiology differ for each individual listener. The shape and size of pinna, concha, ear canal, and so on, vary enormously, and this leads to significant differences in HRTF [Kapralos et al. 2008, 533]. With the binaural method, the HRTF of the recordist is effectively embedded in the resulting recording. Played back directly with in-ear headphones, the HRTF of the listener has limited effect. The desired result (even if this is not fully realisable) is for the listener to hear as the recordist heard. In conversation, Simpson expressed this clearly: "My particular approach is that I'm sampling my own hearing" [Simpson 2016b]. But since every body produces a different HRTF, spatialisation effects can vary quite widely. After all, we are used to hearing with our own ears, not someone else's. Our entire psychoacoustic apparatus has been tuned to the particularities of our own physiology. The inevitable result is that in-ear binaural recordings work best when auditioned by the recordist themselves. But they are less effective, to varying and unpredictable degrees, when heard by other listeners. This is not explicitly acknowledged by Simpson, who refers instead to an ear archetype.

I want to really engage the listener, listening through my ears, which is an archetype of all ears. To encourage them to hear perhaps in a way that they have never listened before. And to focus on things on a journey. Because all of my works are on the move. I tend not to record in a stationary position and then another stationary position. It's always a trajectory around and through an environment [Simpson 2016b].

However, when Simpson makes a binaural recording, it is *he* who is moving through the physical environment. This experience is best appreciated by a sedentary listener, for two reasons. First, this allows the existing location cues to be appreciated, without them being confused by the listener's own movement. Second, the low sound levels and high dynamic range of these recordings require a quiet listening environment to prevent masking. There is something of a paradox in the fact that Simpson's peripatetic activities cannot be appreciated except by a listener at rest. But this is not to fault the method, which relies on an

act of imagination, of putting ourselves in his place. Simpson becomes our proxy, quite literally *our ears*, as he encounters and negotiates place.

5.5 The phenomenology of headphone listening

The phenomenology of headphone listening can be approached by first considering Heidegger's concept of the horizon. Throughout *Being and Time* this stands in for limitations to the understanding of a particular problem or thought [Heidegger 2001, 54, 62, 63, 131, etc.]. A horizon can be approached but not reached, since it is always deferred. As we saw in chapter 4.4, Heidegger's analysis of Raum (space) is made through Greek nomenclature. He develops a definition of horizon that will be fundamentally important to the following arguments.

A space is something that has been made room for, something that is cleared and free, namely within a boundary, Greek *peras*. A boundary is not that at which something stops but, as the Greeks recognized, the boundary is that from which something *begins its presencing*. That is why the concept is that of *horismos*, that is, the horizon, the boundary. Space is in essence that for which room has been made, that which is let into its bounds. That for which room is made is always granted and hence is joined, that is, gathered, by virtue of a location, that is, by such a thing as the bridge. *Accordingly, spaces receive their being from locations and not from* "space" [Heidegger 2001, 152].

Da-Sein encounters things in the world, but never in terms of fixed observations, rather within an extent circumscribed by a horizon. In accordance with our platial theory, it is this region that "gives being." But this coming-into-being also requires that we pay attention *towards* things. In other words, our being is *emplaced*, considered within that horizon.

Take the example of apprehending a sound from beyond a hedge. This occurs within a certain region that has, at first, only the *potentiality* for hearing. Attention to this event is required for the sound to come into being as phenomenon. If our attention is elsewhere, or simply occluded, we will not hear the sound. This is the everyday experience of attending on the auditory. We know that we can focus on one conversation in a noisy room or widen our scope of hearing to encompass the room as a whole. It is noteworthy that we are aware of our atten-

tional acts with regards to acoustic sources. By comparison, our vision tends to come to us as "ready-made" and complete, even if this is a bias resulting from centuries of ocularcentrism. The fact that we can perceive and understand the auditory as process makes hearing a useful sensory modality by which to approach Heidegger's phenomenology.

A horizon is typically thought of as a visual effect, but we can also describe an acoustic horizon by way of limitations to the acuity of hearing. This can occur through distance, as sounds attenuate. A sound too quiet relative to the ambience will not be heard. We have "horizons" for pitch, based on the range of frequencies we can apprehend. Though we can continue to describe these effects in terms of "region," a spatial construct, the word "field" is more appropriate for the auditory. Merleau-Ponty used this term in a general way: "The perceptual 'something' is always in the middle of something else, it always forms part of a 'field" [Merleau-Ponty 2005, 4]. The term has also found favour with Don Ihde.

The question of an *auditory field* has already been proximately anticipated in the observation that all things or occurrences are presented in a situated context, "surrounded" by other things and an expanse of phenomena within which the focused-on things or occurrences are noted. But to take note of a field as a situating phenomenon calls for a deliberate shifting of ordinary intentional directions. The field is what is present, but present as implicit, as fringe that situates and "surrounds" what is explicit or focal. This field, again anticipatorily, is also an *intermediate* or eidetic phenomenon. By intermediate we note that the field is not synonymous with the thing, it exceeds the thing as a region in which the thing is located and to which the thing is always related. But the field is also limited, bounded. It is "less than" what is total, in phenomenological terms, less than the World [Ihde 2007, 73].

A primary characteristic of the auditory field is that it surrounds us pretty much on all sides, through with greater acuity in the plane of our head. This is unlike the visual field, which participates in a frontal ontology. This fact has led to much talk of sound as "immersive," but this is to oversimplify Heidegger's phenomenology as outlined above. It is true, however, that this auditory field is always *close* to us, since it is *known* to us, and anticipates our auditioning of sounds. If the visual and tactile regions present objects in terms of their readi-

ness-to-hand, then there must be a similar coming-into-use that a sound participates in. This idea will be explored below.

Heidegger's horizon must be outside ourselves, already emplaced in the world that we come to and help shape by *giving space*, *de-distancing*, and other processes discussed in the previous chapter. However, this description does not seem to correspond to a situation where the auditory horizon is located somewhere inside our own skull. Indeed, it would be tempting to read headphone listening as a situation partaking of *illusion*, a scenario where we are being "fooled" by sensory data, where the exterior world and our subsequent mental images are not in accord. We could follow Husserl in bracketing out such sounds and considering themselves as internal representations only. But this would abstract and idealise *all* sounds, not just those under consideration (as discussed previously). The idea offers many temptations but is contrary to the ideas of Heidegger and Merleau-Ponty developed herein.

Instead, the phenomenological position of the listener must recognise that the listener is not naive, but knows, in the first instance, that they are listening, as a self-reflexive act. Furthermore, the listener knows that they are not listening to any "natural" source in their immediate environment, but to a recording. The original acoustic source has been removed from the place of recording and shifted in time, allowing this event to be heard after it has concluded. Furthermore, this recording was made by someone, and for a certain purpose. It's been distributed through a net label or on CD, categorised and marketed in particular ways. There is intentionality in production and distribution, and the listener makes themselves a willing participant in this network. Thus, any talk of "illusion" falls quite short of the mark, as it assumes a simple binary correspondence exists, or could ever exist, between a sound and its index, outside of the cultural domain, outside of the recording process. Even if the recording originally pointed to an indexical sounding object in the world - this fact might be granted more readily for a field recording than a musical production - the recording is only ever an approximation of this sound, for a microphone is not an ear.

I go to the auditorium, and, without apparent effort, I hear the speaker while I barely notice the scuffling of feet, the coughing, the scraping noises. My tape recorder, not having the same intentionality as I, records all these auditory stimuli without distinction, and so when I return to it to hear the speech re-presented I find I can-

not even hear the words due to the presence of what for me had been fringe phenomena. The tape recorder's "sense data" intentionality has changed the phenomenon [Ihde 2007, 75].

According to Ihde, the recorder/microphone and listener/recordist do not have the same intentionality and do not record the same sense data. For some, this is a reason to blame the technology itself. The dislocation of "sounds in time and space" has been described in pejorative terms, as *schizophonia*, the unnatural splitting of source and effect caused by mediating technologies [Schafer 1994, 90]. This argument proposes to make the technology unnatural in order to naturalise listening itself. In other words, there was some originary listening that was "natural" before the technology arrived to estrange us from the paradise of unmediated listening. This belief is predicated on defining nature in terms of Romantic and Providential ideologies [Parmar 2018c]. Such thinking does not address an age where mediated listening is not an aberration but a commonplace. A very different approach to technology will be developed in the next section.

5.6 Da-sein and environmental chorography

Heidegger asks "The Question Concerning Technology" by considering that modern technology, unlike "the techniques of the handcraftsman" [Heidegger 1977, 13] is instrumental [4]. It sees nature and humankind alike as a "standing-reserve," an accumulation of excess value, a raw resource to be exploited [17]. This "enframing" [19] of the world "is a challenging, which puts to nature the unreasonable demand that it supply energy that can be extracted and stored" [14]. Heidegger's argument here is fundamentally ecological. If the crisis of "our sheer preoccupation with technology" continues [35], it is not just that harm will be done to the world through our technologies (atomic power is explicitly mentioned [15, 22]), but that humanity itself will become only so much "standing-reserve" [28]. In other words, it is this way of looking at the world that must be countered, by a deeper investigation into being and truth.

A tool is formed of a material (*hyle*), shaped into a form (*eidos*), for a particular end (*telos*) [7]. The use of a tool is in some ways built into that tool; its readiness-to-hand is a function of its creation. Hence, Heidegger cannot call for an end to technology, as though that could ever be, nor even advise us to stop using

technology in certain ways. Instead, he points to a solution in the fact that technology and the arts were the same root activity in ancient Greek culture.

[*T*]echne is the name not only for the activities and skills of the craftsman, but also for the arts of the mind and the fine arts. *Techne* belongs to bringing-forth, to *poiesis*; it is something poietic [13].

From this, Heidegger understands that "the essence of technology is nothing technological," but rather art [35]. This art manifests as questioning, and it is this open attitude towards technology that must be cultivated, for "questioning is the piety of thought" [35]. To follow the way of *poeisis* allows a movement to "unconcealment" that lies implicit in the object of creation (the tool) itself. Only in this way can "the crisis" of "our sheer preoccupation with technology" can be averted [35].

The ecological is also close at hand in Dallas Simpson's works. Like Heidegger, he wishes to address a "damaged understanding," to develop deeper awareness of the radical interconnectedness of being and its place in the world.

We have a fragile planet. We're talking about global warming and all of the ecological disasters, exploitation of resources, all of these things. That to me speaks to a damaged understanding, a damaged relationship we have with the planet that sustains us. And so the work that I do is in part a call to say: look, we need to establish a healthy relationship with our environment. If we do so, if we love the space that we inhabit and all that is therein, then how can we possibly damage it or want to exploit it in a way that's unsustainable? And that is wrapped up in the process of the caress, the touch, the listening, the respect, the silent devotion of listening. And that's all part and parcel of the improvisation [Simpson 2016b].

Simpson's approaches to space here seem fundamentally congruent with Heidegger, whose operations occur in the field in which useful things-at-hand reside [Heidegger 1996, 103]. In chapter 4.4 it was described how existential space is created by the process of *de-distancing*, which brings the world close to hand, and *orientation*, which situates the Da-sein. This entangled relationship is comprised of mutual processes in which the field of experience shapes expecta-

tions about the possible use of objects. At the same time, the knowledge and frame the Da-sein brings to bear shapes its environment. There is a mutual respect between the Da-sein and what it encounters in its field of operation. Every act of the Da-sein *takes care* of things within its horizon. This is done by *giving space*, "free[ing] things at hand for their spatiality." This intimate exchange between the Da-sein and the world is expressed as follows:

When I am moving, creating a work, a lot of the time I am moving in a very, I would say respectful, almost reverent kind of way. I'm trying to give the greatest respect for the materiality that I am both passing through and connecting with. When I'm creating a sound from something, the action will be quite carefully judged [Simpson 2016b].

In Heidegger's essay on technology, he turns and returns to *truth*, whether in the Roman form *veritas* or the Greek *aletheia*, as that which is brought forth out of unconcealment [Heidegger 1977, 11-12]. The truth was once hidden, but through *aletheia* is revealed. This concept is central to his essay, since *poiesis* also participates in the same kind of movement. Heidegger quotes Plato: "Every occasion for whatever passes over and goes forward into presencing from that which is not presencing is *poiesis*, is bringing-forth" [10]. Simpson also uses the phrase "bringing forth" in a description of his activities.

And then that reflects back to this idea of transcendence, which I keep coming back to and mentioned several times in my reply to you. That bringing something forth from the state of *uncreation*, of silence in the sonic universe. Something that's silent is uncreated; it has no reality. But when it vibrates in air or any other rarefied medium then those vibrations are its life, and its being, and its reality. And that transcendence from death to life, and then into silence, which is the death of the sound [Simpson 2016b].

It is clear, then, that Simpson is practising a poietic bringing-forth in exactly the manner Heidegger describes, despite his unfamiliarity with the author⁵⁸. This provides justification for using Simpson sonic practice to augment Heideg-

⁵⁸ In a parenthetical note, Simpson writes: "I never did any pure philosophy at school or in college, so I had to think these things through from scratch" [Simpson 2016a].

ger's logocentric and ocularcentric modes⁵⁹. The field in which Simpson begins, the "place" he has chosen for his choreography, may be read in terms of Plato's *khōros* (chapter 3.3). Recall that Plato first proposed two types of matter, the "unchanging, uncreated, and undying" Model and the "perceptible, created, and in perpetual motion" Copy [*Timaeus* 44-5; 52a]. But then he proposed a strange *third kind*, being both material that has yet to take form, and also a place in which this forming will occur.

Simpson describes a field of silence, where *field* can be taken as that delimited phenomenological region described earlier (chapter 5.5), but also, quite literally, as the area by the River Trent (*The Field of Stones*), a circumscribed zone at Birling Gap (*The Shore of Stones Suite*), or a walking path through Basildon Town Centre (*For Whom The Bells Told*). Simpson states his horizon of experience explicitly when he notes that "performances are localised and conformed to a particular location" [Simpson 2016a]. Within such fields, he will take specific actions. These are circumscribed by the $kh\bar{o}ros$, and the opportunities that place offers, but they are not foretold. Rather they emerge from contemplation and preparedness as "expressed and unexpressed potentialities" [Simpson 2016a]. This requires an initial suspension of attention that Ihde describes:

In isolating field characteristics the temporary suspension of the first existential attention toward things must occur. Attention is turned to what is indirect and implicit when compared to the ordinary involvements with focal things. Phenomenological attention moves outward, recapturing a possibility of the focus-fringe ratio anticipated in the first approximations to the field phenomenon. But this move away from things in order to explicate and describe the field phenomenon does not abandon the existential possibilities of things so much as it performs its purposeful inversion of attention in order to return to a more adequate sense of existentiality once the field is described [Ihde 2007, 74].

Attention, then, has a sort of push-pull dynamic: sometimes from inside-out, as the Da-sein makes decisions that encounter new phenomena; sometimes out-

⁵⁹ Heidegger only significantly writes about silence in one passage of *Being and Time*, and, tellingly, this is concerned with the absence of speech, of *logos* [Heidegger 1996, 208].

side-in, as things in the world shape these encounters. This is, again, a description of the platial mode, which has an essential temporal nature, most especially when dealing with sound. When prompted with the word "drifting," Simpson offers a corrective statement that declares greater volition in the subject.

There's a sense of drifting, but there's also this idea of focusing absolutely on the moment. It's a strange state of being and I can't easily describe it. But it's a state of being absolutely focused in the eternal present, on one level. But also just keeping a glance at what's coming along [Simpson 2016b].

The significance of Simpson's specific mode of engaging with the field is that he expresses these improvisations as sonic encounters, through audio recordings. The sensitivity of the Da-sein to the field dynamic, as just described, is in his case expressed in the first instance through listening, and then through a series of movements and articulations within the horizon of experience. These aspects need to be dealt with more specifically.

As Simpson stated above, a silent state of *uncreation* precedes sonic reality. This silence is pregnant with, not only the *possibility* of reality, but the *necessity* of things birthing, events occurring. This returns us to the function of *khōros* as a rich generative matrix, a nursemaid for creation. If Simpson describes the state before creation as silence, he does so with full knowledge that this is not an absolute acoustic silence, but rather a metaphysical silence that provides room for anticipation. Idhe describes this situation by comparing silence to visual distance, or depth.

Auditorily this hidden depth is silence. In its relative horizonal features silence lies hidden along with the sounding that presents itself. But silence, as in all horizonal features, is not a matter of contrast or of opposition as such. Silence occurs in adumbrations of the soundful to the silent [Ihde 2007, 110].

When an object is far enough away from us, outside the visual horizon, we no longer see it. When an object is quiet enough, outside the auditory horizon, we no longer hear it. In each case if the object "approaches," it adumbrates into perception. Silence, then, is not an absolute measure, but rather the observation that a sounding object is not "near" enough to us to be heard. This is Heideg-

ger's "near," which is not a measure of distance, but a readiness-to-hand, that we might instead express as *readiness-to-ear*. So too, silence is related directly to *aletheia*. Silence is the concealment of truth in an object that intentional acts of unconcealment might reveal. However, these acts cannot reveal to us the silence itself, for that is unknowable.

But it is not as if "silence itself" were discovered. The silence of horizonal phenomena continues to withdraw, but in its withdrawing may be heard the *giving*, the eventing that sound is in its coming-into-presence. *Beyond* this limit silence continues to escape [Ihde 2007, 111].

This truism is known from John Cage. Even if we isolate ourselves from all sound, say in an anechoic chamber, we bring our own sound with us [Cage 1961, 8]. There is no silence that we can ever hear; it is a limit, an auditory horizon. But in this way silence *gives*, since it allows sound to be uncovered and heard. It does this also by providing the contrast that throws sounds into sharper relief.

Ideally, if music is to reach its full presence, it must be "surrounded" or "secured" by a silence that allows the sound to sound forth musically. This is one of the aims of a set of headphones that do not so much improve the music as help close out the other sounds and thus procure a relatively "surrounding" silence [Ihde 2007, 111].

The topic has now come full circle to headphone listening. As has already been explained, headphones operate to isolate listening from the exterior environment, and hence heighten the experience of auditioned sound. This also relates directly to Simpson's preference for recording at low levels. He does this to preserve both the full dynamic range of sound, and the spatial cues.

I like the idea of dwelling in quiet places, because then sounds have a greater distinction from that background of silence. Also, from a technical point of view, in terms of the binaural spatial elements of it, sounds that have a quiet background, where there's less interference from different sounds and reflections and so on, tend to be more spatially distinct. So when spatial choreography and the quality of the space as a three-dimensional realm that you're inhabiting

is for me enhanced by having the sound enveloped in a reasonable amount of silence [Simpson 2016b].

But even apart from these technical requirements, Simpson's methods and tools work in full accordance with his phenomenology, to be developed further in chapter 4.8. First, it will be beneficial to draw attention to an example of his work, to listen as we might listen, but also through Simpson's ears.

5.7 Case study: aquapump

This section will consider in some detail Simpson's composition *aquapump*, which will be used as an exemplar of Simpson's approach and techniques. This work was one of his earliest releases, defining certain processes and interests, foreshadowing his later approaches. It also has special personal significance for Simpson, as will be seen. When asked which was his favourite recording, Simpson chose this track.

I think *aquapump* achieved a perfection of balance and an inversion of environmental musicality at a very early stage along my journey of environmental performance [Simpson 2016a].

The recording was made at Shining Cliff Woods, Ambergate, Derbyshire on 29 May 1996 [Farfield Records 2010]. This is one of the few technically successful recordings made in the first nine-month period of Simpson's experimentations with binaural recording [Simpson 2016b]. He used inexpensive microphones with a home-made battery pack, feeding a Sony D7 DAT recorder [Simpson 2016a]. While back on location twenty years later, Simpson provided this description:

I got here about five o'clock in the morning. Might have been four-thirty, five o'clock. Obviously it was May, the days were longer. It was dusk, and I walked up the path, [...] stopped on the track just over there, and waited for an aircraft to go over. And then, came over here following the sound. Because with the thing pumping away, it's a lot easier to locate. And I did a bit of improvisation [Simpson 2016c].

The track *aquapump* was released in 1997 on the Emit Records compilation *emit 1197*, where it was mistakenly titled *Waterpump*. The timing is given as 12:09, but the playback starts long before the previous track is finished, while the fade-out is edited into the next track on the compact disk. Thus, a pure field recording finds itself sandwiched between International Peoples Gang's *Imagination Satellite* and Miasma's *Dead Eye*. It is a testament to the recording that it bears up well in this context. In 2004, Farfield Records issued *Sonic Bathing 1*, a CDR comprising four tracks, including the two selections that had been released by Emit. The track *aquapump* was now correctly titled, and ran for a length of 13:20. A narrative of the timeline follows, with a more complete version attached as Appendix 7.

The recording fades in to what the listener can assume is a typical temperate woods backdrop. This includes birds chirping and a background pink noise field that could be distant water. For the first minute, the sound of walking, a crumpling of the low earth cover, is paired with louder sounds of snapping twigs and under-brush being dislodged. At about the one-minute mark an indistinct rhythmic sound may be heard, though this makes itself far more obvious as time goes on. It becomes clear that Simpson is moving towards the source of this sound, which has a steady 43.5 BPM pulse. After two minutes we also hear gurgling water, like a small brook. At about 3:45 the full structure of the rhythmic sound can be heard. The sharper "snap" that was previously evident is now matched by a repeated low note, the second impulse of which echoes the first. If we count in 8 beats, these pulses are roughly on 1 (high tone), 6 (low tone), and 8 (low tone slightly quieter). This rhythm sounds uncannily like a heartbeat, or at least like how we might imagine a heartbeat to sound. This beat continues, with different perspectives being offered, sometimes stronger in one channel, sometimes another. After another three minutes the beat can be heard as a constituent component in a more liquid sound. Even if we didn't know from the title, we can now name what we are hearing as a pump. At 8:11 a new element is added. There is a very low frequency rumble as a heavy object is moved. This repeats unevenly, in something like the same rhythm as the pump. In the liner notes, this is described as "some subtle improvisation on the loose concrete lid of the pump housing, which I stood on for part of the recording" [Farfield Records 2010]. At 10:03 this heavy sound of the concrete lid ceases but the recording stays in vicinity of the pump; its peak loudness is reached at 10:27. Then we move away from the pump, back into the woods. There is a fade out to silence from 12:55.

The structure of this recording is symmetrical. It begins with a fade-in from silence to a general ambience; only then is the presence of the recordist revealed by way of the walking sounds. The recording ends in the same way, the general ambience fading out to silence. This theatrical framing is used for many Simpson performances, a technique that he describes as a "walk-in" and "walk-out."

The walk-in and walk-out are conceptual links to all the other performances I have and will create, to these works are all interlinked like the continuum of the surface of the earth. There are spiritual, philosophical and conceptual elements that drive the performances and shape my behaviour [Simpson 2016a].

Simpson's practice partakes of *topos* on the fundamental level of his engagement with the *field* he finds himself in. In chapter 2.5, it was described how the *topos* of ancient tales of circumnavigation, as distinct from Aristotle's *topos* or other formulations, described the world from the viewpoint of an individual. The central axis of the narrative was a subjectivity whose engagement with place, at each and every turn, created the structure of the story. Such wandering protagonists create divergent narratives due to the primordial reliance on the experiential.

In interview, Simpson was explicit about this fact. He would like his listeners to "focus on things on a journey."

It's always a trajectory around and through an environment. As if we're walking through life [Simpson 2016b].

Simpson's trajectory in a given setting, here Shining Cliff Woods, has a two-fold function. First, it articulates the place itself. Movements of "head and body [...] alter the perspective of proximal / distal sounds as appropriate" [Simpson 2016a]. As Simpson encounters specific materials, topologies, and other characteristics of the environment, he is free to respond, the subjects being whatever is at-hand in that *field*. This is the main reason that Simpson uses the in-ear bin-aural method of recording. It permits him fluid, unimpeded movement through a setting.

The second function of Simpson's trajectory is metaphorical. His walk through a setting is also a walk through life. His ears become archetypal ears (chapter 4.5). The walk-in and walk-out act as bridges from one performance to another. Thus, there is an arc that binds together the individual improvisational movements into a larger "movement." Each performance is "part of an on-going personal creative quest in the trajectory of my relationship with our environment" [Simpson 2016a]. This is typical of a *periplus*, which functions as a simple narrative on the one hand, an itinerary of encounters with place, but on the other hand is a metaphor for discovery, growth, learning, and other constituent processes of life itself.

This reading anchors Simpson's *topographic* approach as a personal activity, in the sense that his wanderings are made primarily for himself. Indeed, this is how he describes the recordings. They are

records of my gradual maturation with the environment. They're kind of snapshots: this is what I did at a particular time and place. It's like a diary [Simpson 2016b].

Simpson doesn't listen back to his recordings. "Some people go back and read their diaries. Some people just stick up the volumes and don't look at them." This is because, for him, the recordings are documents of an event that is complete. It is true that Simpson edits the recordings, makes small corrections and sometimes even layers different passages [Simpson 2016a]. But he doesn't do so to create a new aesthetic artwork from the recording; rather he wishes to present the material in the best possible light, in terms of the technical quality. In the final analysis, the recordings are documentation.

I tend not to think of my practice as "field recording." It is more a documentation of my personal engagement with a location, a documentation of my aural perception of that engagement and a record of my location performance at a particular place and time [Simpson 2016a].

If the focus should be on the performance itself, the first questions that arise concern what it is that Simpson does in such a performance, and how these activities are chosen. He has described these performances as "free-form intuitive sound improvisations and sonic observations of particular locations" [Simpson 2016a]. Again, the emphasis on the individuality of the location deserves emphasis. In some cases, he may have, in advance of the recording, "considered attributes and qualities that I would like to explore at the location." Certainly, the places are not chosen randomly, but because of intrinsic sonic qualities. He particularly favours "environments that are rich sources of natural periphonic environmental sounds, seascapes in particular." But in other cases, he enters a field "with a blank canvas, an open mind."

It is appropriate that we are first overtly aware of the recordist through movement: the sound of earth under feet, the under-brush moving, twigs snapping. Careful listening reveals changes in spatialisation that must be due to head movements and other small bodily articulations. By contrast there is the section described as "some subtle improvisation on the loose concrete lid of the pump housing" [Farfield Records 2010]. Though the exact physical action is hard to determine from the recording, it seems that Simpson is rocking back and forth on the heavy lid. The fact that the lid is loose creates vibratory echoes as the mass settles back into a neutral position. Regardless of the method, what is apparent is that the resulting sound is not subtle at all. The high volume levels and deep spectral content of the sound makes this stand out from the rest of the recording. The sound is also imposing because Simpson is "playing" the lid in time with the pump's rhythmic action.

To determine why Simpson might call this performance "subtle," *aquapump* must be heard in the context of his other output. Several of his recordings, especially earlier in his oeuvre, have him "playing found objects musically," and this overt manipulation is sometimes a large part of the recorded sound [Simpson 2016a]. For example, these activities are clearly heard in *For Alderney* (2004), *The Alarming Blend of Three Arches* (2009), and *For Whom the Bells Told* (2009). Simpson describes the reasons for this practice:

Whatever is present at the location becomes the "subjects" and through improvisation, using a variety of sounding techniques, primarily using my body, occasionally using other found objects as scrapers and beaters, I liberate the sonic potentialities of silent objects and surfaces at the location [Simpson 2016a].

Though he is clear that "performance of the environment lies at the very heart of my practice," he slowly realised that such overt interventions both "showed my deficiencies as a competent musician" and "detracted from the reality of the object or surface being sounded." Hence Simpson's practice evolved to contain less obvious manipulations. It is within this context that the section where the lid is played in *aquapump* can be described as "subtle." For one, it lasts for 112 seconds, which is only one-seventh of the total duration of the piece. Hence this track is typical of an early performance while signalling an approach that would take some years to be adopted as the norm. To repeat the quote that opened this section:

I think *aquapump* achieved a perfection of balance and an inversion of environmental musicality at a very early stage along my journey of environmental performance [Simpson 2016a].

Besides the percussive playing of items encountered, Simpson uses other techniques throughout his oeuvre, including speaking and other performative uses of his voice. Yet this too became unsatisfying as his own phenomenological appreciation for his position within the *field* developed.

In some early works I employed vocalisation, but abandoned this approach in favour of me remaining silent. Vocalisation is too personal. My performance intention is, at one level of reality, to be the archetype of human habitation. My presence is always there as I am both the performing and recording locus. My breathing and occasionally heartbeat are present as sonic signatures of my presence [Simpson 2016a].

At 12:30 in the recording Simpson clears his throat. In the previous section it was described how the artist edits such "inappropriate intrinsic bodily noises" out of his recordings [Simpson 2016a]. Yet here this small token is retained, a way of ensuring that the recordist's presence is obvious. It is significant that this is an autonomous bodily sound. It does not depend on aspects of the location, unlike the twigs snapping and feet stamping. Clearing the throat will sound much the same no matter where it occurs, especially with the binaural recording technique, which places the microphones close to this sound source. It is also significant that this sound occurs towards the end of the recording, before the walk-out. It is as though Simpson asserts his own embodied autonomy as the final gesture to a place he has now left or is in the process of leaving. It is also an

explicit acknowledgement that his aim is not to present a "field recording" in any objective sense, but a document of a personal topography, a tracing of unexpected but intentional interactions within a sonic milieu.

5.8 Potentialities and listening: the Soundbody

This section will explore what the phrase "sonic potentialities" means to Simpson's phenomenology of sound, with reference to Katharine Norman's modalities of listening. These she has articulated in the context of "sound-based music and art concerned with environment," drawing extensively on Edward Casey [Norman 2012, 257]. Her work is hence eminently suitable for the current discussion. A good starting place is Simpson's self-appellation as a "location performance environmental sound artist."

I employ intuitive free-form improvisation at a location, which may be extensive or minimal. This is my attempt to allow a "voicing" of the silent sonic potentialities present at a location – to transform certain silent elements observed in the visual domain into creative elements of sonic actuality – and all the cascading potentialities that arise therefrom [Simpson 2016a].

For Simpson, the existence of an object in the realm of sound is its *Soundbody*. He uses the example of striking a gate with eyes closed, so that the visual has no bearing on how one apprehends the action. "That sound of the gate vibrating is the only reality of its existence in the realm of sound; it can have no other existence." On the surface, this concept like Schaeffer's *objet sonore* (chapter 3.5). Schaeffer's transcendent sound object is discovered by applying the Husserlian *epoché* to listening, so that sounds are bracketed apart from their origins as events in the world. In this way, acousmatic listening is distinguished from acoustics, the transcendental from the empirical. Similarly, Simpson declares that the *Soundbody* has "its existence in the realm of pure sound." The *Soundbody* is plastic, "a variable entity of many forms depending how the gate is made to vibrate."

It's clear that this is a distinct concept from Schaeffer's sound object. First, the name indicates a different existential situation; the *Soundbody* is indeed a *body*, not an *object*. As a body, it participates in a relational context with its environment and other bodies that affords it an ontological status. Neither is it

free of indexical relationships; quite the contrary, it can only be understood through its relationships in the world. Hence, Simpson's emphasis on "pure sound" should be read, not as a refutation of the empirical, but as a perhaps overstated emphasis on the sonic over the visual.

Differences with Schaeffer's concept become obvious as Simpson's description continues. He writes of the "transformation of potentiality" that occurs as the *Soundbody* creates other referential experiences. If an echo of the gate *Soundbody* is heard from a distant wall, this is neither the same thing, not an entirely new thing, but "a kind of 'wallgate' *Soundbody* complex." Such amalgams can also be made in memory, as "the sound reminds me of a metal gate I used to hit and make sounds with in my childhood."

Something similar is explicated in Norman's non-exclusive descriptions of listening as referential, reflective, and contextual. Referential listening is our everyday understanding that sounds refer to objects in the world, or events that these objects take part in [Norman 1996, 2]. Like Simpson, she emphasises the role of memory in recalling and framing this information. Reflective listening occurs in tandem as "a creative, enjoyable appraisal of the sound for its acoustic properties" [5]. There is no hard and fast division between these listening activities, since memory and imagination are entwined. And neither does this result in any one monolithic understanding.

This continuous shifting between referential remembering and reflective, imaginative forgetting may be constructive in itself. Perhaps one nourishes the other so that contradictory meanings can provide a multi-faceted and richer understanding of a source [7].

Furthermore, referential and reflective listening both occur within "a pervasive ground," described in terms that recall how Casey has written about place.

It is this ground, an amassing of individually experienced knowledge, that extends beneath all our new experiences to influence and constrain our perceptual direction. Prior to any acquisition of specific referential information, we relate our current experience to our experiential history, to the context of our lives [8].

Simpson also describes a listening context that is highly referential, using a "principle of potentialities" [Simpson 2016a]. This allows for "expressed and un-

expressed potentialities depend[ing] upon the realm in which potentialities are expressed as observable or cognitive distinctions." This "cascade" of possible meaning explicitly includes recorded sound, as potentialities express themselves "through the chain of electronic record and replay." And finally, then, to the listeners of such recordings, "potentialities are expressed distinctions in the mind."

This phenomenology is perhaps more important to Simpson as practitioner than it is to listeners of his works. It helps him "make sense" of his relationship to his milieu when performing but does not necessarily have useful explanatory power for a listener to his recordings. Norman has distinguished between "self-intended" and "composer-intended" listening [Norman 1996, 12]. Composer-intended listening occurs when we know we are listening to a composition that has the (hidden) intention of a composer at its heart. In the traditional model of music, we are "listening out for an abstract sonic discourse" [12]. In listening to a nature recording the experience may well be different, since the material might be taken as serving a scientific or documentary, as opposed to the aesthetic, function. But this is unlikely to be the way in which a listener understands a recording like *aquapump*, which is full of intentional actions, the presence of the recordist obvious from the start.

Even if Simpson wishes the potentialities to be "expressed distinctions in the mind of a listener," it is not necessary for listeners to understand, or even know, that this framework exists [Simpson 2016a]. Simpson's phenomenology is not heard through his recordings in any substantive sense. Neither is his theory explained in liner notes. Rather, this system exists for himself, as a framework to direct his own improvisations, his "on-going personal creative quest."

5.9 Summary of Simpson's platial practice

This chapter has reviewed the correspondence of Dallas Simpson's practice with the models of place developed in chapter three, and the phenomenologies of place from chapter four. Simpson has described his own performance practice as "spatial choreography" [Simpson 2016a], but this might put too much emphasis on movement as an organising principle, rather than as one of many ways in which this artist responds to sonic potentialities. Nonetheless, Simpson's approach to performance is clear in how he situates himself as a

listener in a field of potentialities. Simpson's field, that milieu of silent uncreation, returns us to the generative matrix that is Plato's $kh\bar{o}ros$.

The degree to which this artist's methods and tools correspond to Heidegger's phenomenology is also striking. In Shining Cliff Woods, Simpson became aware of a sound at the very horizon of the sensible. He heard the distinctive signature of the eponymous water-activated pump and moved closer to it, deciding in the moment how to act and interact. By moving towards the sound source, he brings it close to the listener in a literal sense. But the pump is de-distancing in more important ways than mere distance. By conceiving of the Soundbody as a potentiality rippling out through the woods, Simpson positions himself as a recipient and modifier for that Soundbody. He is aware of himself as part of an ongoing process that will render a digital recording and eventually a listening experience for people displaced in space and time. But, in the moment, he creates an existential space by modifying his own hearing, moving his body relative to the sound, uncovering new positions and new timbres in the same Soundbody, exposing its plastic nature. He cares for the sound by facilitating this expression within the sonic field. The Soundbody is freed not only for its spatiality, as Heidegger had it, but for its temporality too.

When auditioning *aquapump* and his other recordings, we experience a recorded trace of Simpson as a listener in the field. These recordings are but documents of a process that was, in the first instance, multisensory and emplaced. Our own listening experience is hence quite different to Simpson's original experience. Nonetheless, he wishes through such work to emphasise the auditory, to focus our attention on the *Soundbody* as a relational concept. The recording is not the end of a process but part of an ongoing cascade of potentialities, an "invitation" [Simpson 2016b]. "The works are open invitations for others – children, youth, adults – to embark, individually or collectively, on their own sensory journey with our environment" [Simpson 2016a]. This ecological impulse finds resonance in Heidegger. Our relationship to technology has an imperative that classifies and partitions the world, treating it as standing-reserve, resources for our consumption. This instrumentalising of the world risks instrumentalising humanity itself, cutting us off from the world.

Because we live in a world with other things happening around us. If we try to deny what else is going one, we've cut ourselves off from reality. [...] This idea of us being collective cohabitants of the eco-

system is very important, very central to what I do [Simpson 2016b].

Simpson's work is platial from the beginning, in that it posits a sustainable ecosystem that is a complicated, ever-changing dynamic, of which humankind is but a part. His ethos stems from a deep spiritual belief. But, as has been demonstrated in this chapter, it can be read as a rigorous, self-consistent phenomenology that partakes of two core platial concepts, *topos* and *khōros*.

5.10 Afterword: a circle, a promise

This research now partakes of the field of potentialities. It has become part of Simpson's narrative, and not just because it has an interpretative function, analysing the artist's work after the fact. Rather, the journalistic component of this research, the interviews and conversations, have helped crystallise Simpson's thought in his own mind, a fact he mentions at different times in the transcripts. Furthermore, it has led to further excursions, walks in the field, recordings. A mutual visit to the original site of *aquapump* brought the journey full-circle. This proved to be a deeply emotive moment.

And there it is. That's the beast from all those years ago. Always a bit of a pilgrimage for me. There it is... the pulse of the forest, the heartbeat of the woods. And when it was running it was just magical, as you can hear from the recording [Simpson 2016c].

Simpson shared with the author something important, a special place, a personal story. This sharing had been made possible by the recording made in 1996, released to the world as *Waterpump* soon after. A compact disk journeyed across an ocean, so that a willing listener in Canada could encounter it at hazard. This same listener, two decades later, contacted the recordist. In visiting the site in Shining Cliff Woods there was a palpable sense of closure.

I don't visit it very often. If it hadn't been for you coming, I wouldn't have come here, since I was here earlier in the year. But because it means so much to me, and because it was one of the first pieces of mine that you encountered, I thought it would be nice to bring you here to start with.

This feeling was combined with a certain nostalgia. Because in 1996 the pump had its "magical" sound. In 2016 it was difficult to even locate the buried brick structure that housed the rusting mechanism.

Because, sonically, it was like a shining beacon of sound, when it was running. You could hear it from quite some distance. And then it stopped. It succumbed to the earth and the elements. And it's now silent.

This silencing of the pump acts as a lesson. The man-made order will succumb to forces on geological time scales. Our attempt to make place, important as they are for community and self, last for only a time. But this knowledge of impermanence provides a useful corrective to the approach to technology as instrumentation.

I just love the way this construction is gradually being consumed and taking on the character of its surroundings. We know that's what decay does. But to see that with a brick structure, and the iron and all the rest of it, that to me is very special.

In these woods, the pump has stopped pumping. The "beacon of sound" no longer shines. But this (relative) silence is itself the potential for something else, a recognition of which begins in acknowledging the impermanence of things, the constant making and remaking of place by our actions. In the sense of *khōros*, Shining Cliff Woods is still pregnant with the possibilities of creation. Merely visiting the site activates sound through movement, intentional or otherwise. The act of documenting a piece made twenty years prior has resulted in further soundings of the milieu. This text too is an echo of the potentialities that Simpson sees inherent in all things.



Chapter 6: Robert Curgenven: sound as weather

6.1 Introduction

Robert Curgenven (1974–) is an Australian artist, resident in Ireland, whose sound works emphasise both the physical and phenomenological aspects of the auditory experience. Since 2005, his practice has included field recording, live performance, electronic music, installations, and video installations. As a composer Curgenven "sculpts volumes of air with sound" [Curgenven 2016a]. Sound is conceptualised as a weather system, consisting of currents and microclimates within discrete architectural volumes of air. Our bodies inhabit these spaces, our auditory perception shaped by temperature, pressure, humidity, and other factors. Curgenven shapes this field for heightened effect, using dramaturgical methods.

This chapter will explore how Curgenven's practice of field recording and composition developed, explaining the specific and characteristic methods he uses. His approach will be placed in the context of the phenomenology of place developed earlier, with two provisos. First, it is important to stress that Curgenven's philosophy doesn't reference Heidegger, whom he describes as "a philosopher who wanted to be the official philosopher of the Third Reich" [Curgenven 2019]. Politics and ethics play a large part in Curgenven's work, and the reading provided here respects these aspects of his practice by downplaying references to Heidegger. Second, as throughout this dissertation, it is important to apply the concepts in a balanced manner, so as not to over-determine or overwhelm the ideas of the artists themselves. The platial stance is a way of reading works; it provides an enlarged and enriched milieu for understanding. It is not designed to be a totalising theory. Therefore, it will be used in proportion with other interpretations, as provided by the artists himself. This chapter provides a demonstration of this measured approach.

The second section will provide a brief biography and overview of Curgenven's works, including his significant audio publications. Important methods and tools will be explained including the structural framework of the matrix and his technique of creating dubplates. Three important works from Curgenven's catalogue have been chosen as emblematic of his approaches to field recording. Each will be dealt with in dedicated sections of this chapter.

They tore the earth and, like a scar, it swallowed them (2014) deals explicitly with colonialism and the relationship of different cultures (European colonist versus native) to place. Section three will consider this political dimension, critical to an understanding of Curgenven's work. But greater attention will be paid to the structure of this work as a tragedy in four movements. The video installation of *They tore the earth* will be used to highlight the cross-modal sensory experiences that Curgenven has increasingly explored in recent works. Here, subjectivities of being in very particular places are conveyed through gestural techniques that highlight a detailed sensitivity to spectromorphology⁶⁰.

Sections four and five consider *Sirène* (2014), a collection of pipe organ works recorded while the artist was living in Cornwall. The analysis will read the relationship of this work with a painting by J. M. W. Turner in several ways. First, in terms of the painter's own mythic narrative, which casts himself as a heroic Prospero in *The Tempest*. Second, using Curgenven's evocation of the myth of Odysseus and the Sirens. This narrative marks *Sirène* as a work of *topos*, the artist himself recapitulating the wandering subject. The ever-changing vorticial motion inherent in both the painting and the musical elements evokes *choros* as birthplace of material and container combined. This matches how Curgenven utilised church organs as machines for making (and responding to) weather. Though presented as a work of music played on instruments, *Sirène* is equally an album of field recordings whose subject is the church organ.

Climata (2016) is the subject of section six. This album was built from recordings made in fifteen James Turrell Skyspace sculptures internationally. Its title explicitly references the place-theory catalogued by Ptolemy. Climata will be read in terms of how Curgenven approaches place as part of a structural matrix, how he considers sound as a volumetric (as opposed to surface) quantity, and how resonances are used as a means of revealing changing characteristics in a volume of air.

Section seven will summarise Curgenven as an artist most concerned with sound as weather, here defined as *a milieu in which we perceive*. This idea will

⁶⁰ As defined by composer Denis Smalley, spectromorphology refers to "the interaction between sound spectra (spectro-) and the ways they change and are shaped through time (-morphology)" [Smalley 1997, 107]. Smalley notes that "Spectromorphology is not a compositional theory or method, but a descriptive tool based on aural perception."

be traced to Merleau-Ponty's assertion that visual perception occurs *in* light as opposed to a perception *of* light. Applying this to sound, Ingold developed the concept of weather as the medium that we are in, when we are in the world.

This chapter was based on an extensive interview with the artist, conducted in March 2019 (transcript in Appendix 8). This will be cited (as Curgenven 2019) where necessary for clarity.

6.2 Curgenven's methods and tools

This section will outline a biography of Curgenven's life, while highlighting specific methods and tools that will be important for understanding the arguments of subsequent sections. These include Curgenven's sensitivity to sound as a physical phenomenon of the air, the use of structured organising principles and operations in his composition, the development of his field recording practice, and his use of combined audio-visual presentations.

Robert Curgenven was born in Sydney, Australia in 1974, on what he describes as "Dharug land" [Curgenven 2019]. His care in referring to the pre-settler nations marks his sensitivity to his relationship to Australia as a "white fella". He has used this position to critique colonialism in general, as well as specific actions taken against native peoples, as shall be explored in section three.

Curgenven learned piano starting at age five, and organ from age seven. A formative experience occurred early in his musical practice:

I took a plate off a shelf when I was nine or ten. It was a metal plate in the next room and I had been holding down some bass pedals. The plate got shaken off the shelf. And so at an early age I understood that's what bass can do. I went around the entire house thinking I had broken a light and I didn't know how. And then, thirty years later, I am doing the same thing on that tour in 2013. In Bratislava I took a glass off the shelf at the opposite end of the venue. The pressure backed off in a transition from a loud bit to a quiet bit and suddenly there was this loud crashing noise.

This recognition of sound as force, as a physical compression wave, extended his awareness of the auditory beyond listening itself. For Curgenven, sound is more than mere sensory perception perceived by the ear. Instead, the whole body can be used as instrumentation, as a tool to perceive sound. He developed a system of mapping frequencies to different parts of his body, so that specific changes in the sonic weather could be accurately gauged.

So that when you hear things you know that you can feel it in your chest, or in your sinuses, or whatever, and you know which frequency, roughly, that corresponds with. You are using the container and material to understand the world around you.

Much of Curgenven's music is organised using a systems approach, even if the structure is hidden below the audible surface. This methodology began with a university project involving the creation of a CD-ROM⁶¹. Starting with a series of twenty photographs taken by a friend, Curgenven made a twenty-second soundtrack for each. He adopted "a syntactical approach to using a matrix of sounds" by devising a series of descriptors, so that each photograph matched a unique combination of these.

A piece could function as "a verb," "a noun," this kind of thing... I can't remember all of the specifics. And some were "a beginning," "an end," "a middle," "a conjunction"... So I managed to find a unique way, with four descriptors by five descriptors, that meant that each photograph fit into that matrix.

Once each photo was tagged in this way, certain rules were employed to constrain how each soundtrack would develop. The key characteristic of this working method is that, once the system was in place, he no longer needed to reference the framework itself, but could work on individual components "without necessary regard for the total outcome." He would trust to the fact that out of this system something coherent would emerge. In 2019, he described an upcoming work that follows the same structure and process.

I have created a bunch of parts, literally just fragments, according to a similar set of conditions, without necessary regard for the total outcome. But when they are combined, according to another set of rules that I've developed, it's not so much that they speak to each other, but they are alive. They appear to be interacting with each

⁶¹ Curgenven attended Macquarie University from 1992-7, graduating with a Bachelor of Arts.

other. So from these three different layers you start drawing inferences: all of these bits are talking to each other, there's a connection between them. Whereas it's the total system that is the connection and it's borne out at specific moments by the interactions. You could say the same about capitalism or any other methodology of social aggregational practice. Rather than the specific events causing capitalism, they are actually reflective of the ideology. This is why the context keeps coming up again and again.

Here Curgenven relates his structural method to larger socio-economic forces. He applies similar processes in different ways, depending on the needs of the piece, as shall be explained in more detail in subsequent sections. What each application has in common is a process of sound gathering that is constrained by place. For *Sirène*, recordings from different church organs were combined after the fact. In *They tore the earth*, disparate field recordings from remote locations in Australia are united under a common narrative. In *Climata*, recordings from geographically dispersed Turrell Skyspaces are layered and matched in the studio.

The artist was not initially aware of field recording⁶², and did not set out to follow a tradition of making recordings in the field. A Tascam DAT recorder and pair of Rode NT-2 microphones were purchased in 1998 with the intent of recording piano at his home outside Wollongong, New South Wales. The extreme sensitivity of these microphones led to an awareness of extrinsic sounds.

I was getting as much from outside as I was from inside. I was tending to play along with what was happening at the time. Then I started just recording stuff outside. Because being near the coast it was a particularly interesting area. I was just under an escarpment; it had its own kind of weather system. And, I was quite close to the beach. And, it turns out, one of the ten best breaks in Australia. They have surfing competitions there every year, because it's reliable. There's always a swell. There's always some interesting weather happening.

⁶² For example, he encountered the work of John M. Hutchinson, an important Australian field recordist, only in 2014 [Curgenven 2019].

This early recording experience is already characteristic of his work. It is primarily about air as a weather system, about the local variation of this as a factor in the creation of a specific place, and about an openness to extrinsic sounds, even when purportedly recording a primary instrument. This approach was to have a direct bearing on how the material for *Sirène* and *Climata* were compiled. In each case there is a primary instrument (organ for *Sirène*, dual oscillators for *Climata*) but outside sounds were allowed to bear influence on these, rather than being edited out or suppressed as extraneous. This is in opposition to the normative process for recording both music and nature sounds. In the case of music, a studio environment is used to isolate instruments and performers, allowing exacting recordings without distraction. In the case of nature recordings, the dominant ideology permits no extraneous sound, particularly if this is anthropogenic [Parmar 2014a, 637-8].

Curgenven continued his interest in sound recording after moving to the Northern Territory. His approach was diaristic rather than documentary or aesthetic. In fact, he had no goal in mind when he made the recordings that would later act as source material for *They tore the earth*.

I noticed some interesting interplays between weather happening and fauna and flora around me. So I would use this setup to record things largely for personal use, no real interest in using them further for anything. It wasn't even documenting, but it was an interesting thing to do. Sometimes people write stories, sometimes people take photos, they might make a film and not show them to anyone, and this is what I was doing.

Recording continued for about twelve years, as a hobbyist activity while Curgenven worked in the bush and remote communities. By this time, he was aware of a variety of electroacoustic and drone music, primarily through three compilations released in 1995 on the US Sombient label: the single CD compilation *Throne of Drones*, the double disc *Swarm of Drones* and triple disc *A Storm of Drones*. In particular, Curgenven had studied Jonty Harrison's piece *Hot Air* for one of his university courses. A revelation occurred when he heard a Francisco Lopez concert in Darwin. Curgenven realised that field recordings could be used aesthetically in much the same manner as the artists he had been listening to.

"Even though I had done radio for years, it didn't occur to me to put them [the field recordings] together for release."

Another important method was inspired by a chance meeting with Rashad Becker from Dubplates and Mastering in 2008, by which time Curgenven was in Europe. Curgenven's interest in room acoustics and resonance had been established by this point, and he saw in dubplates a chance to leverage this in a distinctive way. Dubplates are one-off records designed to be played only a few times. Their primary original purpose is to test pressings for errors in mastering, before a record enters full production. Curgenven repurposed this technology as a means of extending his resonance experiments. Instead of music, he presses standing waves from interior spaces onto a disc at a low volume, so that significant amplification is required on playback. This activates the turntable itself, within the playback room, as "a series of nested resonators". He explains the detailed characteristics of this system:

The body, which is designed not to resonate, resonates at thirty Hz or below. The tone-arm resonates at around two to three hundred Hz. Then there's the head-shell and the stylus, which can often resonate at around six hundred Hz. So if you have made a recording within a discretionary room or chamber, you've also got the resonant functions of that. And how they come together to produce a series of overtones through feedback recording. When those feedback recordings from the room or even from the turntables themselves are put onto a dubplate (and that has a specific mass) the contact microphone or the stylus and the rest of the system that is the series of nested resonators is going to produce a series of discretionary results.

This technique has been used extensively in Curgenven's recordings. Dubplates are a common part of his instrumentation.

Curgenven's catalogue includes three important works that will be studied in detail. *They tore the earth and, like a scar, it swallowed them* (2014) concerns the politics of land use and ownership in Australia. *Sirène* (2014) is a collection of pipe organ works recorded while the artist was living in Cornwall. *Climata* (2016) was built from recordings made in various Turrell Skyspaces.

6.3 Platial thinking in They tore the earth

Robert Curgenven's work often uses video and audio elements in different combinations. They tore the earth and, like a scar, it swallowed them (2014) is the evocative name for a project that demonstrates this approach. This section will discuss several aspects of this piece, drawing on both the audio album and video installation. First, the genesis of the piece will be discussed in terms of the artist's wanderings through Australian territories. His framing of the work in terms of colonialist politics will be explored, not so much for the politics themselves, but in terms of how Curgenven encounters place. The video installation will be discussed as a somatic experience, Curgenven creating a heightened sensory environment that conveys the specificity of things in themselves, as aspects of the context from which they came.

They tore the earth has a long history, beginning with field recordings made over a period of twelve years (starting 1999) at thirty locations, spanning five thousand kilometers of rural Australia [Curgenven 2018c]. Most of the locations are in Northern Territory, but others are in South Australia, Central Queensland, and New South Wales. As described above, these recordings were initially made without plans for a project as such, rather as a hobbyist activity that arose from Curgenven's investigations of sound as weather phenomena.

I was often in remote areas. So, noticing the ten degree temperature drop that you got just before a tropical storm. Equally you would notice that the wildlife would change. And then you would get these intense downpours that could see up to a metre of rainfall in twenty-four hours. And then after the storms, you would notice that the air was moving differently, the humidity had changed. According to where different insects were, along different terrain, be it along a ridge line or in a savannah, you would be able to hear the air moving over that area [Curgenven 2019].

These "pure field recordings" were used to create the twelve-channel installation *Unsilenced Landscape* for the Biorama Projekt, in Joachimstal, Germany in 2009 [Curgenven 2018c]. However, the gathering of raw materials continued after this date, in parallel with the further development of his ideas. Subtle use of guitar, bass, and piano were also added to the mélange, in the various locations the artist's peripatetic existence took him. The result was released in 2014 as a

four-track vinyl album. But this did not fix the form permanently; Curgenven has continued to reconfigure this material. For the Blindside Festival (2016, Melbourne, Australia) *They tore the earth* was presented as 2.1 sound (stereo with subwoofer) accompanying three screens of video, configured as three sides of a cube [Curgenven 2018e]. This was reprised for his retrospective Locate Yourself (2017, Wandesford Quay Gallery, Cork, Ireland). Bookings were taken for this installation, which seated three people in a cube about three metres a side. Hence the participants were proximal to vivid audio-visual stimulation.

The length of time it has taken Curgenven to shape this piece is due to both the varied sonic material itself and his need to grapple with the politics the piece foregrounds.

I was trying to find a way to turn it into a two channel presentation. As the concept got honed, the audio got honed, and the narrative got more precise. Much the same as you would with a screenplay or a treatment [Curgenven 2019].

This quote demonstrates how Curgenven uses film as model for his piece, even though it was initially conceived as an audio presentation. He had been impressed by *Koyaanisqatsi* (dir. Godfrey Reggio, 1982) and *Powaqqatsi* (dir. Godfrey Reggio, 1988), films which presented landscape as tectonic forces that we, as a species, manipulate for our own ends. Paired with slowly-changing music from Philip Glass, the Reggio films created an aesthetic not previously seen in either documentary or feature film. From these films Curgenven devised a structured way of approaching sonic material as a narrative. The vinyl album has four movements, following a classic pattern. For the digital release two pieces were added, but these are labelled "interval" and "epilogue," so as not to break the canonical structure already in place.

The sequence of the overarching chronology [of] the scenes are: the survey of a land assumed to be empty; the movement into and inhabitation of this confrontingly large, alien landscape and the colonists [sic] vague awareness of the underlying social landscape; a conflagration and the resulting change in the relationships with the land for all within this social landscape; devastation – of culture, citizenry, land – the inevitable decline [Curgenven 2018e].

The piece is therefore a tragedy, in the classic sense. The protagonists are settlers, new arrivals to Australia. They have a fatal flaw in how they engage with the land. This flaw ends in ruin for all sides: for the colonists, the Aboriginal peoples, and the land itself⁶³. The struggle of the settlers is entirely due to their misunderstanding and ignorance of the land, their engagement with it in a modality of confrontation. This conflict extends to the brutal treatment of the native peoples.

When performing on tour in 2013, Curgenven found that listeners were treating the music as a soundscape piece, an approach he takes exception to for several reasons, not least of which is that this ignores the specificity of the political context.

The conversation with some people was "Oh yeah, I could just listen to that as a noise piece or as a sound art *object sonore* or whatever." And I was "yeah, that's a way to listen to it". Sometimes people would go "I felt like I was in..." or "I felt like I went to.." So I was trying to ground it out into a concrete reality.

Curgenven achieved this "grounding" by reading a formal introduction before each performance. This was later reproduced on the back of the album jacket, framing listener expectation. The web page for *They tore the earth* goes further, providing a thorough reading list for the "geopolitics, colonial and sociopolitical aspects of the album" [Curgenven 2018c]. The introduction Curgenven wrote also made its way into the trailer for the video installation:

Imagine you have found a new country. To you and your fellow countrymen & women this new country appears empty. Perhaps there are some people living there, but you decide their culture is perhaps "unsophisticated." These people have had a long relationship with this seemingly empty country – for thousands of years – they understand and care for the country and in turn the land cares for them. So, you decide to invade/colonise this country. You need to clear this empty land to make it your own, ready for you to inhabit, maybe even make it more like where you're from. The place you left behind. This not only changes the land but also vastly

⁶³ Curgenven explicitly agreed with this interpretation in interview [2019].

changes the nature of the long relationship of those you've displaced. But this story isn't really about "them." Its [sic] about you. As you colonise this new country, moving further into the interior, you soon discover that you are very ill-prepared for what turns out to be a harsh and hostile land. This story doesn't end well for anyone [Curgenven 2014d].

Curgenven's engagement with colonialism is the critical aspect of this piece. We have already seen how he identifies with being a "white fella," born on someone else's land [Curgenven 2019]. "I realise that as a white Australian I'm complicit in a great deal of problematic history, and I realise that it is increasingly necessary to state things where it is difficult." This difficulty was the reason for Curgenven leaving Australia in the first place. Specifically, this was triggered by the government's establishing of the Northern Territory Intervention in 2006.

I was between jobs, had just done a festival, and was between cities: Alice Springs and Darwin. I had to decide what to do next. At the time I was quite passionate about working out bush for a variety of reasons, and felt I was starting to get good. I was starting to understand the process that yielded beneficial outcomes through community cultural development as a practice. Through work that I had been doing, paid employment. I felt that as a "white fella" I couldn't conscionably work out bush, because I would for all intents and purposes present as just another "white fella". Arriving at the time when the government was sending the army out, the compulsory reacquisition of Indigenous land across the Northern Territory, the suspension of the Racial Discrimination Act, bringing into question sovereignty that was only recent.

Curgenven bought a one-way ticket for Germany, where his visa mandated that he must work as a sound artist. Hence this move was not just a political statement, one made from a philosophical and emotive level, but also an engine for change in his work practice. From this point Curgenven would, perforce, work with sound as a primary material. And eventually he would mold the recordings he had made back in Australia into a work that would speak to others of this experience.

People don't like to be told how to listen and possibly that album was a little bit dialectical. But I literally spent ten years working out how best to speak. And I can't speak for Indigenous people. I can't speak for the people from my country, the country as opposed to the nations. So I was trying to articulate some of the myopic issues with a settler-colonial perspective. Which has become even more vehement in the ten years since I have left.

Despite his misgivings, Curgenven has found a way to take the conversation about land rights in Australia with him around the world, to package these into an auditory form that is both satisfying on a listening level and explicit on a political level. *They tore the earth* addresses both contemporary political concerns and challenges certain assumptions of post-colonial discourse, particularly those that might ascribe blame. It embeds this analysis in a phenomenological model of place as the accumulated record of all those who have gone before, who have shaped the land, and been shaped by it. The sonic record that Curgenven retrieves and then constructs, over years of mixing and augmentation, belies any simplistic interpretation of field recording as being inherently documentary. This is very much a constructed work.

Curgenven's approach to place is in accordance with the platial theory advanced in earlier chapters. He is explicit about comparing his ontological approach to place-formation, emphasising the individual specificities of place encounters, contrasting this with the mode of *geos* that measures and locates.

People talk about place but it's not specific. A location is. You can refer to it by GPS, or elevation, or relation to surrounding features, be it a chasm, or a desert, or a savannah, or what-have-you. But you are trying to understand all of these things as a matrix of possibilities that come together to present something very specific that happened. Rather than it being about space-time, it's about location-duration. Because these are more subjective and it's how we experience the world.

The title *They tore the earth and like a scar it swallowed them* is a poetic creation of the artist, a phrase that occurred to him one morning. But this revelation did not come from nowhere, rather it is sourced in specific moments of recognition within his long history of practice in rural Australia. He relates a

story of being taken to a remote northern location, outside of Hay's Creek, by a local man.

We got out of the van and he took me to a spot and he said "Right there is the only permanent source of fresh water". And it was just like a puddle, literally. And then we walked a little bit further and he pulled back a bit of a bush and there's a footing for an old building. Two right-angled stacks of bricks that were largely hidden under the earth. That was where the town hall used to be. So there had been a few hundred people living out there, and to the untrained eye there was no trace any more. Trying to do the mining, they had literally torn the earth, to take out what they needed, what they wanted. They had created a kind of scar upon the earth. For those who didn't survive or who'd moved on and left some trace, the earth swallowed them up, but only that scar remained. So it's a comment about how the extractive notion of settler colonial practice can play out upon the land and the substrata, as well as how that presence changes it.

The sonic material of *They tore the earth* conveys this conflict through deep dubplate drones and vertical textures. But there are also many harsh sonic fragments, generated by close miking of mineral and other sources. This material expresses not just the movements of air that were the focus of the previous work, but also tactile engagement with place as texture. Surprisingly, contact microphones were not used, but Curgenven nonetheless expresses physical processes: friction, force, work, and energy. He does this by foregrounding gesture, capturing a proprioceptive sense of a body in space.

What you hear in the recording is what I would have been feeling with my body. Through the movement of my body and being quite judicious with that movement and economical with the movement, you are going to be capturing what was happening in that specific location. Very small movements of the microphone yield big shifts in phase change, which give the impression of the field increasing or decreasing in size. If there is a waterfall off in the distance, you move the microphones left and right a fraction of a millimetre, then the position of that waterfall appears to change. [...] It's not binaural entirely but you are creating this near-impossible ontological state.

The last phrase is important, since Curgenven does not purport to document a place, nor even a particular subjectivity. He creates a listening experience as narrative, always aware that this *is* an aesthetic construction. (This point will be made again in the context of *Climata*.)

Though the artist is not familiar with Merleau-Ponty, his approach aligns very much with that post-Husserlian phenomenology. When Curgenven speaks of the body and how we use tools to augment our auditory (and other) sensorium, he rehearses arguments that rely on the proposition that consciousness of our body can only occur because of engagements in the world. As Merleau-Ponty wrote, to have a body is "to be intervolved in a definite environment" [Merleau-Ponty 2005, 94]. This specificity occurs time and again in Curgenven's descriptions. He asserts that "digital tools and a post-digital approach to listening" have extended our acuity and provided several useful augmentations [Curgenven 2019]. But he takes pains to distinguish this from a naive technophilia. "So rather than it being a techno-optimism, it's that if you use these tools they can teach you a new technique that can advance something further." As we become familiar with tools they extend our reach and the accuracy of our apprehension of the milieu, becoming another part of a dynamic body image. The tools "become like a prosthesis where ultimately you don't need the prosthesis any more." Our body image, tools, and orientation together create an "intelligible space" within which we operate [Merleau-Ponty 2005, 117]. This is precisely what happens when Curgenven leverages hyper-sensitive microphones to record the Australian bush.

I practised over the years holding them and having the gain up very high, and moving my hands carefully so you couldn't hear the bones in my wrist grinding together, because that would be quite loud. How people move when they do Tai Chi, or perhaps butoh. You've got an awareness of both where your joints are and how they are moving against each other [Curgenven 2019].

After *They tore the earth* toured in 2013, Curgenven decided to make a video accompaniment. A three-month trip to Australia was already planned, so at the last minute Curgenven purchased a video camera and determined an inexpens-

ive way to obtain a vehicle⁶⁴. Over ten days and five thousand kilometres, he shot seven-and-a-half hours of footage, mostly at dawn and dusk, as part of a "very strict travel regime." He listened back extensively to the album mix in the vehicle, developing an explicit shot list that ensured he would be able to capture video that matched the spectromorphological information already embedded in the soundtrack.

The specific gestural movements that had been captured within the recordings I was trying to get with the camera. So it's kind of like a reverse Foley, if you will.

A specific example should make this clear. A noteworthy travelling shot (at 0:38 in the trailer) was made in either Emily or Jessie Gap (the artist is unsure), just outside Alice Springs. This ravine is lined on either side with 350 million year-old sedimentary rock. The shot tracks along the ravine as though revealing terrain to the viewer. The sound parallels the action to demonstrate a sonic phenomenology.

The way that you feel when you are moving through space, for want of a better word, and how you hear reflections off surfaces, trying to capture similar movements that you would also be hearing in the field recordings. Because you are getting that modulation in real-time from the microphones. So if a bird flies through you can hear how big the area is, because you are hearing the splashback from the wings on the edge of the chasm. It's like an assemblage.

The video builds, through accretion of apposite images, a milieu that is consistent with the soundtrack. The camera is always in motion, through tracking, panning, and zooming. In the second movement the three panels fuse to form a panorama, which provides both establishing shots and details of texture. Slow

⁶⁴ A Toyota Land Cruiser was obtained for the cost of fuel, on the basis that it would be transferred, as a service for its owner, from south to north, across the continent. Curgenven wants facts such as this to be known, since he is extremely aware of the "sum of privileges of knowing the information, being able to access the information, being able to access the resources" that results in field recordings. He wishes to be fully disclosive in terms of the privileges he has enjoyed, so that such recordings do not exist in a political and economic vacuum.

lap dissolves are used to overlay clips. Bleaching of colour and other effects are used both subtly and with impact. Cuts are made on sudden changes in the sound. A distorted audio segment is matched with video effects that scramble the image. A buzzing high frequency noise is twice associated with the screens going white. The crackling sound of burning is echoed by an image of a bush on fire. Thunder on the soundtrack matches a distant flash of lightning. In sum, the video is a masterful combination of both parallel editing and contrapuntal techniques.

The content might be varied in what is pictured, but it is consistent in what it says of relationships to the land. Abandoned buildings rot in the dry heat; wind is heard through wooden apertures; a rusty hinge creaks. Sculpted riverbanks of dry red grit funnel sound from hidden banks. Their sculptural forms are proof that water once coursed here, but no longer. When the first-person camera tracks suddenly, it follows a possible walking path through a history of erosion and deposition, sedimentary rocks lining the path. Harsh overtones emulate the burning sun. Scratches and clicks build as wind whips sand into cyclones. *They tore the earth* articulates the landscape through vivid and visceral vignettes that build into a consistent whole.

Save insects and the carcass of a horse, no fauna is seen in the footage, which instead presents "a landscape populated only by the insinuation of characters" [Curgenven 2014]. But traces are everywhere: burning bushes, abandoned lots, whitened skeletons, decaying frames of buildings, the outlines of roads and paths on salted earth. The piece is all about presence, starting with the traces that remain of "the settler colonialists' blind enactment of will and violence." Curgenven states that he is not attempting to romanticise this struggle between settlers and land, nor is the narrative primarily about the Australian native peoples, though they are invoked since their approach to the land is diametrically opposed to that of the settlers. Rather, the artist proposes that it is the mismatch between the settlers' wills, their "myopic conquest," and something inherent in the land itself that causes the inevitable failure of their enterprise. Eventually, "the ravaging frontier consumes and erases the ruins of these battles." The images are of a battlefield after the war is done. The sounds directly represent this violence, even if it is now passed.

Sound has less of the trappings, but it's also more visceral than some of the other senses. So you can create something that would

otherwise be violent, intrusive, difficult. There's a lot of things in films that I literally don't want to see, because I don't understand why people dwell on them. And that they felt so motivated to tell a story about it. I am not literally showing any of the violence, it's all unseen and insinuated [Curgenven 2019].

Although characters aren't present in the video, Curgenven emphasises that the land is always occupied by the shadows and intimations of people, as well as the built traces of their previous presence. At one point (6'13") in the centre panel, the shadow of an Indigenous tour guide crosses the frame, expressing the fact that "the characters are all there but people simply don't know how to look for them" [Curgenven 2019].

Curgenven relates how land use was regulated within and between nations, as part of "The Law," a normative system developed over thousands of years. There was no original "wilderness," since the land was always *in* use, explicitly in the case of agriculture, or at least *available* for use. Neither was the territory unoccupied.

By contradistinction to the settler or the colonist who is on their own... people were *never* on their own. There was always a system of knowledge. There was always a vast matrix of possibilities between nations. Communicative and survival possibilities of knowing where water was, being able to read the land as a text, so you would know where water would occur. It shows the ridiculousness of "they died alone with no food," when in fact they were surrounded by water and surrounded by food. They just literally didn't know how to access it. And by charging out there on their own, in a non-consultative fashion, they brought about their own demise. And probably were not far away from people.

Being overwhelmed by the senses is part of Curgenven's method. The presentation of the video installation as three wrap-around screens forces the viewer into proximity with both image and sound. Peripheral vision is fully engaged. The space is constrained and shared with two other occupants. This contrasts with the generally open spaces portrayed in the video. The effect on the viewer is that they are drawn *into* the screen by the movement of the camera or drawn *across* the screens by the relational movement of the three frame. But always movement, from one psychic zone to another. And so it is fitting to read

They tore the earth as a navigation of remote territories. Curgenven himself made this journey many times while gathering sounds, and again when he returned to record the video. The handheld shooting and personal field of view strongly associates what we see in the finished video with what he experienced shooting it. There are no aerial shots or other totalising viewpoints. This matches the audio, designed to convey a strong phenomenological sense of the objects we are experiencing, through a highly individuated series of sensibilities... Curgenven's own, in fact. He is clear in stating the importance of this experience to his overall development.

Spending a lot of time in those areas and working with Indigenous people had – I wouldn't say radically but I would say substantially – reshaped and shifted my approach to sound, listening, territory. A lot of the stuff I learned from an early age playing music but also philosophically from my studies at university. It was a very grounded and fundamental way of bringing these things together. And in many respects it has taken me some time to understand how they all come together to produce the outcomes that I am seeking now.

The same conclusion can be approached from another starting point. Despite the political context in which he wrapped the work, we witness no people in the frame, least of all the native peoples. No specific political points are illustrated or alluded to in the video, and the opening quotation refers to the landscape, not culture⁶⁵. The piece does not act as a call to action, to vote, or protest. Instead, it's clear that this is a very personal work, and that the protagonist of this film is the recordist himself, Robert Curgenven. The traces of his body are those we experience, whether this is due to precisely holding a microphone to avoid joint sounds, tracking a camera to match the gestural movement of a sound, or planning a continent-spanning journey to meet certain economic and narrative constraints. At every moment in his activities, Curgenven directs his person "towards a certain existing or possible task" [Merleau-Ponty 2005, 114]. The spatiality he creates is not "a spatiality of position, but a spatiality of situation" [115].

⁶⁵ The quote, from explorer Ernest Giles (1835–1897), reads: "It is with regret that I have had to record the existence of such large areas of desert land encountered in my travels in Australia."

They tore the earth conveys a "near-impossible ontological state," that of us being Curgenven – hearing as him, seeing as him – in a land that is, in the final analysis, resistant to our understanding, empty as it is of all others.

This is one possible outcome of the platial approach. If we give place its due as a primordial milieu, composed of things that have their own individuated lives, already shaped by what has come before, then our own apprehension of this place is severely constrained. In the case of the Northern Territories, our experience is entirely insufficient to match the accumulated traces of activity (human, geomorphological, meteorological) that have already, long before us, shaped the land. Our only recourse is to be humble in the face of such a rich accumulation of strange phenomena. The fatal flaw of the Australian colonists was that they saw the land as barren, awaiting their presence as gardeners of they saw it as empty space awaiting a rectilinear grid of fences marking land claims. They tore the earth documents the tragedy of spatial thinking at the same time as it enacts a platial understanding. This is conveyed through the substance, methods, and structure of the piece, each aspect working in concert to produce a visceral experience that maps the composer's topos to our own.

6.4 Sirène and the wandering subject

Five generations ago, Curgenven's family emigrated from Cornwall to Australia. In 2011 the artist became the first of his family to return to his ancestral home [Curgenven 2018b]. His second "return" was to re-engage with his musical practice as organist, playing pipe organs in local churches. Given his extensive background of field recording in Australia, one might wonder why Curgenven did not make this his primary activity in Cornwall. This question can be held in abeyance until the end of this section, which will document his specific techniques and how these accord with an approach to sound as weather.

Over the course of his time in Cornwall, Curgenven recorded the organs of St. Paul (Ludgvan), St. Winnow (Towednack), St. Uny (Lelant), St. Wyllow (Lanteglos), and St. Cyrus & Juliette (St. Veep). These sites were chosen for practical reasons; they were churches where he could get the local custodian to grant ac-

⁶⁶ This providential ideology of nature derives from Abrahamic religions, which grant humans domain over nature, giving them the responsibility for managing the originary garden as a raw resource [Parmar 2018c, 156-7; Parmar 2019a, 15-16].

cess [Curgenven 2019]. Nonetheless, the specificity of each setting played an important part in the resulting recordings.

[T]he specific humidity and temperature in the organ at that time, and also the time of the day, is going to have a bearing on how the air moves. A lot of the Cornish churches are made of granite, which sucks up a lot of water, so it's very humid. And it's also very cold in there. So motivating the air can be a little bit harder. Whereas the cathedral that I was working in, here in Cork; it's heated in there. And it's made of sandstone I think; I'm not sure. So, subtly different acoustic qualities. It's this realisation that the air and its meteorological properties of temperature, humidity, and pressure, are all very specific to how a recording is going to turn out. Because essentially the microphones are measuring and converting the movement of air pressure into electrical signals, that are then getting stored on tape.

Curgenven engaged in a further mediation by activating specific spaces through resonant tones, pressing dubplates of these recordings, and reconfiguring the results on turntables. The result is a complex amalgam of the original sounds, using their places of origin as active principles in the timbres. Four musical pieces composed from this material were released as the album *Sirène* in 2014 (digital edition in 2017). Each composition presents the listener with vertical masses of shifting harmonics. These drone sonorities relate to Curgenven's idea of place in several ways, as explicitly announced in the online liner notes. On arriving in Cornwall, the artist was surprised to find a "country as wild as his former home in Australia's Northern Territory" [Curgenven 2018b]. This idea of the "wild" for Curgenven is, as a rule, opposed to human civilisation. Specifically, the wilderness is a constraint on colonial processes. (A matter discussed in the previous section.)

If Cornwall was too vast and "wild" to be apprehended by a visitor, the interiors of small churches, by contrast, are constrained environs, built around human dimensions and needs. Playing the organ might have afforded Curgenven a degree of connectedness, of comfort, while in a new and strange place. These instruments, while individual in temperament and timbre, nonetheless present standard modes of engagement through traditional methods of playing. That's what musical instruments do: standardize affordances and interfaces. And so,

moving from church to church, his next destination dictated by the whims of custodial staff, Curgenven traced a sonic *topos* of Cornwall, with himself as wandering subject, bound within a structural matrix of his own devising. This highly individuated path is a circumnavigation of the artist's historical record, through what he knows (or imagines he knows) of his ancestors' own navigation from Cornwall to Australia. The churches present microcosms of cultural activity that might resonate with specific details from Curgenven's family history. Perhaps his ancestors had attended religious service in these very buildings? In this way, the return to his earliest musical practice of the organ recapitulated Curgenven's return to Cornwall. Both were ways to re-engage with history, whether personal or familial. The album could not have existed without travel and foregrounds this motif in the content itself. The breathy whispers and creaky pipes bear witness to air moving through constructions of valve and tube, bringing sound forth into the room and then recirculating again. As material, the air moves. As protagonist and subject of this air, Curgenven moves too.

Curgenven's phenomenology insists on the specificity of place. He follows Ingold (chapter 3.8) in critiquing the term "soundscape" as being too unstructured and non-specific.

Without the denotation of the specifics of soundscape — anything ending in "'scape" — it becomes generalised. Hence my tendency, rather than to say "it was a beautiful landscape," I might refer to a variegated granite structure adjacent to the North Atlantic. Which would be describing the cliffs of Cornwall. […Soundscape's] impending universality means that it's both everything and nothing at the same time, but ends up being more nothing [Curgenven 2019].

Curgenven wrote an article on this very subject. Published in 2008, "Sound, landscape and the bastard child soundscape" predates the sonic works under consideration here. It acts as something of a manifesto, calling for "a return to first principles which interrogates the nature of sound, ecology and landscape" and listing several ways in which this might be accomplished [Curgenven 2008, 45]. Curgenven argues against the *objet sonore* (chapter 3.5) as a universalised, objectified concept.

By contrast, the delineation between the "sound of" and "sound" produces artificial distinctions which reduce a world of "wholes"

into an atomized series of parts which operates in a similar way to this deconstruction of the notion of landscape: sound objects, stripped of their context, reduced by a subject to an occurrence outside of the continua of the moments surrounding it [46].

Instead, Curgenven foregrounds the rich ontological milieu from which sound is apprehended.

These decontextualisations limit the relations around the pervasiveness, specificity and spatially evocative qualities of sound, producing abstractions and artifacts independent of the manifestation of phenomena, events, moments which are part of an ontological continuum often characterised as sensory elements (light, sound, taste, tactility, olfactory) [45].

There are strong connections between *Sirène*'s timbres and the landscape of Cornwall, which Curgenven describes as a trace of change over time. Empires have come and gone, like Cornwall's rugged granite cliffs, which, in the days of Cornubia⁶⁷, stood miles away from their present location. The people have also been slowly transformed by various economic and political forces. *Sirène* is not nostalgic, but instead presents time, lineage, and nationhood as a process and continuum of change [Curgenven 2018b]. Curgenven explicitly relates the political processes that shape a land with those tectonic activities that shift cliff-faces over the millennia. In this instance, these changes are not read as violent intrusions or ruptures but rather laminar processes. This suits the music itself, in which tones are sustained for long durations, mixing with others in a pace appropriately glacial. But what is it to play drone music – free of melody and rhythm, with little in the way of conventional musical development – in a church? How does this reconfigure one's encounter with place? Curgenven anticipated the questions:

Perhaps a return to first principles which interrogates the nature of sound, ecology and landscape is ideal in furthering this discussion, where "nature" is taken as a starting point – freeing us from inductive reasoning wrought by the convoluted and territorialized

⁶⁷ The ancient Latin name for Cornwall.

approaches surrounding urban, or even sometimes rural zones, in order to enable a closer examination of landscape [Curgenven 2008, 45].

A conventional recital might be said to impose structure on space through the music. Rhythm and pulse divide time, just as sequences of pitch create a narrative timeline. At a recital the organist expresses their aesthetic sensibilities though an ability to improvise within the structure that the composer has constructed. The composer too is an audible subject in and through the music. We read his style and recognise developments throughout a career, a narrative this time of practice, improvement, and mastery. But it is difficult to ascribe such structures and forms to a pure improvisation. In the first instance, such a work lacks a composer, an author standing temporally before and spatially outside the piece. In the second instance, it lacks a musician as interpreter and channel for the muses (in the Romantic interpretation), as there is nothing to interpret. A drone piece goes further along this path than improvisation, removing much idiomatic expression, along with most musical form that might be traditionally recognised.

In a drone there is no definitive point at which one structure begins and another ends, but only a horizon, a slipping of one timbre into another. All sounds are mixed, like paints on the palette, following the template of the vortex. There is no separation of observer and observed, of player and played. The personality of the musician is unimportant. There is no privileged position from which musical certainty can be obtained. Instead, the player and the listener become complicit in a sonic world that encompasses both. The sound work is part of the process of perception itself. By sounding out the acoustics of the room, an organ drone demonstrates how listening is tied to the specifics of that container. Certain dimensions produce certain resonant tones. Factors of absorption and reflectance change the echoes and reverberation. Sirène presents a "chaotic miasma from which form only hesitantly and incompletely emerges," a "primordial state of suspended possibilities" [Monks 2010, 11]. The description is of a painting by Turner, but the connection to Curgenven is apposite (as will be explored in the next section). Indeed, Curgenven has gone further with sound than Turner could go with paint. Turner might have wished to encompass the viewer within an immersive field free of conventional dimensionality and tactility but was restricted by his medium. But for a listener there is no frame to encompass acoustic material as content.

The four drones that comprise *Sirène* are not static, nor indeed fully contained within the church walls. Instead, they freely admit of interruptions and sonic overlays that break the frame or, rather, prevent any framework from being established in the first place. Curgenven's use of dubplates to refashion the material at a postponed date serves two functions. For the artist it is a self-conscious effort to come to terms with the materiality of the pieces, by transforming material from one form to another and hearing what remains. For the listener this recontextualisation adds depth to what might otherwise be heard as a recital. Instead of straightforward "music," strange sonorities beckon:

[T]he crackle of a field recorder with the gain cranked could be rain (or perhaps the other way round), and occasional human interference – footsteps, microphone scrapes, the pull of organ stops and clothing rustles [St. John 2014].

When the additions are laminar, a background hiss or vinyl static, they act as patina, a nostalgic veil knitting together present and past. When the augmented sounds are impulsive, these act as interruption to the drone flow. In either case they make apparent "the constant presence and intention of the recordist." Place is individuated, but this is not only due to its innate geometrical qualities. Place is also individuated according to the aesthetic intentions of the artist.

To summarise, it is safe to say that *Sirène* is not specifically concerned with pipe organs as musical instruments, but instead approaches them as part of an organ-church construct, as machines for moving air within specific confines. This aspect is emphasised in the recordings by magnifying the creaks and groans of valves and tubes. We hear the excursions of air, vented into the building, creating a micro-climate that envelopes our listening. Pipe organs are machines for making sound, yes, but also machines for making weather.

We can now return to the question posed at the start of this section. Given Curgenven's extensive practice of field recording in Australia, why did he abandon this approach in Cornwall? It should now be clear that he did no such thing. As in Australia, Curgenven's peripatetic travels from one site to another followed a method of obtaining recordings within a regulated system. Those granite walls held characteristic masses of humid air, providing a milieu within

which the meteorological nature of sound could be explored. Though purportedly an album of music, *Sirène* is also a series of pipe organ field recordings⁶⁸.

6.5 Sirène and "Steam-Boat off a Harbour's Mouth"

The third (and longest) track on the album *Sirène*, "Turner's Tempest," references the painting "Snow Storm – Steam-Boat off a Harbour's Mouth" (1842, The Tate, London) by J. M. W. Turner (1775–1851). This section considers the parallels between this painting and Curgenven's composition.

Turner's canvas presents a grey vortex where sky and sea merge. Centred in the frame is a struggling steam-ship, its aspect difficult to determine, its outline ghostly. The brown and ochre smudge that represents smoke curves up and towards us, mirrored by a dark shadow in the water. In fact, all lines here are bent into a spiral, our eye drawn into the centre as though sucked through a funnel cloud. The emotive content might well be of drowning in the wild seas. But we are also flying, viewing the scene from elevation, pulled through the perspectival dimension of the canvas by the spiralling forms. This effect could be characterised as "immersive," to borrow an anachronistic term from the vocabulary of installations. But the psychological sense of being at the centre of things is not a positive feeling. Rather, we are a victim of meteorological conditions beyond our control, forces that threaten to sweep us away.

The full title of Turner's painting is "Snow Storm – Steam-Boat off a Harbour's Mouth making Signals in Shallow Water, and going by the Lead. The Author was in this Storm on the Night the Ariel left Harwich." This title recapitulates Turner's story of being "tied to the mast of a steam-ship for four hours during a nocturnal snow storm" [Hall 2009]. This narrative situates the painter at a specific topological point with respect to the canvas, following the perspectival view instantiated by Alberti (chapter 3.3). The narrative physically elevates the painter above the waters, giving him a bird's eye (or God's eye) viewpoint, the *episkopein* of *geos*, while simultaneously aligning his artistic creativity with the forces of nature. The frontal formula posited the gaze as an instrument of investigation and knowledge acquisition. In this manner, men viewed a world that they could explore, quantify, catalogue, and exploit. Maritime painters of the

⁶⁸ In interview, Curgenven agreed with this assessment.

seventeenth and eighteenth centuries inherited this epistemology [Monks 2010, 11]. Their world of "freely circulating bodies" measured the efforts of man (commercial, military, scientific) against a definitive horizon. In accordance with positivist ideologies and the progressive spirit of the time, man's efforts were seen as productive and morally-centred.

But in Turner's painting there is no horizon; there is not even a definitive point at which the ghost ship ends, and the atmosphere begins. All objects are mixed, like paints on the palette, and in a similar swirling motion. There is no separation of observer and observed, so there is no privileged position from which certainty can be obtained. Instead, the self is smudged into the world it observes. The painting itself becomes part of the process of perception.

[It] performs the moment before knowledge, when vision, thought and bodily experience are effectively equivalent and have yet to tip over into the re-cognition that will define them as distinct, and differently valued, types of "knowledge" [Monks 2010, 11].

"Steam-Boat off a Harbour's Mouth" represents the inchoate swirl of creativity itself, before objects fully form. It is a visual representation of *khōros* as flux. Within Plato's receptacle (chapter 2.3) the elements are combined in different proportions, creating all those forms that exist.

Hall proposes that Turner's origin narrative is a deliberate myth. Turner chooses the name Ariel for his vessel of discovery, and by so doing allies himself with Shakespeare's mage Prospero. There is no coincidence in the fact that a tempest, in its meteorological sense, is indeed the subject of this painting. Nor is it chance that Ariel, derived from the same root that gives us "aerial," is a sprite associated with the powers of the wind. According to Hall, this literary connection might well have been a deliberate strategy by Turner to elevate himself, in his critics' eyes, above his Cockney roots, to bestow the painter with the supernatural generative powers of the magician Prospero.

The perspectival vertigo created by this canvas reinforces Turner's ongoing theme of "dissolution and its defiance" [Monks 2010, 9]. The ship struggles and might well, like so many vessels before it, fail to overcome the forces of air, water, and rock, the primordial elements. The fictive Turner is placed in heroic proportion to this event. Strapped to a mast to gain an elevated view, he is destined to survive the storm. How else could he paint what we now view? The

painting oscillates between this first-person perspective and the impossibility of its truth in the face of raw turmoil and unalloyed power. In Monks' interpretation, the technologies of navigation and steam power represent "culture's attempts to organise and cut through the world in its own interests." The attempts to resist the forces of nature result only in "man burn[ing] out both himself and his resources." The painting, then, is a portrait of ecological disaster, of the failure of industrialisation, and the ultimate ruination of the positivist project. Curgenven has himself taken up this theme in his work, particularly in *They tore the earth*.

There is a pride inherent in this bold struggle against adversity. By allying himself with mythology, Turner fashions himself as hero. He holds in abeyance the forces of nature, if only long enough to paint them. Though Curgenven tethers his work to this mythology, his perspective is not so naive. "Turner's Tempest" may be the title of the track on the digital edition of Sirène, but as previously available on cassette tape, it has a much longer appellation: "The Internal Meta-Narrative of Turner's Tempest As He Is Tied To The Mast in Order to Create the Direct Experience of the Drama Embodied Within a 'Snow Storm -[wherein a] Steam-Boat off a Harbour's Mouth making Signals in Shallow Water, and going by the Lead. [is rendered by virtue of the claim that] The Author was in this Storm on the Night the Ariel left Harwich'." Even if close attention is paid to the internal quotation and parentheses, this title does not resolve into meaningful syntax. The complex phrasing interpolates myth within the actuality of the painting, exploding the title, making explicit Turner's framing device. At the same time, the title denies laminar flow; it is itself a vortex of language. Description and commentary are combined; the content breaches its own bounds by referring to "Internal Meta-Narrative."

If the first narrative Turner is exploiting is *The Tempest*, the second is that of Odysseus. In the online notes for *Sirène*, Curgenven repeats the Celtic interpretation of *The Iliad* and *The Odyssey*, which holds that these epic poems were not set in the Eastern Mediterranean, as is commonly assumed, but rather in Western Europe. In this reading, the battle of Troy was not fought for Helen of Troy but for tin, then a prized component of bronze. Curgenven notes that his ancestral home of Cornwall "has been home to thousands of years of tin mining and a tin trade dating back beyond the Phoenicians" [Curgenven 2018b]. Furthermore, the Isles of Scilly off Cornwall's coast might well be "the treacherous

home to the Sirens." It should be remembered that Odysseus had his sailors fill their ears with wax, to avoid the audible charms that might cast their ship upon the rocks. But Odysseus left his own ears free, wishing to audition the Sirens' call. Curgenven does not recall this part of the story explicitly, but the themes of temptation and refusal are nonetheless evoked as potential, through the title of the album, for example.

Curgenven debuted this track on *Transfixed*, a cassette release on the Tapeworm label (2013). This tape is in many ways a "dress rehearsal" for *Sirène*, allowing him to gauge the interest in the material while refining his methods, developing a narrative around the work. External commentary is important to Curgenven, as was demonstrated in the previous section. He would rather point listeners in the direction of appropriate contextualising materials, rather than risk an interpretation he did not intend. This is demonstrated by the long title to the piece, which enacts its own self-analysis. It is also evident on his website, where the description of this track links directly to The Tate's website and the Hall text referenced earlier [Curgenven 2013]. Since such connections are not left to chance, the analysis in this section was, at least partially, anticipated by Curgenven.

One final correspondence will help link this reading back to the phenomenology elaborated in earlier chapters. Both the chiaroscuro of Turner's oils and the swirling timbres of the *Sirène* organ pieces illustrate the doubled movement of the Da-sein. In reaching out to apprehend the world, the world is created through perception. The lack of a defined horizon in Turner's painting finds its counterpart in Curgenven's compositions, which are amalgams of place as experiential field, impossible to pin down to specific location. Is that sound a bird from outside? Is that bass drone a low pedal note or a turntable shaking itself into feedback? Is that wheezing crackle a vinyl record or the organ pipes pumping air? Such sounds open experience to a world of shifting dimensionality and texture. In Turner's painting, the lack of a rectilinear grid refutes Cartesian spatial ontology. *Sirène* is similarly all vortex and flow. These correspondences validate the platial reading of this work. Here, place is formed already, and at every moment that follows, from a subjective position within a meteorological vortex.

6.6 Climata: volumetric sound

While living in Cornwall, Curgenven discovered a Skyspace, an architectural light installation designed by artist James Turrell (1943-). Turrell was born in Los Angeles and became associated with the Light and Space movement that developed in that city in the late 1960s. In 1966 he leased the Mendota Hotel for two years and transformed it into a work known as the Mendota Stoppages [King 2002]. He progressively sealed off the building from exterior light, so that he could create controlled areas of dark and light within.

That is where I made the first series of projection works. When you seal up a space, it can get a little stuffy, and if you open anything, light will come into this perfectly bare room in a very strong and amazing way. I then began to open up the space, particularly at night, to different areas of light. All forms of light were available—the path of the moon, cars, street lights, and shop lights. I made a series of spaces where I could change the space by virtue of how I let in light. I literally made a whole new space out of the same physical space, which remained the same, although that's not what you encountered perceptually [King 2002].

In 1979 Turrell bought Roden Crater, Arizona as a site for his installations, a grandiose project that required decades of development. He has also created more than eighty Skyspaces for private collectors and public institutions, at various sites around the world [King 2002]. Each Skyspace frames the sky within an architectural volume, often using distinctive lighting and paint to colour the interior. The goal is to make light tangible as a thing in itself, not merely a medium for perception. As Turrell says: "We don't normally look at light, we're generally looking at something light reveals" [Art21 2013, 0:17]. This forms the basis for his phenomenology, which adopts a platial approach in the way it emphasises the ongoing, active process that creates the world we perceive.

This world that we have around us is not a world that we receive, but more a world that we create and make. Now this seems a bit of a surprise because we really feel, and we are very much attached to the fact, that we are receiving these perceptions, as opposed to creating them. But we do create the reality in which we live [Art21 2013, 3:33].

Given what has already been written about Curgenven's interest in phenomenology, it is not surprising that he was attracted to working with the Skyspaces. But there is an important distinction between their ontologies. Turrell emphasises the "thingness" of light, stating "I'm making something out of a thing we don't normally attribute thingness to" [King 2002]. Curgenven differs in that his focus is not on the object, but rather on individual subjectivities within a field. This he grounds in the individuated expression of the body.

There are a variety of constructs that he uses to present light in a specific way. And it also relates back to the system response and the parameters of how our corporeality, both container and material, respond to the situation around us. So inherently our subjectivity, as opposed to there being an objectivity to the world that we are seeing and reporting, and hearing [Curgenven 2019].

Turrell and Curgenven nonetheless have a similar interest in topology, specifically a need to consider *volumes* rather than *surfaces*. In interview, Turrell talks about how the formal colour models fail to predict how light operates in space, since such models are predicated on reflective colour, designed for those working with pigments on canvas or paper. This standard mode of artistic vision is furthermore built on Alberti's ocularcentric viewpoint: that the cone of vision is designed to focus light onto a planar surface. "In general, we're a surface culture," writes Turrell, "and tend to look at and speak about reflected light because of our tradition of painting" [King 2002]. Curgenven echoes this:

[I]t took me years to realise that it was the air that I was specifically interested in. Perhaps that's why contact mics haven't been as interesting for me. You do get surface sounds but I am less largely interested in surfaces. I am interested in the mode of being: where you are, how you are, how you came to get there [Curgenven 2019].

The phrase he uses here, "mode of being" is perhaps more fitting than the "subjectivity" he speaks of in the previous quotation. Curgenven uses "subjectivity" to oppose an empirical emphasis on things in themselves, but it is not that he wishes to build a subjective account of experience apart from phenomena.

Quite the contrary. Curgenven is instead charting a third course, much like Merleau-Ponty's exploration of phenomena as neither mere ideation nor simple empirical object. With respect to Turrell, Curgenven makes an important statement of sound as milieu:

Because if it's about, not the thing that light reveals, but the thing that light *is* itself that's the revelation, then the question followed: "What then about sound?" So that sound equally *reveals* things. It's not necessarily the sound in itself, but it's the culmination of a series of geographical, geological, locational, contextual, durational, and meteorological concepts that produce... Well, not concepts, even, but fundaments that come together to produce a sound.

Voegelin has described listening to Curgenven's work⁶⁹ in terms that emphasise how corporeal representations of composer and listener become overlaid: "The horizontal layer thickens and vibrates in this encounter until his landscape encompasses mine and I take his to be my location" [Voegelin 2010, 97]. She emphasises landscape in her description, going so far as to describe Curgenven as a "Land artist." But it is not the surface of a landscape but the dimensional extent of air that interests Curgenven most. The "horizontal layer thickens," becomes volumetric, a necessary pre-condition for the occurrence of sound.

To explore his meteorological conception of sound, Curgenven traveled to fifteen Skyspaces worldwide, taking with him a pair of custom-built oscillators. He tuned each to a resonant node of the room, so that the difference frequency would also activate the space. He describes this process as "three things coming together to produce a fourth thing."

I was recording the feedback, but it's the point just before when it starts to honk. So you are getting a fluttering, so it produces a kind of beating frequency. So you are hearing the movement of air as a heterodyning tonal relation that's specific to the phase relationship in the room between the mic and the speaker, and also specific to that place at that time. Because you are also going to be getting sounds from outside, that may be enough to produce an attack

69 In this case "Silent Landscapes No. 2" (2008).

within the room. It's a living situation. So even the things that I would maybe do that might approximate a studio are still a kind of field recording, because I am not just interested in *an* object, it's the total relation of the air around it. So everything has been placed in a specific spot, much as you would with a studio recording, but I am trying to not just zoom in on one thing. It's the total relation that I am after. Because that might not be evident or useful in that one part of the recording but when you combine it with one or two other recordings then they start to cross-modulate each other.

The fact that recordings from different sites would later be combined was a given from the beginning. Curgenven "was intentionally building a matrix of possibilities over two hundred recordings". Back in the studio, these were mixed into an integrated musical piece. In this way, the project instantiated the artist's matrix method outlined in chapter 5.2. Specifically, there was a constrained selection of material (predicated on the available Turrell Skyspaces), a consistent and idiosyncratic process (the creation of resonant beats from dual generators), and the treatment of the material after the fact as a pool of data from which to work aesthetically. There is a tension in this method between treating the field recordings as equal-value material, and in acknowledging the specificity embedded in each. Curgenven favours the latter approach, as evidenced in the final product, which bears many traces (birds, traffic noises, an alarm) of the "outside world." No attempt is made to purge these, "cleaning" the recordings. Rather, the hubbub of the world maintains a constant auditory presence.

The title of the resulting album, *Climata*, explicitly acknowledges Ptolemy's alternative formulation of place (chapter 2.2). Though geographically dispersed, the Skyspaces nonetheless create a zone of similarity, since they were all created by Turrell for similar purposes. Each Skyspace framing, in specific ways, our visual and auditory apprehension of the world. They are phenomenological *klimata*. Curgenven is aware that he is representing these places within an aesthetic he is creating, but asserts that this dramatic act can throw into sharper relief important phenomenological aspects.

[I am] trying to use sound pressure and particular combinations of frequencies to elicit a range of emotions that aren't necessarily universal but that have a dramaturgical coherence to them. So that within a lot of the field recordings, they are both a recording of something that may or may not be happening in a particular location, but that within those things that happen, or that don't happen, there is a discrete dramaturgy. Layering field recordings over each other was done hesitantly because I was literally layering different recordings of different countries over each other. So there is a processional notion to how it goes from one place to another, over a duration.

The way the music was released facilitated experimentation. The two discs in the double CD set each contain three tracks of 19:19 duration. Given two sound systems, it is possible to play back combinations of tracks in the listening space, hence replicating, in part, the artist's own method of combining and layering components within a *klimatic* matrix.

For the exhibition Locate Yourself, *Climata* was presented as an interactive sound atlas. Visitors could mix sounds from different locations by selecting them on a digital representation of a map. This experience seemed superfluous to the original piece, even contradicting the phenomenology that Curgenven had taken pains to illustrate. The first problem was that, in this case, the sound mixing was being done within an electronic or digital realm. This flattens the experience that would be present if sounds were being mixed as pressure waves in the air. Atmospheric mixing allows a corporeal engagement, each slight movement of the head producing phase changes that informed experience. Instead, the digital manipulation of a computer interface flattened experience. Second, this arbitrary interactivity reasserted a perspectival hierarchy in which the listener views the Skyspaces from a superior position, manipulating the individual sounds using the *geos* model. However flawed this particular implementation, it does not take away from the audio version of *Climata*, which stands as a particularly pure⁷⁰ implementation of Curgenven's methods and interests.

6.7 Conclusion: sound as weather

This chapter has demonstrated how Curgenven works with sound as physical manifestations of the air itself. This section will extend the analysis of his phe-

⁷⁰ Unlike the other pieces discussed, no further sounds (e.g. dubplates, instruments) were added to the *Climata* source recordings. In this sense it presents the original field recordings with a particular unadulterated clarity.

nomenology by considering sound as weather, a proposition that finds support in Merleau-Ponty by way of Ingold.

First, consider vision by returning to Turrell's statement regarding the limitations of colour theory. As described in the previous section, light as a phenomenon in volumetric space is perceived very differently from light reflected from surfaces. In a world of surfaces, it is perhaps reasonable to assume that light reveals innate characteristics of objects. Change those objects, by pigmentation, for example, and the visual perception of them changes. But the presence of light in space, in three dimensions as opposed to two, presents difficulties for these models. The sky in particular has long been considered a test case for perceptual theories. Should the sky be considered a surface revealed in light? This contradicts our everyday experience of its immaterial form. In *The Phenomenology of Perception*, Merleau-Ponty proposes a very different engagement.

As I contemplate the blue of the sky I am not *set over against* it as an acosmic subject; I do not possess it in thought, or spread out towards it some idea of blue such as might reveal the secret of it, I abandon myself to it and plunge into this mystery, it "thinks itself within me," I am the sky itself as it is drawn together and unified, and as it begins to exist for itself; my consciousness is saturated with this limitless blue [Merleau-Ponty 2005, 249].

Ingold returns to this passage time and again. His interpretation considers that light is the "experience of inhabiting the world of the visible, and its qualities – of brilliance and shade, tint and colour, and saturation – are variations on this experience" [Ingold 2005, 101]. In short, light is just another word for "I can see" [Ingold 2007a, 11; Ingold 2007b, S29]. As Curgenven extended Turrell's ideas from the realm of light into the realm of sound, so too does Ingold extend Merleau-Ponty's expression of visual perception to sound. To repeat a quotation used in chapter 3.8:

Sound, in my view, is neither mental nor material, but a phenomenon of experience – that is, of our immersion in, and commingling with, the world in which we find ourselves. Such immersion, as the philosopher Maurice Merleau-Ponty (1964) insisted, is an existential precondition for the isolation both of minds to perceive and of things in the world to be perceived. To put it another

way, sound is simply another way of saying "I can hear" [Ingold 2007a, 11].

In "Earth, sky, wind and weather," Ingold considers those mental models of the Earth that contrast the textured surface known as "ground" with the texture-less expanse of nothingness known as "sky" [Ingold 2007b, S26]. Yet the sky is not empty. It can, for example, be full of clouds, or scattered with birds. Neither is the sky passive and featureless, but rather an active region of rain, snow, and wind [S28]. Ingold notes that you cannot touch wind, you touch *in* wind [S29]. Hence, Merleau-Ponty's statement "I am the sky itself as it is drawn together and unified" applies as much to the sense of touch as sight, and to hearing as well. "Far from being disclosed to us as targets of perception, waves, wind and sky were present as an all-enveloping experience of sound, light and feeling – that is, an *atmosphere*" [Ingold 2011, 134]. The activities of this atmosphere we commonly call weather. We live, then, "not on the fixed surface of the landscape but in the swirling midst of the weather-world" [135]. Light, sound, and weather are not objects of perception. Rather we perceive *in* light, *in* sound, and *in* weather [Ingold 2005, 102].

Curgenven references weather repeatedly in descriptions of his work. It was the weather outside his home while he was recording piano that first engaged his interest in field recording. When in the Northern Territory he discovered "interesting interplays between weather happening and fauna and flora" that compelled him to record different places he encountered [Curgenven 2019]. The particular temperature, humidity, and pressure in the churches of Cornwall were responsible for how he engaged with their organs, to activate the spaces. And when recording the Turrell's Skyspaces, Curgenven was responsive to the changeable microclimates, his recordings conveying exterior sounds as much as the interior resonances that were the purported focus of the work.

It is clear from this catalogue that Curgenven uses weather in a sense largely compatible with Ingold and Merleau-Ponty. Sound is not the thing to be revealed, instead "sound equally *reveals* things," within a context created from "geographical, geological, locational, contextual, durational, and meteorological" fundaments. His ontology is predicated on the specificities of the place in which he records (individual churches for *Sirène*, specific Skyspaces for *Climata*), even if he will later reconstitute and augment these materials (for example by montaging recordings from different places or adding dubplate reson-

ances) as a dramatic experience for the listener. He treats sound not as an object to be described, but as an emergent property of a meteorological system, one which can be used to describe our ontological engagements with those places. For Robert Curgenven, sound *is* weather, the milieu in which we experience place and its affects.



Chapter 7: Conclusions

Almost as soon as audio recording equipment was available, it was pressed into service in the field. Field recordings have since been an essential tool in anthropology, ethnomusicology, ecology, bioacoustics, and urban studies. In recent years the proliferation of high-quality, portable, solid-state recorders, to say nothing of mobile phones, has transformed the act of field recording from a professional, specialist task to a commonplace activity. Meanwhile the aesthetic use of field recordings has been important in musique concrète, soundscape composition, phonography, and other disciplines. In today's world of fluid digital practice, it is common for field recordings to be used as raw material for further transformation, or to be published as compositions in their own right.71 The term "environmental music" is here proposed as an umbrella term for aesthetic products (fixed pieces, installations, performances) that use field recordings as primary material. In this context, the distinguishing characteristic of a field recording is that the sounds were encountered in their original context, and retain some indexical relationship to this milieu. Such sounds are not planned or scored by the recordist. Even if the sonic content falls within general expectations (birdsong in a Dorset dawn chorus, shrimp clatter in the Red Sea), the specifics cannot be predicted. The composer must first encounter anecdotal sounds as things-in-the-world, before recording and reconstituting them according to their goals.

Though environmental composition is predicated on the significance of the place in which a field recording was made, the ontology and phenomenology of place in this context has been under-theorised. This study has partially addressed this lacuna by investigating the rich conceptions of place known to the Ancient Greeks. Of these, Ptolemy's *geos*, embedded in our word "geography," became the West's normative approach to the world. Geos is predicated on *epi-skopein*, a God's-eye view of the world that removes the subject from its milieu.

⁷¹ There are many labels dedicated to publishing field recordings: Gruenrekorder (Germany), Very Quiet Records (UK), Impulsive Habitat (Colombia / UK), Hibernate (UK), Earth Ear (USA), Unfathomless (Belgium), and Galaverna (Italy).

This spatial ideology was reinforced by Alberti's perspectivism, which places the viewer in a strict topological relationship to their subject. Cartesian rationalism followed this geometric interpretation, reducing place to a secondary aggregation of qualities in an ordered, homogeneous space. Such an interpretation of place encourages sound mapping and other structuralist schema.

But though *geos* and ocularcentrism have dominated Western society's experience of the world, alternative approaches to place have maintained minority interest. *Topos*, as exemplified by tales of *periplis*, foregrounds the perambulations of an individuated subjectivity, emphasising the experiential nature of the journey itself. Contemporary sonic practice uses this *topos* as a model for the soundwalk. *Choros*, as delineated by the *klimata* of Ptolemy, models place as psychic zones of influence on the Earth. This found expression in the Situationist *dérive*. In the most radical model of place, Plato described *khōros* as both receptacle and material, a generative site of instability and unknowability that *gives place* to things, through an ongoing act of creation.

Taken together, these concepts provide a rich descriptive framework for studying place, but the English language has no word that foregrounds place as subject. Hence the neologism *platial*, meaning "of or relating to place." This term asserts the primacy of place as milieu, a responsive context that shapes, and is shaped by, *being-in-the-world*. This expression builds on Heidegger's writings on dwelling and the phenomenology of Merleau-Ponty, which denies both Cartesian rationalism and Husserl's idealism. Platial thinking follows Casey's Archytian Axiom in positing place as the first of all things, an inversion of the usual spatial thinking.

The remainder of this study illustrated the benefits of applying platial thinking to environmental music. A pluralist vocabulary of place allowed previously obscure activities to be described clearly, facilitating deeper understandings of such works. The artists under consideration illustrated a diversity of practices, but each emphasised the experiential nature of the recording process itself. Robert Curgenven's *Climata* was created through an extensive process of visiting different structures and "activating" each space for sound, in a prescribed manner that is open to individuated geological and meteorological effects. The results were compiled into fixed compositions, but listeners have been given autonomy to augment these further, either by playing multiple CDs synchronously, or by remixing source tracks through a computer application. Dallas

Simpson's environmental performances exist for their own sake, as a personal engagement with place. The recordings are provided as documentation, invitations for listeners to perform similar actions and take on similar relationships with specific places.

Such artists create environmental music that foregrounds platial thinking. The fundamental understanding is that the ontology of sound is integral to how sound manifests as phenomena. For Heidegger, phenomenology is not about the simple fact that a thing exists, since this is already apparent from direct observation [King 2001, 112]. Instead, phenomenology is about the *being* of things: ontology, in other words. Simpson rooted his Soundbody theory in how an object expresses itself to a particular subject. The details of how one approaches and engages with Soundbodies in the first place are hence critical. Context is everything.

The "principle of potentialities" suggests that the nature of the expression of expressed and unexpressed potentialities depend upon the realm in which potentialities are expressed as observable or cognitive distinctions [...] [Simpson 2016a].

Simpson's practice evolved from a deliberate interaction with objects in his environment, essentially using them as instruments, to more restrained, considered actions. This change arose from an understanding of how objects revealed themselves in sound.

The object of the improvisation was not to find things I could play musically, but to "voice" the environment so that in a sense, with me as the intermediary, it could "speak for itself". We perceive and respond to the sound of musicality very differently to the simple observation of our surroundings together with the pure environmental soundscape [Simpson 2016a].

Heidegger discussed this manifestation of a phenomenon as a "self-showing" [Heidegger 1996, 25]. A thing reveals itself for what it is, but for this to express ontology the Da-sein must be present. In other words, the phenomenon and its perception are inextricably linked. Curgenven addressed this inseparability in similar terms.

The thing itself is concrete but we can't comment on its existence outside our existence, so we get caught up in a series of meta-representations, that at each contra-indicated and interconnected level reveals something of itself and each other. But we can't necessarily say that this thing exists independently of ourselves, but that it *shows* something [Curgenven 2019].

We now arrive at a critical point that has not yet been made explicit. This study concerns a phenomenology of place, but not a phenomenology of listening. Following Heidegger, phenomenology is not about how things appear, but how they show themselves as being. In other words, phenomenology is not mere perception, but is rooted in the initial "reveal." It follows that phenomenology cannot be reduced to listening. Listening comes after the phenomena, after the potentialities have resolved into sensory data. This understanding has been tacit throughout this dissertation, which is why, although listening has received significant attention at various points, it has not been the dominant subject⁷². For example, when Schaeffer's four listening modes were discussed in chapter 3.5, this was to demonstrate the limitations of Husserl's phenomenological reduction. It was not so that a new phenomenology of listening might be constructed. Nonetheless, the relative lack of emphasis on listening should not be taken to imply that composers shouldn't develop listening skills as an essential part of their practice. Nor is this an argument against studying listening and its role in the creation and reception of environmental music. But the emphasis on listening in so much of the literature overlooks the prior ontology of the object itself. A future work might follow up on this oversight.

Possible deficiencies of the current text will now be addressed. This dissertation has drawn on so many diverse disciplines: anthropology, phenomenology, urban studies, media studies, electroacoustic music, acoustic ecology, etc. This

⁷² Greater consideration of listening, in itself, might have been anticipated, given that listening is currently a "hot topic." Relevant works cited in this study are Carlyle and Lane 2013, Ihde 2007, Norman 1996, Norman 2012, and Voegelin 2010. Other important publications on the topic include Jean-Luc Nancy's *Listening* (2007), Joanna Demers' *Listening Through the Noise* (2010), Pauline Oliveros' *Deep Listening* (2005), Barry Blesser and Linda-Ruth Salter's *Spaces Speak, Are You Listening*? (2007), Seth Kim-Cohen's *In the Blink of an Ear* (2009), and readers such as *Sound By Artists* (1990) and *Audio Culture* (2017).

has precluded the type of fulsome contextualisation each individual subject would have received in its original context. It is worth pointing out, however, that detailed readings on several subjects were in fact undertaken as part of this research, even if space has not allowed the inclusion of this material within these covers. This is made evident in the first instance by the literature review summarised in chapter 1.4. Ancillary work has also been demonstrated by publications made in the same time frame as this dissertation. A history of field recording was published as Parmar 2016a; ideologies of nature in the context of Schafer's soundscape are explored in Parmar 2018c; a review of Curgenven exhibition was published in an arts journal [Parmar 2017]. It is anticipated that additional related research will be published.

There is certainly scope for further research in several areas. Merleau-Ponty's phenomenology deserves a more nuanced treatment, especially with respect to how later works, for instance "Eye and Mind," do (or do not) bear out the promise of *Phenomenology of Perception*, specifically with respect to ocularcentrism. His use of visual metaphors needs questioning, refuting, or perhaps simply extending into other sensory registers. Indeed, there is a need for a study that essentially rewrites Merleau-Ponty *after* the sonic turn. In addition, this philosopher has a significant body of material on the subject of nature, some from lecture notes published after his death [Merleau-Ponty, 2003]. This material can no doubt be used to enrich understandings of place, especially in relation to the Romantic ideologies of nature that underpin *The Soundscape*.

Similarly, Tim Ingold has written more extensively than the sections on his work here might have indicated. His integration of an anthropological perspective within human geography resulted in much platial thinking. Of interest to environmental composition is his critique of the soundscape. Although discussed in chapters 4.8 and 6.4, more could be written in parallel with an extended reading of Schafer. This work was begun in Parmar 2018c.

Notable omissions from the literature on place include Henri Lefebvre, whose *The Production of Space* is key to understanding space as socially and politically constructed [1974]. Important also is Doreen Massey, who proposes that space is "the product of interrelations," a sphere of "contemporaneous plurality," that is "always under construction" [2005, 9]. Both writers have engaged with place in a manner compatible with this study, even if they used the word "space"

where we would use "place." (Perhaps ironically, space precluded a more detailed consideration of their ideas.)

The artists studied here provided only a small cross-section of contemporary practice. They were selected for three main reasons. First, they articulated the platial concepts under development, as chapters five and six have demonstrated. Second, they were previously quite absent from critical literature, despite their extensive bodies of work. Third, they were accessible and amenable to collaboration on this research. An obvious extension to the current study would be to apply platial understandings to other practitioners. Here follows an overview of suggested artists.

Hildegard Westerkamp's Kits Beach Soundwalk is a fixed composition arising from radiophonic practice (chapter 3.10). It has generated a large body of critical theory but could benefit from an explicitly platial approach that considers her ongoing practice of soundwalking. Francisco López has a voluminous discography that expresses often contradictory approaches to place. His various statements on decisions such as blindfolding audience members deserve exploring for any through-line that relates to ocularcentrism. Janet Cardiff's The Missing Voice: Case Study B is a fictive narrative constructed as a soundwalk, one of over two dozen such pieces made since 1991. Though much-lauded and studied, her practice has not been explored using concepts of topos and choros. Christina Kubisch has a large and intriguing catalogue of performances, but is best known for her electrical walks, which make audible those traces of energy that are usually imperceptible. This charts a territory that is explicitly urban while simultaneously ephemeral. It might be fruitful to consider these projects in terms of the periplis, since these tales posited places that were both highly individuated but resisted resolution to actual locations on a map. The playful experiments of Slavek Kwi have covered every variety of solo and group improvisation, musical performance, composition, and installation. An inquiry into his vast oeuvre could begin by relating his chorographic practice to Dallas Simpson, finding commonality of approach in the meditative centre that anchors each artist. Stéphane Marin has developed a sophisticated practice of individual and group soundwalks into several environmental compositions, notably Matins d'Ariège (2015) and Invisible(s) Archipelago(s) #1 Serendib Rhythms (2016). His selfaware recording techniques deliberately reconfigure the sounds he discovers, expressing place as ever-changing, generative khōros. It is evident from this

catalogue that this dissertation, while providing a firm foundation, is only the beginning of a much larger project. Many other contemporary artists deserve study using the framework developed herein.

In parallel with the current research, the author developed the installation *In that place, the air was very different* as a practical demonstration of the platial approach. This work begins in *dwelling*, the composer inhabiting the *oikoumene*, the everyday world, through an artist residency. This approach recognises that Da-Sein is bound to place in a relationship that is always in the process of being negotiated, through difference and differentiation. From one residency to another, field recordings are gathered as material, each forming a sound pool. The cumulative result is a sonic memory of an ongoing journey, a tracery of *topos*.

The resulting installation is encountered by visitors as $kh\bar{o}ros$, an active container that is always in the process of creating and recreating sonic terrain. Hidden algorithmic processes are optimised to create accidents of listening, the montage of place-on-place. The visitor activates this matrix by walking, so that different phenomena are revealed to each listener, depending on their situation, receptivity, and expectations. This piece instantiates the fundamental principle of platial thinking, that *being-in-the-world* is also *world-made-by-being*, a mutual construction that occurs at every inflected moment. We make place as place makes us. Environmental music is ideally suited to expressing this rich conceptual field. The four models presented here - *geos*, *topos*, *choros*, *khōros* - provide a useful descriptive template for platial composition.



I stand on the banks of the Corbally Canal in Limerick. It's four-thirty in the morning. How many others are awake at this hour? Certainly, few are waiting in the half-mist with a steaming mug of Jasmine tea, proof against the chill. The blend of aromas is decisive: stagnant water and herbs from the tea. A special play of muscle and tendons is needed to carefully balance this substantial mug of hot fluid in one hand while distributing the weight of a pack across my back. The isometrics are part of a specific pattern, one that recalls memories stored in the body, more so than those lingering in the mind. Memories of other excursions.

An hour earlier, when it was darker still, I had placed an audio recorder in hiding. I attached it to a small tripod, bent the flexible legs into a supporting position, and found safe place, out of the way of any curious passers-by. It didn't seem likely, but there was a small chance that a dog walker or jogger might stumble upon the device. I wished to be careful.

The position I chose happened to be embraced by a bed of nettles. One of these scored the back of my right hand. My hand is now on fire, traced with acid. I am forever forgetting to bring gloves.

A group of birds has started up their song from the bushes on the far side of the canal. Cars pass over the hump-back bridge some hundred metres away. You wouldn't think people have anywhere to go at four-thirty on a Sunday morning. But there's one car every three or four minutes. And more still on the flyover downstream. The sound of tyres on tarmacadam is omnipresent.

Scattered impressions of the Corbally Canal impinge on my thoughts. At this moment an archipelago of experience, memory, and cognition forms the land-scape my listening inhabits. I can't listen without enjoying my rapidly-cooling tea. Without wondering if the air will grow too cold for me, if I stay here another hour. Or how a leaf can possess a toxin that pains human flesh so exquisitely. How loud will that car on the overpass sound on the recording? Experience rushes through me, in proportion to how much attention I afford it. The sensations themselves have causes elsewhere, emanating in objects in the world over which I have no control.

A cat crosses the footpath at right angles, making directly for the water. I wonder if the sound of its feet will register. Likely not. But what of its intrusion into the avian realm? When playing back the recording, will the delicate feline passage be evident from small gaps in birdsong?

As if to answer my thoughts, a crow sets up a warning chatter across the river. The call bounces off the bank; the echo replicates the creature in sound. A second warning.

Much time has passed. I am cold, tired, and hungry. I walk back to the recorder, recover it from a home in the nettles, taking slightly greater care this time to avoid incident. The red light is still blinking in pre-record mode; the timer reads 00:00. I have forgotten that this device requires *two* presses of the red button before it begins recording. So, there is nothing on the disk. But altogether it is still one of the best recordings I've made. The Corbally Canal, which I

thought I knew so well, has changed me. I am not the same person I was when I awoke.

Returning home, I set about writing these notes. One day they will find a home, in a context that isn't quite right, for readers who are not quite prepared. That would be most appropriate. For when are we ever ready for the strange, beautiful wonder of the world? This world that reveals itself to us in mysterious phenomena, a sharing that shapes us, that we have no choice but to reciprocate.



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Appendix 1: Discography of Robert Curgenven

- Curgenven, Robert. 2005. *Cichaczem*, Privatelektro [pe_cd 07], Germany. 3 track CD.
- —. 2006. "A Quiet Night at Home in the Shed" on *Recorded in the Field by...*, Gruenrekorder [Gruen 033], Germany. 19 track CD.
- —. 2007. "Air Escaping From Snow" on Gruenrekorder [GrDl 112], Germany. 35 track digital.
- -. 2008. Silent Landscapes. Recorded Fields [RF002], Australia. 4 track CDr.
- -. 2008. Air+Electricity, Recorded Fields [RF006], Australia. 1 track CDr.
- —. 2008. *Transparence*, Recorded Fields [RF007], Italy. 2 track vinyl 10", edition of three.
- —. 2008. "untitled" on *Tape Projects (Locked Groove)*, Tape Projects [TAPR06], Australia, 62 track vinyl LP.
- -. 2009. "Silent Landscapes No 5" on Compilation #1, Compost and Height, UK. 9 track CDr.
- -. 2009. "Largo Affettuoso Aria II, 8th Movement" on Largo Affettuoso –
 Aria II, 8th Movement / Pelure #6 by Robert Curgenven / Jez Riley French,
 Compost and Height [C&Hoo8], UK. 1 track on shared CDr.
- -. 2010. Oltre, LINE [LINE_042], US. 5 track CD.
- —. 2010. "Transmission_1.1" on *V-p V-f Is V-n*, Winds Measure Recordings [wm20], USA. 51 track cassette.
- —. 2010. "Acciaccatura Amplificata" on *Under the Influence of Angelo Badala-menti*, Boomkat [bundle_96], Manchester, UK. 14 track digital.
- —. 2011. "Against the Barren Vanity of Their Paradise Undone, Past Countenance and Ignorance Brokered No Shelter" on *Audiotheque 4 Elements*, m|i 5.11 [magazine], Poland. 4-track CD.
- —. 2011. "Looking for Narratives on Small Islands." *Asleep on Red Earth, Under Bright Stars*, Kaldor Public Art Projects, Australia. 12 track digital.
- -. 2012. Go Outside, Kaon [ju12], France. 1 track CDr.
- —. 2012. "Go Outside 60 Second ADD Remix" on *SIGNALVOID*, no label, UK. 263 track digital.
- -. 2012. "Looking For Narratives On Small Islands" on Heygate / Looking For Narratives On Small Islands by Will Montgomery / Robert Curgenven, Winds Measure Recordings [wm25], US. 1 track on shared vinyl LP.
- -. 2013. Transfixed, The Tapeworm [TTW#58], UK. 2 track cassette.
- —. 2013. *Live at the Exchange, Cornwall 12th August 2011*, Touch [TouchRadio 93], UK. 1 track digital file.
- —. 2014b. Sirène, Recorded Fields Editions [RFE_01], UK. 4 track vinyl LP.

- —. 2014c. *They Tore the Earth and, Like a Scar, It Swallowed Them*, Recorded Fields Editions [RFE 02], UK. 4 track vinyl LP.
- 2016. Climata, Dragon's Eye Recordings dero12, Recorded Fields Editions [RFE_03], UK. 6 track double CD.
- 2016. Oltre / Transparence Dubplate: Extended Trilogy, self-released, Ireland. 7 digital tracks.
- Curgenven, Robert and Chartier, Richard. 2012. *Built Through*, LINE [LINE_056], US. 4 track CD.
- Curgenven, Robert and Holzer, Derek. 2007. Improvisations: Febr Apr 2007, Umatic, Netherlands. 6 track CDr.
- Curgenven, Robert and Howden, Chris. 2007. *Alice Springs, Central Australia*, Recorded Fields [RF001], Australia. 5 track CDr.
- Curgenven, Robert and Wojak, AñA. 2008. *Royal Botanic Gardens, Sydney*, Recorded Fields [RF004], Australia. 4 track CDr.



Appendix 2: Discography of Robin Parmar

- Daly, John, Anthony Kelly, Harry Moore, Robin Parmar, Jesse Ronneau, David Stalling, Mick O'Shea. 2012. *Sonic Abyss: Live at Barbican Centre, Drogheda Arts Festival, 2012*, Farpoint Recordings, Dublin, Ireland. 2 track digital.
- Parmar, Robin. 2009. *The Garden of Adumbrations*. Premièred 2 September 2009, University of Limerick, Ireland.
- —. 2011a. "West of the Solar Spectrum." *Just Listening Ireland Calling*, Sculpture Factory, Cork, Ireland. 13 track digital.
- 2011b. Avoidance Strategies. Stolen Mirror [2011C01], Limerick, Ireland. 6 track CDr.
- --. 2011c. "Snowblind and Falling." Out of Silence, Modisti Records, Barcelona, Spain. 15 track CD.
- —. 2012b. "Picabia's Hammer," "Propagating the Catastrophe," "The Nightingale Blockade". *SIGNALVOID*, no label, UK. 263 track digital.
- —. 2012c. "Perturbation." *Somewhere on the Edge*, Gruenrekorder [Gruen 100], Germany. 47 track digital.
- —. 2012d. "Freeze-Thaw." *1 Minute Autohypnosis*, Mute Sound Records, Zaragoza, Spain. 16 track digital.
- 2012e. Device for the Transmission of Electrical Energy Through Air. Stolen Mirror [2012C01], Limerick, Ireland. 14 track CDr.
- —. 2012f. Marmaros. Stolen Mirror [2012C02], Limerick, Ireland. 1 track CDr.
- —. 2013a. "Bicameral Dash." *For Tom Carter*, Deserted Village, Dublin, Ireland. 99 track digital.
- —. 2013b. "Two Observations." *Sonic Vigil 6*, Farpoint Recordings, Dublin, Ireland. 14 track digital.
- —. 2013c. "Oxygen Debt." *No Labels No Music 4* [edp 058], Editora Do Porto, Porto, Portugal. 30 track digital.
- —. 2013d. *The Drones*. Stolen Mirror [2013C01], Limerick, Ireland. 9 track CDr.
- —. 2015a. *The Absence of Baudrillard*. Stolen Mirror [2015D01], Limerick, Ireland. 9 track digital.
- -. 2016b. "Division by Zero {shadow}." From Here to Tranquility Volume 7,
 Silent Records, USA. 24 track digital.
- -. 2016c. "Trembling the Manifold." The Next Station, Cities and Memory, Oxford, UK. 96 track digital.
- —. 2017a. "Before the Listening Begins." *Sacred Spaces*, Cities and Memory, Oxford, UK. 87 track digital.

- —. 2017b. "Grajski Gric." *A View from a Hill*, Linear Obsessional Recordings [LOR101D], UK. 105 track digital.
- —. 2017c. "untitled." *12 14 16 18 20 22 = 2*, Sofia Records [006], Ireland. 2 track cassette.
- (as 7PRS). 2018c. $\it Division\ by\ Zero.$ Silent Records, California, USA. 5 track digital.
- Parmar, Robin and David Colohan. 2014. ...between... Gruenrekorder [GrDl 135], Germany. 10 track digital.



Appendix 3: Discography of Karl Reich

- Reich, Karl. 1910a. "Song of a nightingale." Germany: Gramophone (29303), 10" mono 78 rpm, single-faced. Gramophone matrix 7444r.
- Reich, Karl. 1910b. "Song of a nightingale." USA: Victor (64161, red seal), 10" mono 78 rpm, single-faced. Gramophone matrix 7444r.
- Reich, Karl. 1913a. "Song of a sprosser." Germany: Gramophone (12956), 10" mono 78 rpm, single-faced. Gramophone matrix 15491L.
- Reich, Karl. 1913b. "Song of a thrush." Germany: Gramophone (61906), 10" mono 78 rpm, single-faced. Gramophone matrix 15493L.
- Reich, Karl. 1913c. "Canary and thrush duet." Germany: Gramophone (17487), 10" mono 78 rpm, single-faced. Gramophone matrix 15500L.
- Reich, Karl. 1913d. "Song of a nightingale, no. 2." Germany: Gramophone (17485), 10" mono 78 rpm, single-faced. Gramophone matrix 15507L.
- Reich, Karl. 1913e. "Song of a thrush" / "Song of a nightingale, no. 2." USA: Victor (45057, blue seal), 10" mono 78 rpm, double-faced. Gramophone matrix 15493L and 15507L.
- Reich, Karl. 1913f. "Song of a sprosser" / "Canary and thrush duet." USA: Victor (45058, blue seal), 10" mono 78 rpm, double-faced. Gramophone matrix 15491L and 15500L.



Appendix 4: Discography of Dallas Simpson

- Simpson, Dallas. 1996. "abha," on *emit 2296*, Emit Records [2296], Nottingham, UK. CD compilation.
- —. 1997. "Waterpump," on *emit 1197*, Emit Records [1197], Nottingham, UK. CD compilation.
- —. 2004a. *Sonic Bathing 1*, Farfield Records [FARCD10]. Bristol, UK. 4 track CDR.
- —. 2004b. For Alderney, and/OAR [and/14], USA. 2 track CDR.
- —. 2005. A Meditation for Spring, Autumn Records [leaf 016], Burlington, Vermont, USA. 1 track CDR.
- —. 2009a. For Whom the Bells Told, tecnonucleo [TN014] Spain. 1 track (digital).
- —. 2009b. *The Alarming Blend of Three Arches*, Impulsive Habitat [IHab002], UK. 1 track (digital).
- —. 2009c. *Braye Harbour Harbouring Desires of Transcendence*, Konkretourist [none], Germany. 1 track (digital).
- —. 2011. St. Livres, Switzerland, Binaural Phonographic Documentary, Green Field Recordings [GFR 029], Portugal. 1 track (digital).
- —. 2012a. *Making Tracks feat. Linkage*, La Escucha Atenta [lea005a], Spain. 1 track (digital).
- —. 2012b. *Fragmented Tracks*, La Escucha Atenta [lea005b], Spain. 10 tracks (digital).
- —. 2012c. *The Stonevandal Suite (1995-1996)*, La Escucha Atenta [lea005c], Spain. 1 track (digital).
- —. 2012d. *The Ferroequinologist's Dream*, self-released, UK. 1 track (digital).
- —. 2013a. *The Stonevandal Suite: Dukes Quarry*, Green Field Recordings [GFR 071], Portugal. 2 tracks (digital) with video.
- —. 2013b. *Sacred Thresholds*, Green Field Recordings [GFR 058], Portugal. 4 tracks (digital).
- —. 2013c. *World Listening Day Vigil*, .phonographiq [.ph14] Russia. 2 tracks (digital) with images and video.
- —. 2014a. *The South Downs*, Impulsive Habitat [IHabo92], UK. 1 track (digital).
- —. 2014b. *The Field of Stones*, .phonographiq [.ph32], Russia. 1 track (digital).
- —. 2015a. *Balsam*, Green Field Recordings [GFR 087], Portugal. 1 track (digital).
- —. 2015b. *The Shore of Stones Suite*, .phonographiq [.ph37], Russia. 3 tracks (digital).

- —. 2015c. Monsal Head, TecnoNucleo [TN039], Spain. 2 tracks (digital).
- —. 2015d. *2performances*, Auriculab [a005], Barcelona, Spain. 2 tracks (digital).
- —. 2016d. *Skegness Lagoon Walk / Gibraltar Point Improvisations*, Pilot Eleven [PE09], UK. 3 tracks (digital).
- —. 2017. *A Short Journey of Silica*, Plus Timbre [PT052], Greece, 3 tracks (digital).
- —. 2018. *Railway Footbridge Improvisation for One Adult and Two Children*, Plus Timbre [PT072], Greece. 2 tracks (digital).
- Ciuta / Kwi / Simpson / Whitehead. 2018. *An Attempt for Balance*, Plus Timbre [PT074], Greece. 6 tracks (digital).



Appendix 5: Dallas Simpson Biography

Dallas Simpson was born 1950 in Billericay, Essex. He graduated in Analytical Biochemistry and Medical Microbiology in 1972 [Simpson 2016a]. He first worked at Glaxo Research Laboratories but in 1974 moved to the Clinical Chemistry department at General Hospital, Nottingham, a city that has been his home ever since. For many years his full-time work and family commitments precluded deep involvement with any of his "hobby" interests, as he describes them. Nonetheless, his background in chemistry translated to a growing interest in photography, Simpson soon developing his own techniques for silver gelatine monochrome toning.

By the mid-1990s his children had grown and he was working only part-time, allowing greater devotion to interests outside his career in biochemistry. In 1996 he joined composer Chris Thorpe at Serendipity, a recording and mastering studio. By 2005 the name had changed to Dallas Masters [Dallas Masters 2019]. With Simpson's retirement from mastering, the name changed again to Subsequent Mastering; the business is now run by Joe Caithness.

By 1992 Simpson had also begun tentative experiments with "environmental sound recording," as he would come to label his practice. His first publications were contributions to compilations released by Nottingham-based label Emit Records. The first, *abha*, was included on *emit 2296* [Simpson 1996] and the second, *aquapump* on *emit 1197* (though mistitled *Waterpump*)⁷³. With artists such as Woob, Gas, and People's Republic, Emit became famous for a polished, ambient, pop style. Simpson's contributions are distinctive in the label's catalogue, being the only field recordings they released⁷⁴.

It wasn't until 2004 that Simpson released an album under his own name. *Sonic Bathing 1* was a compilation of the two previously-released compilation tracks with two others [Simpson 2004a]. In the same year *For Alderney* was released on the American label and/OAR [Simpson 2004b]. In 2005, Bristol's Autumn Records issued *A Meditation for Spring* [Simpson 2005]. These were the

⁷³ Simpson prefers the lower-case spelling of these two titles [personal communication].

⁷⁴ Although many of the artists on Emit incorporate field recordings, samples from films, etc. into their musical compositions.

only fixed recordings Simpson has released. Since 2005 he has preferred to issue titles (twenty in number) exclusively on the net labels TecnoNucleo (Spain), La Escucha Atenta (Spain), Plus Timbre (Greece), .phonographiq (Russia), Green Field Recordings (Portugal), Impulsive Habitat (UK), Pilot Eleven (UK), and Konkretourist (Germany). Each release is usually comprised of one or two long-form pieces. A full discography may be found in Appendix 4.

Besides these recorded works, Simpson contributed to projects such as the BBC series *Music for Spaces* (BBC Radio 3, 1997) [Simpson 2019b]. His early public appearances include a performance with Max Eastley and Helmut Lemke at Creswell Craggs (1997) and with composer Chris Thorpe at the London College of Music (1998) [Simpson 2019a]. Since 1998 he has also conducted workshops that introduce participants to his methods.

In recent years, Simpson has been experimenting with oil and ink techniques for analogue light shows, in the manner of the visual music of the late 1960s. Under the name 7th Valley Lightshow he has presented projections to live musical accompaniment. One of the first such events was Film Free & Easy at Primary, Nottingham [Simpson 2019c].

Appendix 6: Dallas Simpson interviews

1.1 Introduction

This appendix presents the text of interviews and conversations with Dallas Simpson that were conducted expressly for the purposes of the current research. This process followed a semi-formal qualitative methodology.

Initial contact was made with Simpson via email. The "Field Recording Questionnaire" was completed (10 July 2016) as a word processor document through email attachment. Only minor typographic changes, plus a few spelling corrections, have been made before presenting the text here. Other formatting has been retained as written. The initial objective was to send the same questionnaire to a number of contemporary practitioners, in order to produce a volume of material that might be compared and contrasted. The focus of the researched changed, in part due to the rich replies from Simpson, which encouraged follow-up.

A conversation was conducted using Skype on 14 July 2016. This was recorded using a plug-in application for Skype, resulting in three MP3 files of total duration 74 minutes. Unfortunately, the sound quality is of middling quality. A regular glitch in the files sometimes obliterates as much as a full syllable of a word. Hence, a fresh memory of the conversation was required to produce an accurate transcription.

The interviewer next journeyed to Simpson's home in Nottingham for further conversations, and with a mind to visiting places important to Simpson's work. On 2 December 2016, an expedition was undertaken to Shining Cliff Woods, Ambergate, Derbyshire. The goal was to find the site of Simpson's early recording aquapump. A recording was made with a portable digital recorder, though not for the express purpose of transcription. However, a section of the conversation proved to be substantial enough to warrant inclusion here.

For these transcriptions of conversational English to be coherent, certain hesitations and repetitions have been omitted. Passages that were personal asides or related to disparate topics have not been transcribed. In some cases, a note of these has been made in square brackets, so that the overall flow of conversation can be ascertained. For clarity, questions and comments from the interviewer have been styled in italics.

1.2 Field Recording Questionnaire, 10 July 2016

Section A: Introductions

A1. Introduce yourself and your practice. You do not need to reference field recording if that is something you normally don't include in a biographical statement.

I have always been fascinated by listening. As a child of 6 or 7 living in Wickford, Essex, I noticed that sounds behind a hedge seemed much closer than they actually were. When you came to a break in the hedge and could see where the sounds were coming from, the sound sources were much further away than they appeared by ear. This was curious. I was hooked on listening from an early age.

I trained in science qualifying with an HND in Analytical Biochemistry and Medical Microbiology in 1972. My first job in 1972 was at Glaxo Research Laboratories in Greenford, Middlesex. In 1974 I moved to Nottingham, did 2 years teacher training, but then got a job in the General Hospital Clinical Chemistry department. I finished hospital work in December 1989, did some freelance private tuition, became a freelance photographic artist specialising in silver gelatine monochrome toning, then joined a friend, Chris Thorpe at his recording and mastering studio near Retford around 1996.

In the 1970's my mother damaged her right arm and was unable to write her regular letters to me. So I gave her a cheap "piano key" cassette recorder and microphone and she then went out and made "audio diaries" in the countryside. She would post me the cassettes to replace the letters that she could not write. This set my mother off as an environmental audio diarist and she adopted a unique and highly personal style. The letters became shorter and less frequent, meanwhile she recorded her observations as personal emotional almost child-like responses rather than "clinical" or "factual" documentations about the physicality of a place or the history / social history of a location. They took the form of walks through the countryside with intimate personal observations and responses. These recordings conveyed a purity and honesty "from the heart and soul" that I found absolutely compelling... but of course it was my mother!

Moving through a location while listening, responding and reacting to it became very much a foundation of my own work in the '90's.

In the early '90's I found myself part time employed and occasionally unemployed, and the children were older, which allowed me much more thinking time and opportunities to return to "hobby" interests of my childhood and youth – photography, tape sound recording and electronics. It was during this time frame that I evolved my style of environmental sound recording and environmental performance, the environmental location performance sound art was directly inspired from the work of my mother.

A2. When did you first become aware of field recording? Were there any specific practitioners you heard who inspired you?

I suppose it was the birdsong recordings of Ludwig Koch on 78's that drew my attention to field recording. I had heard these on the radio occasionally and as a casual collector of 78rpm records I had acquired a set of the Ludwig Koch bird recordings on 78's, which I still have.

A3. How did your practice of field recording begin?

Around 1992-1995 I began to experiment with environmental sound recording. Several threads came together to set me off on the path of environmental sound recording. Firstly there were the audio diaries of my mother. I tried to recreate her style of "emotional observations," responses from the heart, but my attempts always sounded contrived and false, so I abandoned that approach. Before that in the late '80's I started doing simple recordings of my family on holidays and outings to the countryside, train journeys, walks and other activities. Some other early attempts involved reading Baha'i Prayers live on location with an environmental soundscape background. These were originally recorded to a Walkman-style cassette in mono, but the spatial presentation was very disappointing as the surrounding soundscape and recitation were collapsed together. Clearly I required a more spatial form of recording to both record and convey my actual experience of "being there".

I acquired a Walkman-type stereo cassette recorder and made some recordings using a home constructed Jecklin disc, and although I achieved a wider stereo field I still felt the spatial image could be better, particularly on headphones.

I had heard some remarkable binaural documentaries produced by the BBC in the late '70's to '80's, one was a recording of a person who was cycling down a long tunnel – the spatial presence of the tunnel was palpable and, as a keen cyclist, the bicycle chain sounds perceived below, at my feet level, totally blew me away – I was hooked on binaural. But at that time I was working full time at Nottingham general Hospital, while involved in Nottingham adventure playgrounds and running alternative medicine courses, plus raising a family in the 80's so I never had time to pursue any binaural recording.

A4. How would you say your practice has changed over time?

It's changed very little over time, except for degrees of refinement of both performance and listening skills and also an evolving conceptual foundation / philosophy. Generally my current interventions are more minimal than early works, which were often quite vigorous and brash, generally my more recent recordings contain greater subtlety. In some of the very early works I occasionally used to play found objects as percussion instruments tapping out rhythms. Conceptually this posed a problem. The object of the physical engagement was to release the sonic potentialities of silent objects and surfaces – to transform a silent

uncreated visual object into an active perceivable sound object placed within the context of my performance at a location. Music in the form of rhythm, (and also tone) represented a higher order of sonic transcendence. The object of the improvisation was not to find things I could play musically, but to "voice" the environment so that in a sense, with me as the intermediary, it could "speak for itself". We perceive and respond to the sound of musicality very differently to the simple observation of our surroundings together with the pure environmental soundscape. So I moved away from "using a fence as a drum kit".

Paradoxically my work *aquapump* (*waterpump*, 1997) includes the rhythmic sound of a water activated environmental pump and my response to it. This inversion of finding an environmental source of rhythm for me to respond to makes this work quite unique and very special, which is why I rate it so highly.

The process of the performance of the environment lies at the very heart of my practice. However, playing found objects musically on the one hand showed my deficiencies as a competent musician (I was never a great drummer!) and on the other the musicality, in so doing, detracted from the reality of the object or surface being sounded. The fence, or the wall, or the tree trunk could easily become different timbres of "drum" and "rhythm" or even "proto-rhythm" (played badly, or fragmentally), rather than a sonic voicing of the reality of Fence, or Wall or Tree Trunk in the context of Environment (capitals indicate essences of Archetypes). My initial attempt to overcome the musicality was to use "broken rhythms" - rhythmic fragments, (proto-rhythms) rather than sustained pure rhythmic beats. Unfortunately this gave the impression of "badly played rhythms" (see above) so I still had not escaped the musicality element. So I attempted to overcome this problem by developing the concept of the Soundbody.

In order to explain the Soundbody I need to develop some ideas about sonic potentialities.

From childhood, following the "hedge experience" I had always been fascinated by the phenomenal perceptual discrepancy of vision and sound. With eyes shut or in total darkness the perceived world around us is vastly different to that of full vision and hearing together. Then there's the problem of "reality". A further partitioning of "reality" is the world out there vs what I perceive and conceive in my own mind. So I evolved the idea of realities as sets of "expressed and unexpressed potentialities". In simple terms any reality can exist in different potential and / or actual forms depending upon the realm, or realms within which its distinctions are expressed. (OK, its basic stuff, but I never did any pure philosophy at school or in college, so I had to think these things through from scratch.)

Example: I'm standing in a field. In front of me is a metal gate. I'm hearing a background of birdsong, sheep bleating in the distance, distant traffic... I have a

visual perception of the gate. I shut my eyes. All of the visual elements have now disappeared in my perception. The gate, as all silent perceptions previously in my visual field, have no reality. I move forward slowly with my eyes shut and strike the gate sharply with my hand. I have a contact perception from my hand and a sound of the gate. I hear the sound of the gate. Now the gate has a momentary sonic reality in my aural perception. That sound of the gate vibrating *is* the only reality of its existence in the realm of sound; it can have no other existence. This is the gate Soundbody – its existence in the realm of pure sound. Unlike the relatively fixed visual perception of the physical gate perceived through the agency of reflected light, the Soundbody of the gate is 'plastic', a variable entity of many forms depending how the gate is made to vibrate.

The transformation of potentiality – yet there are further cascades of the reality of the gate Soundbody, for the sound reminds me of a metal gate I used to hit and make sounds with in my childhood. And suddenly I realise that I have heard an environmental echo of the Soundbody of the gate from a wall some distance away – a kind of "wallgate" Soundbody complex...

The "principle of potentialities" suggests that the nature of the expression of expressed and unexpressed potentialities depend upon the realm in which potentialities are expressed as observable or cognitive distinction—air distinction (gate Soundbody), conformations of matter in air distinction (gatewall echo Soundbody), conscious sound perception distinction (the Soundbody of the gate as struck to vibrate perceived in my mind of conscious perception distinction), conscious memory (the memory of striking a gate in my childhood in my mind distinction)...

We can conceive of further transformations of Soundbody potentiality (cascade) distinctions through the chain of electronic record and replay.

These ideas of the transformation of potentiality are embedded in the conceptual foundations of my works and include the influence (hopefully behavioural rather than purely aesthetic) that the cascade of soundbodies of the works may have when their potentialities are expressed distinctions in the mind of a listener...

A5. Is field recording a goal in itself or part of your larger practice?

I tend not to think of my practice as "field recording". It is more a documentation of my personal engagement with a location, a documentation of my aural perception of that engagement and a record of my location performance at a particular place and time. Hence my description of myself as a "location performance environmental sound artist". I employ intuitive free-form improvisation at a location, which may be extensive or minimal. This is my attempt to allow a "voicing" of the silent sonic potentialities present at a location — to trans-

form certain silent elements observed in the visual domain into creative elements of sonic actuality – and all the cascading potentialities that arise therefrom.

Performances are localised and conformed to a particular location, but compositions may involve post editing, layering and mixing of the original performance recording. The sound recording may be supplemented by images of the location and video re-enactments filmed after the original location performance, plus short descriptive texts to provide a context for those interested. The location performances are elements of an ongoing process of my sensory and behavioural relationship with environments. I also create photographic art and film / video works, but these are predominantly separate creative activities to the binaural location performance works.

A6. Why do you make field recordings? (Film, documentation, pleasure, composition, installations, biological research, etc.)

The recordings are an ongoing documentation of my sensory relationship with the environment. There is a dynamic of intention from performing an environment in a more vigorous and brash way to delicate minimal interventions of light touches. It depends upon the robustness or fragility of the environment and my ethical / spiritual considerations in respect of the effects of my interventions.

A7. What subjects do you record? (Animals, water, machinery, music, dialogue, etc.)

The recordings are documents of my free-form intuitive sound improvisations and sonic observations of particular locations. Those are the subjects I record. Whatever is present at the location becomes the "subjects" and through improvisation, using a variety of sounding techniques, primarily using my body, occasionally using other found objects as scrapers and beaters, I liberate the sonic potentialities of silent objects and surfaces at the location.

A8. Are there any sounds you avoid capturing during a recording?

Apart from a few of my very early performance recordings, now I do not use my spoken voice or vocalisation. I edit out personal "accidentals" like coughing, blowing my nose and other inappropriate intrinsic bodily noises. Sometimes "intrusive sounds," like extrinsic passing aircraft, are edited out, or reduced post record. Although sometimes such sounds are assimilated into the work as part of the extrinsic environmental soundscape. I do not have totally hard and fast rules, but allow the variable aesthetic of the work dictate the degree of rigour of final execution to a great extent.

Section B: Technical approaches

B1. What sound recording devices do you commonly use? (Please mention specific models.)

For my binaural recordings I started with one, then two Sony D7 DAT (I still have one of my originals, not in working condition!) I used to split the mic outputs into both recorders and run both at different recording levels to catch loud peaks, eventually I found I was always using the lower level recording, so I adopted that as standard practice. Then a Tascam DAP1 DAT, currently using Tascam DR70D and Sound Devices 744T. I also have a Tascam DR60D as a backup.

B2. Do you record in mono? Stereo? Binaural? Mid-side? Higher order?

Always Binaural using custom in-ear techniques. I'm simply sampling my own hearing.

B3. What microphones do you use?

Early recordings used custom made in-ear sub miniature electrets with hand made leads (bifilar wound copper wires on fishing line) and a custom designed power module. They gave surprisingly good audio quality, (Abha, EMIT2296) but were unreliable and went noisy or failed randomly ruining some recordings. Now I always use highly reliable modified DPA4060's used in-ear to effectively sample my own hearing.

B4. What microphone configurations do you use? (ORTF, spaced pair, Jecklin disk, etc.)

Some early experiments in wide stereo to cassette used a home made Jecklin disk, currently using in-ear binaural.

B5. Do you monitor with headphones during recording? If so, which model? No!

B6. Are there specific reasons you have chosen the equipment you use?

High quality, low noise. The aim is to convey the impression of "being there" rather than the impression of a "recording".

B7. How does your recording equipment influence your results?

Ideally it should provide a transparent capture of what I hear. Recording device / microphone noise can be an issue when the environmental sounds are very low level, or if I get the record levels non optimal. Battery life and tape media length may limit recording time. Solid state recorders do not have the recording media limitation for the time scales of my performances, but there is still the battery issue. Generally my performances rarely exceed 90 minutes so

recorders using lithium batteries (like Sound Devices) provide ample power for this recording duration. Recorders using 4x AA power cells will generally also last for this duration when using high capacity NiMH, or high capacity alkaline.

The greatest disappointment is when there is unexpected battery or microphone failure during a performance that may go undetected and I cannot monitor while I am performing using the in-ear microphone technique.

B8. Do you generally attempt to isolate a specific sound source? Or do you prefer to record an integrated soundscape?

I record an integrated soundscape, but move my head and body to alter the perspective of proximal / distal sounds as appropriate. Creating a moving trajectory through and around a location is part of the spatial choreography of the performance and is an important element of spatial composition. I generally employ a "walk-in" and "walk-out" as part of the spatial composition. The walk-in and walk-out are conceptual links to all the other performances I have and will create, to these works are all interlinked like the continuum of the surface of the earth. There are spiritual, philosophical and conceptual elements that drive the performances and shape my behaviour.

Section C: Interpretation and reflection

C1. How do you measure the success of your own recordings, or those of others? What makes a good field recording?

I never compare my works to others. Fundamentally the environmental performances are part of an on-going personal creative quest in the trajectory of my relationship with our environment. Ideally I'm looking for a performance that can be presented unedited save corrective EQ. However, some works are created with the specific intention of time manipulation, like the use of multiple layers running in parallel. Some works are recorded over two successive or separate days and edited together. The successive days may include audio performance on one day, followed 24 hours later by a video shoot while listening to the audio playback of the previous day (for example Bottledisposal, 2010).

C2. Which of your own recordings are you the proudest of, and why?

I think aquapump achieved a perfection of balance and an inversion of environmental musicality at a very early stage along my journey of environmental performance. Sacred Thresholds witnessed some remarkable environmental sonic discoveries and coincidences. But in a sense its not about taking any "pride" in the recordings, they are an ongoing documentation of my personal maturation and my varying relationships with a variety of environments and an open invita-

tion for others to establish their own path of sensory maturation with our environment.

C3. What are your favourite places for recording and why?

Environments that are rich sources of natural periphonic environmental sounds, seascapes in particular. But any location offering a variety of sonic and spatial potentialities has a strong appeal. Occasionally sparse environments provide an interesting creative challenge!

C4. Is creating a sense of place important to your work? Do you attempt to represent the "real" place? Or do you prefer to create an "imaginary" place?

It's more a sense of conveying my personal experience of "place" in the context of my perceived and improvised spatial choreography, plus the sonic product of my engagement and performance at a particular location.

C5. Do you wish to make yourself present in your recordings? Or do you avoid this?

In some early works I employed vocalisation, but abandoned this approach in favour of me remaining silent. Vocalisation is too personal. My performance intention is, at one level of reality, to be the archetype of human habitation. My presence is always there as I am both the performing and recording locus. My breathing and occasionally heartbeat are present as sonic signatures of my presence. All of my performed sounds and the musicality of my spatial choreography speak of my inhabitance of that place. These soundworks are a celebration of human presence in an ongoing dialogue with environment, engaging in the process of intimacy and communion. A loving embrace giving birth to sonic transcendence and a voicing of the silent potentialities of place. An invitation for us all to establish an ethical and sustainable relationship with the Earth.

C6. Does your work have specific philosophical or political goals? Do you articulate this through the work itself or through external material such as programme notes, interviews, etc.?

Yes. I have outlined some philosophical / conceptual considerations above. There is a religious / spiritual / ethical intent to my work, which I have alluded to, but will not be explored in depth here.

C7. Who is your ideal listener?

Anyone who is prepared to listen.

Do you consider potential listeners when creating work?

No. When I am *creating* a location performance work I am existing of the moment, moment to moment, at best totally "locked in" to the location and highly focussed on my (hopefully) developing and evolving empathy with that place.

In my personal preparation, before the location performance, I may have considered attributes and qualities that I would like to explore at the location, there again sometimes I go in with a blank canvas, an open mind.

The works are open invitations for others – children, youth, adults – to embark, individually or collectively, on their own sensory journey with our environment.

C8. Does this questionnaire omit any question that you expected to be asked?

Not really, the questions have been very stimulating in providing a framework for me to elucidate on my practice. Thank you Robin.

1.3 Skype conversation, 14 July 2016

One of the first words that comes to mind to describe your work is "quiet". It's not only quiet in terms of simple sound levels, but it has this sense of stillness to it.

Yes, that's true. I suppose there's a number of reasons for that. I like the idea of dwelling in quiet places, because then sounds have a greater distinction from that background of silence. Also, from a technical point of view, in terms of the binaural spatial elements of it, sounds that have a quiet background, where there's less interference from different sounds and reflections and so on, tend to be more spatially distinct. So when spatial choreography and the quality of the space as a three-dimensional realm that you're inhabiting is for me enhanced by having the sound enveloped in a reasonable amount of silence. That's what seems to work.

Occasionally, I do go into spaces where there is a lot of noise, particularly city environments. But less so. I tend to dwell in the quiet places.

The human ear is capable of an incredibly wide range of dynamics. 100 dB is not a problem with transient peaks of loud sounds. By using a particular in-ear binaural technique of recording, I am trying to capture, as accurately as I can, my own hearing. So I want to try and capture that sense of dynamic range as well. So the consequences of that are that I have to record at quite a low level by conventional standards. I'm trying to actually capture a range of about 60dB of dynamics onto whatever media I am recording to. And obviously in the digital domain it's easier to do that in 24-bit. And at 16-bit you can still achieve 50dB of dynamic range. And that's important to me because it conveys that perceptual immersion. A lot of the time we're listening to highly compressed sounds with

highly compressed dynamics, with music. Whereas I'm trying to convey something totally different. To try and give the illusion that you're there, and you're listening as I am hearing. Which is what I am capturing. So that can only happen if I have a very wide dynamic range. And so I keep the volume level down on the recording to achieve that. And that's why, by modern standards, it might be peak-limited occasionally, but generally speaking it's totally uncompressed. The overall RMS level is low, so it sounds quiet. You just turn the volume up, if you need to.

It's interesting as a listening experience, because those of us who make field recordings are very used to recording as you've just described: without compression and without amplification either, in the sense that we want to represent the actual sound pressure levels. It's obviously just a representation, but we strive to do that. And it does require a very different listening. [Talks about listening to binaural recordings on speakers.]

Once I've created something and put it out there I've totally lost control of it. So if people want to listen to it on speakers or any which way they like, then that's fine, if it works for you. Maybe the two different listening schema give you different insights and different perspectives into it.

Do you yourself listen back to your recordings often or regularly. Is it part of your practice?

No. Generally speaking the only time I listen to them is after I've recorded them and I'm compiling the audio in a form that will be the final work. And that's it. If I choose to release it then I will approach one or more – usually one – of the many internet labels out there. Work out the text that's appropriate, maybe some images, and that's it.

So, generally speaking, I don't listen to things again. The thinking behind it is that they are basically records of my gradual maturation with the environment. They're kind of snapshots: this is what I did at a particular time and place. It's like a diary. Some people go back and read their diaries. Some people just stick up the volumes and don't look at them.

There's a difference, then, in how your listeners will be listening to the spaces. In the questionnaire I had a question, which is obviously easy for you to answer, about headphone monitoring. Obviously when you are making binaural recordings you are not very likely to be monitoring on headphones, because that's going to be interfering with the recording.

Feedback!

It's a question that's often come up with other field recordists. The way professionals are taught, the way I was taught, is that you are always supposed to be monitoring, so that you know if there is any technical deficiency in what you are recording. [Details about shotgun mics and other technicalities.]

Every recording intention and every circumstance requires a particular approach. If you're doing a professional job with a shotgun microphone or a mid-side pair or just a mono vocal mic, whatever it is, you've got to hear what you are doing. Because there could be a problem with the line, there could be crackle, you could be picking up things you didn't want to pick up, and so on, and so forth. And in that situation, of course you've got to monitor, whether it's on speakers or headphones.

My particular approach is that I'm sampling my own hearing. I can't monitor on headphones; that's out of the question. Of course it has a downside. If you go through a one-hour improv and it's absolutely fantastic and then you find that you've got hiss on the left channel when you listen to it afterwards... and that happened a couple of years ago. I was really quite miffed about it, actually. Because it was a very exciting recording. And I've still got it on the shelf wondering what to do with it. It's usable, but the only way I can make it work is to add an equivalent amount of hiss in the other channel. Which kind of defeats the objective of a super-high quality recording.

Since 2004 you've been releasing or published at least one recording per year, sometimes more. As you say, through net labels and also the CDRs. [Further release details.] But I wonder how much more you record. Because there was a comment on your website from some years ago, that you had one hundred hours unreleased. So is it the case that you engage in this practice of location performance a lot more often than we get to hear through the releases?

That's particularly the case in the early days when I used to have a lot of technical problems. The microphones I used at the beginning when I was doing the Emit compilations. The first one, which was "abha," that was done on two pound Maplin electret mic inserts and a home-built power supply. And I had to work quite hard to get the quality. And the trouble was that they went crackly very quickly or they blew. And if I am doing a recording and that happens, then it ruins the whole thing. So I've got a lot of the early recording where there's errors. Things have gone crackly or something has happened, and technically I can't use it. There are other recordings where I'm just not happy with what I was doing. It's like everything. You try to establish a way of working that is aesthetically satisfying and fulfils other criteria that you want to have in the work. And sometimes you just don't achieve that. So in the early day, in the nineties in particular, there was a number of things that I just didn't want to put out. But they

are there as an archive and if someone wants to trawl through them at some point in the future then they can. But I just don't feel that it's right to release them at this point.

In earlier works you more explicitly "played" a location, both with found materials, stones, playing a fence, dragging your feet through gravel, all these different methods.

I still use those, but in a less overt, less flamboyant way. It's a lot more subtle now.

I still hear that evolution in what you are doing. And I think it is coming, or has now come, to a really incredible point. With works like "Sacred Thresholds,"

Yes, that was a good one!

In that piece you have, in one sense, absented yourself from it in the way that you would have been overtly present in the earlier ones.

Yes, that's true. And for me that's extremely important. Because I want to really engage the listener, listening through my ears, which is an archetype of all ears. To encourage them to hear perhaps in a way that they have never listened before. And to focus on things on a journey. Because all of my works are on the move. I tend not to record in a stationary position and then another stationary position. It's always a trajectory around and through an environment. As if we're walking through life. And so it's snapshots of walking through life at one level.

It ties your work in with a popular movement (that's a pun), but a popular way of thinking about field recording which is coming into being, which is based on this flâneur tradition. The idea of someone who, almost without volition, or at least without too much conscious volition, allows themselves to drift through an environment.

There's a sense of drifting, but there's also this idea of focusing absolutely on the moment. It's a strange state of being and I can't easily describe it. But it's a state of being absolutely focused in the eternal present, on one level. But also just keeping a glance at what's coming along. And if I don't do that, I lose focus and I can lose control of everything. Because my body posture, my head movements, the rate of change of head panning, the way I tread over the ground, the way I position myself to the ambience around me, it's changing moment by moment. And to make it work for me, I have to be acutely aware of that micro-moment of present, in order to aesthetically and choreographically compose as I'm doing it. And it's a one-off; I don't get a second chance. And it sometimes takes me a little while — I use the phrase lock in — to lock in to the environment. So whilst there

is this idea of aimlessly wandering about, consuming what comes, which to my mind is a broader perspective. Within that broader perspective of that ambulation there's the micro-focus of attention at levels of immediate surroundings, and the impulse to improvise both in terms of bringing forth sounds from silent objects and surfaces, using the tools of objects and things that I find, but also listening to the context of that within the ambient soundscape that I am embedded within. And to get it to work well; I find that quite difficult.

The description you just gave, that was a lovely description, is exactly a description of improvising, even if one was to musically improvise. At least outside of idioms. I mean, I sometimes describe myself as an improviser but then I have to say "a non-idiomatic improviser," so that people don't think I play jazz. And, again, you can't say "free improvisation" because that term's been taken as well. But the idea that it is free of these structural constraints that otherwise might determine it. But nonetheless it's "improvised" in the sense that you're open and focused constantly at every moment to the next. Which is something very important.

It's extremely important. This idea of connection, of empathy, of becoming (a bit of an old cliché) one with the environment. So often we pass through the environment as an impediment to get from where we start to the destination we are going to. Whereas I am trying to connect to every moment of that journey, and develop my relationship with it as an inhabitant and custodian. That take it onto a grander scale. We have a fragile planet. We're talking about global warming and all of the ecological disasters, exploitation of resources, all of these things. That to me speaks to a damaged understanding, a damaged relationship we have with the planet that sustains us. And so the work that I do is in part a call to say: look, we need to establish a healthy relationship with our environment. If we do so, if we love the space that we inhabit and all that is therein, then how can we possibly damage it or want to exploit it in a way that's unsustainable? And that is wrapped up in the process of the caress, the touch, the listening, the respect, the silent devotion of listening. And that's all part and parcel of the improvisation.

[Talk about a purist approach to nature recording.] Almost all human sounds are considered not valid. They don't want to record the sounds of human activity, and don't want to record the sounds of human places.

For me it's not about denying the human presence, it's celebrating it. That all of us are... we inhabit, we are part of the ecology. We are an integral part of the ecosystem. To say: let's record this environment but let's totally obliterate any trace of human presence, even though I've had to walk to the middle of the

forest and stick my microphone and recording equipment there, and then I walk out again. You've been there; you've done it. You've inhabited that place. So why would you want to deny it? OK, that's a particular perspective on it. And of course it's valid to try to capture the natural sounds without the human presence. But if we do that all the time, there's a sense of denial. In that so much of what's happening now is a result of us "being there". If you know what I am saying?

Definitely. Because I like researching and presenting papers I sometimes go to conferences. Especially if it's the World [Forum of Acoustic] Ecology conference where you also get to hear sounds and experience different art, and it's not just about people talking and presenting slide-shows. So I do get to hear this sort of narrative over and over again, this narrative that separates us from the natural world. And it becomes extraordinarily frustrating. But then I listen to some of your pieces, for example one that I haven't heard but which I did just get to order today: "For Alderney." And I know from your description that there's a foghorn in one segment of that. And then there's the alarm... I actually wondered why the piece was called "An Alarming Blend of Three Arches" until I realised that there's an alarm in it, and you're making a bit of a pun, perhaps.

Sure.

But these events happen. Like a car alarm goes off. And you integrate it with the piece. Whereas some would just hit "stop" on the recorder at that point.

That's a very important point, Robin. Because we live in a world with other things happening around us. If we try to deny what else is going one, we've cut ourselves off from reality. We're denying that there are other people doing stuff around us, and sometimes it's not always compatible with what we are doing. But, hey, that's what people do. To me, that's instructive in itself. In "An Alarming Blend of Three Arches" the alarm went off and I thought "Did I trigger that? Or was it just a random event?" And that came into my mind and I thought it's important to be thinking about that. This idea of us being collective cohabitants of the ecosystem is very important, very central to what I do. And you've picked up very strongly on it.

A related but different line of inquiry. Starting with "Sacred Thresholds," because, first of all, the title. And then the fact that it's in four parts and three of them are in churches. The last one is also under a bridge, if I'm remembering?

Yes, that's absolutely right, under a railway line.

From the title, and knowing that it was recorded in churches, if one momentarily ignores the fact it's not exclusive to that, one might be prepared for a certain sort of listening experience. Because, again, a lot of people do try to.. what's the right way of saying this without being wrong or really unfair to other recordists? Let me put it in a positive way. Your work obviously has a spiritual dimension, which I think is coming out more explicitly recently. Or perhaps that's just because of me and my listening practice. That might be related to places of worship, a church. But then that might also be related to a railway overpass. They are put side by side and together as one.

At one level of understanding, the sacred can be related to a centre of worship, a centre of spiritual growth and development like a church. But on the other hand, the sacred is something within us, that we carry with us at all times to varying degrees. That sense of awe and wonder at a simple level. That sense of the divine transcendent at another level. And so in "Sacred Thresholds" there's the obvious connection with churches, which are sacred places where people worship. But the thresholds is like crossing through from the space outside into the sacred building. That is a sense of transcendence going from one to the other. But then there's all kinds of symbology of the elements of the sounds, and the incongruities that I discovered doing those recordings. Like the ticking clock, the bizarrely ticking clock in a church. And the trapped bird. That was just bizarre! I walked into the church and there's a bird trapped in the church! It kind of confounds the idea of what you expect in a place, in a location. The other thing was the gunshots, right at the end of "Sacred Thresholds". Purely out of nowhere came some distant gunfire. And there's the idea of the ultimate sacred threshold being death, from the physical to the spiritual.

And then that reflects back to this idea of transcendence, which I keep coming back to and mentioned several times in my reply to you. That bringing something forth from the state of *uncreation*, of silence in the sonic universe. Something that's silent is uncreated; it has no reality. But when it vibrates in air or any other rarefied medium then those vibrations are its life, and its being, and its reality. And that transcendence from death to life, and then into silence, which is the death of the sound. All of these things were coming together as meditation as I was creating the work. And that's the sort of broader concept of sacred thresholds. But that doesn't exclude other insights that listeners of those works may have.

Central to your philosophy as you were describing it is this idea of the Soundbody as something that's formed from both action and perception. I take a lot from Maurice Merleau-Ponty in terms of phenomenology, because for me he has the most integrated embodied way of explaining phenomenology, how we perceive things. And I got a lot of that from what you were saying, as well. Permit me to expand on this and then you can correct me when I go astray.

Sure.

In your specific example, you strike a gate sharply with your hand, with your eyes shut so it's a listening experience. But before that there's this embodied act, the strike. The fact that you have to call your arm into action by a force of will, which happens before anything.

Sure. The thought always precedes the action, definitely.

And then there's the execution of the movement and the stroke itself. Generally, unless we are trained dancers or martial artists, we generally don't pay much attention to what our muscles are doing, what our tendons are doing. Perhaps only third is the sensation of the hand as it strikes the gate. Then the temperature, the rigidity, the surface texture...

Can I just stop you there, Robin? Because you've raised some really important points. There are certain things that come into play that you are alluding to that perhaps I should explain. When I am moving, creating a work, a lot of the time I am moving in a very, I would say respectful, almost reverent kind of way. I'm trying to give the greatest respect for the materiality that I am both passing through and connecting with. When I'm creating a sound from something, the action will be quite carefully judged.

In the early days I used to do a lot more thrashing about, like a child. Kicking around, kicking stones, throwing things about. And there's nothing wrong with that. In some instances it works extremely well. But as time went on I felt that this was, although maybe appropriate in some circumstances, generally it could be a bit disrespectful to the environment. And I wanted to approach it with a reverence, with a respect, as if all the materiality around me was of God, was sacred. And therefore I should approach it as someone in a place of worship approaches an altar or some sacred object within that building or structure or whatever it is. The whole process was spiritually motivated rather than just creating sounds or trying to make a sound work. My behaviour should reflect that respect. [Aside omitted.] But when I am performing, there is certainly a lot of thought about the nature of the contact. And that for me is extremely important.

That's what I was finding so fascinating: how much happens even before the sound. A lot is happening in and with you and the environment even before any energy is imparted to material that might make a sound.

That's right.

In one sense it's a very shallow documentation, if one wants to call it that, of the experience. And it has to be, because you had the experience and you can only convey so much of that to us, through this recording. But of course, that can be a seed for our own experiential sonic engagement with the place. But I'm fascinated by the different perceptions. There's your perception of the environment when you are in it. It's very rich, especially because of your intentionality that you bring to bear. As a listener, it even changes my listening knowing this. Even the knowledge that this is what you do changes my experience of listening to the two-channel audio recording. It becomes much more of a two-way dynamic.

I mention from time to time about the pieces not being an end in themselves, but an invitation. So they are a documentation of the status of my engagement at a particular place and time. But they then become an invitation. Perhaps it's only through this conversation that I opened up that window. Because, as you quite rightly point out, there are things going on which are not recorded in the sound domain. They are part of my mindset, before the contact, which isn't conveyed in sound. But this whole concept of an invitation is important. Because I want to try and encourage people to change and develop the way they engage with place, location, environment, they materiality of this wonderful and beautiful sacred planet. That's what it's all about, as far as I am concerned.

Even this process that we are engaged in, of discussing your working methods and your aims... Hopefully, if people do get the chance to read this in a suitable form, then it will, as it has for me, increase the richness of what they get from your pieces. In some contrary situations, the more you know about something... They say that about sausages, don't they: if you know how they are made, you'd never eat them. But in other cases, knowing the process and more about it can add this richness to the result. And it's a fine line to walk. Your liner notes do that, and the images that you choose to go with the recordings. [Aside omitted.]

I really did enjoy responding to the questions. They were a wonderful set of pegs to hang things on. Sometimes it takes another person to draw things out and to focus my own mind on certain things, and focus on ways that I can express those elements of what I do. For people who want to know, I'm always happy to explain in whatever detail people are interested. Some people might not want to know. They might just want to listen to it as a sound piece and that's it. But my own personal intentions are a lot deeper than that.

At one point if you wanted to go out and make a field recording, you really had to want to do it. As you said, you were building your own little micro-

phones and amps so that you could get what you wanted out of it, even in the nineties. Certainly before that... I am researching the history of field recording. Initially you had to take two-ton lorries out into the wilderness to get any sort of recording. But now everyone has a recorder with them at all times, at least on their mobile phone. And it's very easy and inexpensive to purchase high quality digital recorders. We're faced with the problem now that we are deluged with recordings. The number of net labels that release field recordings, and hundreds of them. It's become difficult to find a reason to listen to them. Some people just record because they can and because it's easy. And they don't have a purpose. They never really asked "why?" I'm trying to find the people who have asked why... and who have pretty good answers!

When I started doing the recording I was always asking myself "why am I doing this?" And questioning my behaviour in a particular environment: is it appropriate? There were times when I caught myself out and thought, "hang on a minute, this is inappropriate". Going back to the nineties, one of my favourite locations in the Nottingham area is a place called Lambley Dumbles. It's a set of small, very narrow, quite deep, little valleys. Wooden valleys with ferns, just glorious. On one occasion I was working my way up the stream bed, and I decided with my hand to caress the bank, which was clad in ivy. What I didn't realise was that the soil of this bank was incredibly fragile. And as I brushed my hand down the ivy, a cascade of soil comes shooting down into water. I'd obviously disturbed a lot more than just the leaves of ivy. And that made me think "hang on a minute, this is a very fragile environment". My behaviour towards it has got to be a lot more respectful.

Just that one event really made me think about the ethics of my behaviour within the context of an environment. To have to assess: is it a robust environment; is it a fragile environment. What's my appropriate limit of behaviour. That ethical framework that arose out of performing in the environment excited me, because I was learning from the environment. My behaviour was being modified by consideration of the environment that I was in. I think that is a lesson we could all take on board.

In many cases the problems arise because of the total disrespect, not only of the environment, but is some cases of the people who are inhabiting these environments, as tribal peoples who have been there for thousands of years. The total disrespect that's shown is appalling. Those considerations are important to me as well.

There are many cases where first the violence is done to people, and only after that the environmental damage is done. Even in terms of the social and spiritual damage that missionaries did going to Papua New Guinea, to give an example. And that came before any environmental damage, because there weren't enough people going there to do much environmental damage, and they weren't going there, at first, to harvest ore or the other resources. They changed mindsets in people that had evolved in synchrony with their environment, so that people no longer had that synchrony, and had other things they were looking for instead, other objectives. And that permitted the environmental damage. Without these new mindsets it could never have occurred.

That's a very important point: the whole thing about the mindset. We referred earlier to the fact that the thought always precedes the action. So if you pollute and corrupt thinking, then the action that proceeds out of that mindset are very likely to be corrupt and destructive. This is very central to what I am trying to convey as an environmental sound artist. I suppose it's hidden, and it wouldn't be obvious unless we'd had this conversation. So thanks for the opportunity.

Well, you are very welcome.

1.4 Shining Woods conversation

[This recording was made on-site. The ground in Shining Woods in December was boggy and heavily brambled in parts. The objective of the walk was to locate the site where aquapump was recorded in 1996, but Simpson has some difficulty in locating the correct place twenty years later.]

As the seasons change, the whole geography and the micro-geography changes, and things that you thought you imagined as marker points evaporate. That's the nature of the beast.

[Eventually, the location is found.]

It's one of my favourite locations. Originally this stream took a different course. Over on that side you can see the original iron pipe. I don't know if you can see it. And the blue plastic pipe coming out of it. But there used to be one that came down from up there, and that was what was driving the water. Because it's a water-activated pump. It's just run on water pressure.

[Opens the metal top on the container, a brick structure that is well sunk into the earth.]

And there it is. That's the beast from all those years ago. Always a bit of a pil-grimage for me. There it is... the pulse of the forest, the heartbeat of the woods. And when it was running it was just magical, as you can hear from the recording.

It is an amazing thing to find. And no-one would know it's here now. Except whomever built it.

Wow, yes, it's always quite emotional for me. Because when you come here on your own...

The first [recording] was done on the 29th of May. And I got here about five o'clock in the morning. Might have been four-thirty, five o'clock. Obviously it was May, the days were longer. It was dusk, and I walked up the path. The one that we started walking down carries on. Eventually it goes back to where I pointed out. So I came up that way, walked up, stopped on the track just over there, and waited for an aircraft to go over. And then, came over here following the sound. Because with the thing pumping away, it's a lot easier to locate. And I did a bit of improvisation.

There are some remnants of the iron feeder pipe somewhere around here. It's decaying, so you find odd bits here and there. And other bits have just rusted away.

Yes, so there we are. That's the one.

You can see at the side, here, you can see the brick structure of the housing. And that was, originally, as you can see from the photographs, there was no stream here. The path keeps changing. The rivulets come down as the years turn over, and carve new trajectories for the water.

I don't know what to say, really.

It's just to enjoy the environment. It's quite beautiful the way a purpose-built man-made structure, even after its purpose is forsaken, is still something that beauty can be found in.

Absolutely.

I think it's a very different approach to how many people look at things. And, as you say, the iron will rust back into the soil. And, it will take a bit longer for the bricks, but the water will help weather them, anyway. It's all covered in moss and bramble. You only have to be a few metres one way or another and you would miss it.

This is another wonderful thing. Because, sonically, it was like a shining beacon of sound, when it was running. You could hear it from quite some distance. And then it stopped. It succumbed to the earth and the elements. And it's now silent. And... yeah... Following that trajectory to when it was alive and the heartbeat was sounding.

I don't visit it very often. If it hadn't been for you coming, I wouldn't have come here, since I was here earlier in the year. But because it means so much to me, and because it was one of the first pieces of mine that you encountered, I thought it would be nice to bring you here to start with.

It's really nice. I mean the whole area. But this is still a focal point, even if only psychic focal point. It still is for you, and then for me by relationship. And though that sound is gone, it's greeted by another here. It's not that things "go"... I mean, things do "go," but everything...

... it transforms, evolves...

But there must have been one precise moment when it switched off.

There must have been.

It's like in a chaos field, the perturbation or the outside energy that came in... or finally the entropy that took it away. There's often that little bifurcation, that little point where all around it is chaotic energies that you can't predict.

There's the chaos in the water flow, but also the rivulets that carve their way through this area. They're always changing. There used to be a path that ran along the side; it roughly goes down there, but it's very difficult to see. I only know it's there, because I was aware of it twenty years ago.

[Asides omitted.]

And that's what makes it so wonderful. It's like the veins and tissue growth, the innervation of the arteries and capillaries that invigorate the tissue.

For me it's a very positive thought, because as much as it disappears, it reappears in different forms.

That's right.

[Monologue about sonic ecology and the idea of a balance of nature.]

The balance is it's own chaos. When we create structures, we establish an order which doesn't really exist in the natural world. It's literally man-made. And we take that order as being something desirable. Cities, dams, whatever they are. And they are structural and they are there to serve our purpose. And we compare other things to that. And if we take a snapshot in a moment of time, with a camera, then there appears to be a kind of order of things at that time. But of course the time frame of nature and the time frame of geology are on a completely different scale to our own lives. It's continually growing, the mountains are crumbling and eroding, all in a state of change. And it's a very different kind of being to the structures we create with their geometry, hopefully their aesthetic, their utility. Bringing the materials from that state of nature, if you want to call it that, making a construction.

This is a construction, obviously. And I just love the way this construction is gradually being consumed and taking on the character of its surroundings. We know that's what decay does. But to see that with a brick structure, and the iron and all the rest of it, that to me is very special. Very special.

Obviously everyone is concerned with the issue of climate change, and how we are or aren't reacting to this fact. There's a growing idea that nature is chaotic, but the Romantic idea is that it's quite ordered, and we are the ones who are supposed to deduce that order and manage that order. That was the way of thinking, but it still persists. Even in some of the climate change stuff. People who want to manage climate change, as if they can!

It's beyond our management in real terms. But if we recognise that we have contributed and are contributing to it, then that is something we need to think about as well. We can moderate.

[Talk about climate change, vegetarianism, etc. And then we walk back to the waiting car, and home.]



Appendix 7: aquapump timeline

The following is an annotated timeline of the track *aquapump* by Dallas Simpson, taken from the album *Sonic Bathing 1* [Simpson 2004a]. Timings are in minutes and seconds.

- oo:oo Fade in to... birds from a temperate climate, likely in spring due to the degree of activity, chirping against a pink noise backdrop that could be distant water.
- OO:23 The quiet crumpling sound of walking, with low frequency noise of body movement.
- oo:36 The sharp snap of a twig. Then, increasingly heavy feet with more small twigs snapping.
- 00:46 Another sharp snap of a twig.
- 00:52 Walking stops; birds and ambience continue.
- 00:54 Walking starts again with various twigs snapping.
- oo:56 A rhythmic sound, at first indistinct, makes itself known. On first listen, this can take some time to be obvious.
- O1:13 The rhythmic ticking is more obvious. Perhaps we are now slightly closer to the source?
- O1:16 A higher pitch drone with descending pitch appears in the far distance and last for about 4 seconds. Could this be the Doppler effect from a passing motorcycle?
- 01:26 Sounds of moving through heavier under-brush.
- O1:44 As the under-brush gets quieter, the ticking becomes far more obvious. It can now be measured to a steady 43.5 BPM.
- O2:16 The ticking is now as loud as the under-brush sounds. It is now clear that our path through the woods has been oriented towards this sound. The tick is dominantly in the left ear. A secondary pulse overlaid at a lower frequency is just becoming audible.
- O2:25 As walking stops, a gurgle of water can be heard below the other sounds. The birds are louder too.
- O2:43 Ticking is now loud to our left, water flowing steadily to the right. More of the timbre of the ticking is now evident. It's less a noisy impulse and has more mid-frequency content. Over the next period the water fills in more of the panorama.
- 03:17 Walking stirs up under-brush sounds again, loud and with sharp crackles.
- o3:22 The walking stops. Both beats of the percussive sound, the higher snappier crack, and the lower-pitched thud, can now plainly be heard.

- O3:43 It can now be determined that the lower beat occurs twice, the second impulse echoing the first. It sounds uncannily like a heartbeat, or at least like how we might imagine a heartbeat to sound. This sound continues, with different perspectives being offered, sometimes with one beat in one channel, sometimes another.
- o6:19 After some movement, the stream becomes louder and clearer.
- o6:46 The beat can now be heard not just with water accompaniment, but as a water sound itself. It is clear that this is the waterpump / aquapump of the title.
- 07:25 A particularly loud bird call, to the right.
- O8:11 Very low frequency rumble as a heavy object is moved. This repeats unevenly, in something like the same rhythm as the pump. Perhaps a solid lid is being moved with the feet? Each impulse is followed with repeating fast rhythm, as though a heavy metallic object is vibrating after each hit.
- 10:03 A louder sound is the last of the heavy low frequency vibrations. Pump, stream, birds continue. Pump again gets louder.
- 10:27 This is the peak loudness for the pump. It slowly tails off from here. The birds are now making individual calls.
- 12:30 A slight clearing of the throat makes the recordist's presence obvious. From here the pump is silent but the water is louder.
- 12:55 Fade out from here.
- 13:20 Recording ends.



Appendix 8: Robert Curgenven biography

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Appendix 9: Robert Curgenven interview

1.1 Introduction

Robert Curgenven has been well-documented through interviews and his own efforts (liner notes, websites), as the bibliography demonstrates. Thus there was not a compelling reason to interview him early in the research, but rather later in the process, where such a discussion could be used to test and confirm ideas. Previous interviews had not detailed certain aspects of recording and compositional practice, as well as his underlying phenomenology. It also became clear that the primary motivation of much of Curgenven's work was political. Such topics too, had not been given adequate airing in previous dialogues. Thus this interview adds an important dimension to the existing primary research on this artist.

The interview was conducted via Skype on 21 March 2019. The bulk of the recording has been transcribed from what proved to be an extensive conversation, lasting over three hours. Though some diversions and off-topic material have been omitted, no useful information has been lost as a result.

As with the previous interviews, omission of verbal repetition and other changes have been made to facilitate the text. Interviewer comments have been italicised and abbreviated. The following text has been corrected an approved by the interview subject.

1.2 Skype conversation, 21 March 2019

[introduction omitted]

The concept of the habitable and the dwelling refer back to epistemologies like Husserl with the "world-hood of the world" and his stuff on dwelling. Less so Heidegger. I'm not really interested in quoting Heidegger.

That's interesting because I have really got into Heidegger through doing this. And realised that in the maze of his writing — which is a maze — there are some really incredible things.

There are some really good things. But the most cogent way of critiquing his work is: In the notion of Da-sein he presents three concepts: "being there," authenticity and disclosure. As a philosopher who wanted to be the official philosopher of the Third Reich, he has behaved inauthentically, he has failed to disclose, and in terms of "being there" he has presented a very difficult habitation of the zeitgeist.

Yes. So the political aspect of himself and his work impacts negatively.

His motivations. He's come up with some really great ideas that are eminently quotable, but I feel that there's an essential *aporia*. As much as I like *aporia*, this one is unresolvable and sets up an essential tension in his work: of racist, elitist aspiration versus trying to understand the human condition, shall we say. And this essential unresolved tension calls on questions of class, it calls on questions of racism. If we are talking about a world view, an epistemology, and also an ontology, I feel the whole work becomes flawed as a result. It's unfortunate but I've given it considerable thought.

Yes. Well then let me clarify, just so you know. I definitely understand and respect that point of view. But when I actually read the works, I get none of that out of the works.

This is the difficult thing.

So it's very hard for me to... I realise his work is tainted, and it has to be tainted if we're ethical, in one sense. However, unlike other philosophers where I can read in their works highly questionable things that might motivate fascism, like say Neitzche.

He is the unofficial philosopher and got hijacked.

But he actually has stuff in his works that you can use to support fascism.

The ubermensch.

Whereas I find with Heidegger, it's hard to find much in the text themselves to support that. Partly because of how he problematizes any one stance you might take in the first place. It's not even possible for a word to have a fixed meaning in his work.

I guess there's a kind of heteronormativity. When one talks about a person then it becomes a white, middle-class person from a white, middle-class background. So the problematization comes about from being able to apply it in a universal way. It ends up describing a very specific paradigm. It ends up being a point instead of a field. It's not implicitly stated in the text. He was one of the early people that I studied when I was studying philosophy at university. Later I just came to find... Like a foundation. The foundation is often concealed but it holds up the architecture. The slab is laid at ground level and then the architecture sits on top. And it's inevitably going to shape it, even if the nature of that firmament isn't necessarily revealed or apparent.

That's a good point and an appropriate metaphor.

You know, everyone's really flawed.

That's a good recognition to have. I was expecting to use Merleau-Ponty more and in fact read him more, because he doesn't have that taint, first of all. He's obviously more humanist. He implicates the body a lot more than Heidegger would. Heidegger flat out says "I'm not going to discuss that" in Being and Time.

So it becomes a non-corporeal study of being in the world. Which is a strange juxtaposition. Interestingly, Merleau-Ponty has come up a lot with a friend who is doing movement-based work and stuff that is very much about the body. And through my discussions with her, I have become more pliant about this grey zone between phenomenology and ontology. Where a phenomenological approach can describe a mode of being with respect to a specific context. I guess these concepts will come up later in our discussion. But I am yet to read Merleau-Ponty, sadly.

It's got to be easier than reading Heidegger, not only because of the text but because you don't have to constantly have this rat gnawing at the back of your head saying "yeah, but look at what he did". It's easier to read in both ways. But sometimes the core ideas are just as hard to tease out. He only wrote three main works, which at least is some respite because there's less to read. And then he died unexpectedly still in middle age...

Don't tell me how it ends! [laughter]

He died with a copy of Descartes' Optics open on his table. He would have been quite a critic of Descartes, but a critic who was always engaged with the source material. And that is telling. In a way, it's kind of a nice ending though a sad ending. The book he would have written would have really helped us, I think. It would just have helped us if he would have got those ideas out. He was positioned to help us with this philosophy and to give us something that we need, in a post-Heidegger world.

Fermat's Last Theorem of philosophy that will never be found.

Maybe others have found it since.

Suffice it to say that what you were saying about using a philosophy and a human geography approach to a discussion of field recording is very pertinent because it flushes out a lot of questions that are taken from a pure phenomenological approach. This is a recording of a thing, and then the devolvement of that to an *objet sonore* that becomes entirely disconnected from the context of the thing happening. Things don't happen in a vacuum; they are a result of social, physical, meteorological, geographical sources.

[Discussion of interviewer's position studying at MTI.]

Schaeffer's idea of the reduction, which he directly took from Husserl, of course, applied to sound to produce a sound object as an ideal, almost like a Platonic solid, an idealised view of something. Which I only write about as foil, to say "well, obviously not."

I find it interesting as a tool, but as a thing in itself, it has a degree of cerebreality that represents an exercise. A tool can be a thing in itself, but it's best realised from the context of the application of the tool.

I think, to their credit, most people who followed [Schaeffer] in musique concrète recognised that as well. Most composers that followed, except maybe for some of the really doctrinaire ones in the first ten years, are totally open to this being just one kind of pole of interpretation. And not one that you can ever realise in practice. It's just out there as an abstract. Even Schaeffer himself, didn't accomplish it in his compositions, such that they were. He recorded trains and you can hear that they are trains. [laughs]

It produces a mode of listening. It's possible that second, third, fourth generation producers of *musique concrète* may... Like a text, something can be lost in the translation and it can produce a new puritanism or a doctrinaire approach. So the use of the *object sonore* to produce this new mode of listening that has a greater level of awareness of what we are hearing. And the way that is fed into post-digital sound production, so that our hearing is a lot better than it used to be. We are taking in a lot more detail and we are aware of that. That this second, third, fourth generation may be approaching it from a different end-point so the reduction itself is the goal.

I will just highlight something that you said there. Because you said that our hearing has improved, which is something that you don't hear very often from certain schools. And I totally agree. Because as our tools have provided more acuity and range, we have actually — those who have taken the time to — we have actually trained our ears to be, let's say, "better" than they used to be.

We have a greater range of noise to pick signals out from. And we have a greater range of signals to pick out from the noise. I would argue that this is a modern concept, the improved listening, say of the last hundred, hundred-and fifty years. We are needing to pick things out against a background that one could loosely term "noise," be it the industrial age or a technological age of transportation. But it would be hard not to argue that a few hundred, a few thousand years ago we would have had really good hearing but the background against which we were picking things out (objects or sounds), the context within which they were residing was completely different.

This feeds back into the "field" that is referred to in "field recording" because the field is quite diffuse now. Whereas if you are living in a desert environment and ranging over a given territory, in a Deleuzian sense... The Deleuzian approach to the nomad, the deterritorialisation, the reterritorialisation, a lot of it applies very well to the inhabitation of a given area within an Indigenous epistemology. What they would be listening for would be within that territory. It's a part of the territory. It's an expression of the land within which they are living, and within which they identify and are part of, be it as a traditional owner or a history of belonging to that area. It would be unusual for there to be, several thousand years ago, sudden changes, outside of meteorological shifts. You wouldn't get new things arriving in that area because that possibility, technologically and in terms of transportation, didn't exist.

What we listen for now [with] digital tools and a post-digital approach to listening — and that we have speakers that offer a great range of acuity, and that we can zero in on specific frequencies — produces an entrainment much the same as a classical musician. Except that we are not doing it all with our hands. It's producing a hands-free approach to near-perfect pitch. Where we can also understand the relationship between different frequencies, be it the cross-modulation of very high frequencies by subsonic and very low frequencies, and the way in which frequencies interfere with each other in the mid range. Understanding the first principles behind these things, and being able to draw it out from a background of noise has produced a greater understanding, because we have a much broader context within which to practice these abilities.

That's a great techno-positivist statement which is not often expressed in such a way. Again, if I can go to another foil, which I know is definitely a foil that has come up in our conversations before... There has been a lot of fear of technology. The way in which technology, and audio technology specifically, has been positioned as something which has degraded a pre-existing "natural" environment. One of the people who expresses that is R. Murray Schafer.

[...] That's come up at a conference before when we were discussing colonisation and his whole "modern world is bad" and "getting back to nature is good". It's an essential tension that wasn't resolved within his work and is rarely discussed.

You'll be happy to hear that the last conference I went to was to bring that up. And it was the World Forum of Acoustic Ecology Conference. [details omitted]

I am reading a lot more day-to-day about colonial approaches and the need to express Indigenous identity, of which I don't have one. But I realise that as a white Australian I'm complicit in a great deal of problematic history, and I real-

ise that it is increasingly necessary to state things where it is difficult. [aside about film, then a phone call]

The Glasgow Impressionists idealised the working class. So the regarding eye becomes class-based. And that is concealed within "oh it's art, a universal expression". These essentialisms are uttered as if they cover all of us, but then when you remove class-based issues — even the Irish situation with the landlords and colonial concepts of having land taken away. The right to land, the right to occupy land, and the right to have a connection to land is brought into question. So when you are talking about "city is bad and nature is good," when you look at the ongoing movement of Indigenous and displaced people towards cities then it becomes part of a reshaping of narrative.

I don't even know where to start with that, so I can ask a practical question. I think I know the answer but I am not 100% sure. With the release of your work, especially They tore the earth, you provided quite an extensive reading and viewing list, which obviously demonstrates the depths to which, not only that you've researched issues such as Indigenous land rights etc., but also the degree to which that's just a compelling emotional point for you, a fulcrum of your work, if I can say.

It's also connected to where I lived and where I worked for nigh on ten years, and the reason for my departure from Australia.

Sorry, I am going to actually cut into that, which I hope not to do very often, because that is actually the question. The very first item (if I remember) in your reading list is a document of the Northern Territory Intervention of 2006. Would I be right in saying that was the final straw or a major factor in you leaving the country?

Again, an essential tension. As a white person I felt that... Due to a variety of circumstances the Intervention happened. I was between jobs, had just done a festival, and was between cities: Alice Springs and Darwin. I had to decide what to do next. At the time I was quite passionate about working out bush for a variety of reasons, and felt I was starting to get good. I was starting to understand the process that yielded beneficial outcomes through community cultural development as a practice. Through work that I had been doing, paid employment. I felt that as a "white fella" I couldn't conscionably work out bush, because I would for all intents and purposes present as just another "white fella". Arriving at the time when the government was sending the army out, the compulsory reacquisition of Indigenous land across the Northern Territory, the suspension of the Racial Discrimination Act, bringing into question sovereignty that was only recent.

When you consider that in 1967 Indigenous people were given the vote and recognised as people rather than covered under the Flora and Fauna Act for the first time. And twenty-five years later they were given land rights under the Mabo Native Title court case in 1991. And then another twenty-five years later they were getting it taken away again. And because the Northern Territory is not a state, it can be overridden by the Federal Government in Australia. I felt that I couldn't be complicit in what was going on. I couldn't be just another lying white fella. There had also been a variety of changes within Federal government departments that was making things less transparent and less straight-forward to work within. So I bought a one-way ticket and left. I felt that I could have much more productive conversations, much as what we are having right now, outside Australia than I could inside Australia. And the only alternative I had to the work that I had been doing — a range of work, some stuff in radio, some stuff in health, more recently in community cultural development. I had been trying to put on some events myself. [omitted]

I had previously spent a year outside. I had been overseas twice before, between the tropics and the desert and Europe. I could get a visa outside Australia as a sound artist in Germany. And it stipulated that all I could do was work with sound. So I felt that it was, yes, the fulcrum, and the most useful way to take the conversation with me. And also to feel like I was at least trying to do something. I made a number of visits to the Northern Territory. Every couple of year I'd go back over the next decade or so, I visited every couple of years. To see how things were changing, to catch up with friends, and to have that conversation of where people stood. It's a complicated, diffuse nature, much the same as with most situations. If you are not living within it, it's easier to comment, much as I am now. You're not dealing with it day-to-day. But equally Indigenous people have been dealing with this day-to-day for the last 230 years.

On a personal note, I knew nothing about this until you introduced me to it through the liner notes or wherever it was, the web site. So your work, I can see that it has a potent political component and you are obviously trying to get across these ideas. And you are. Because I knew nothing about the Northern Territory Intervention. If it ever popped up in the news wherever I was living at the time, I didn't pay attention.

It was rarely spoken of. And given that it's three thousand kilometres at the nearest point from the Northern Territory to the eastern seaboard, then there's quite a physical remove about that discussion as well. Interestingly, the report that was the so-called catalyst for the Northern Territory Intervention was the *Little Children Are Sacred* report which made one hundred recommendations, only one of which was carried out. And that was not the secondment of Indigen-

ous land. Then after that report six hundred pages of legislation was written in six weeks, which is not physically possible. So it was already ready. It was then implemented with zero consultation.

Why I found community cultural development a useful tool is because it's a consultative approach. You are trying to understand what's happened, what people have done, what they want to happen, and where they would like that to go. And extensive consultation is required. You can't just fly in and fly out for that approach.

Recently George Pell, who was the third most senior Catholic in the world, under the same auspice, has been found guilty, subject to appeal, of some rather heinous crimes, which I am not going to go into, but which stand in sharp opposition to the title *Little Children Are Sacred*. Which shows that the report was basically a straw man for a very problematic assumption of patriarchal authority. And the removal of Indigenous sovereignty in an area where they had only recently been able to get it back.

It's a long and bloody history. Interestingly, *The Guardian* has been running a series recently on the massacres that have occurred. And there seems to have been more recent conversations about what has gone on. There's more conversation about moving Australia Day, which is the national public holiday that celebrates the day the colony was started. The ceding of sovereignty was made without any consent. The original document for the colony changed referring to the people as "savages" to "natives". [This] gives an idea of what the English were planning at that time. As does the undoing of empire that we are seeing at the moment, with the current decision to leave the EU. I think that these issues of empire, of legislation, and how people approach territory, this diffuse notion of where one thing becomes another is a nice metaphor for how sound works, with regards to phase. I think that these are all very important philosophical issues. And to pretend that one's work happens entirely in a vacuum, as opposed to being informed by these things... Yes, I am from a white middle-class background and I try to be aware of that and I try not to get in the way and hog the mic. But if other people aren't aware of these basic issues, then...

People don't like to be told how to listen and possibly that album was a little bit dialectical. But I literally spent ten years working out how best to speak. And I can't speak for Indigenous people. I can't speak for the people from my country, the country as opposed to the nations. So I was trying to articulate some of the myopic issues with a settler-colonial perspective. Which has become even more vehement in the ten years since I have left. There has been a shift to the right, nationally. Prime Ministers from the eighties are now regarded as left-wing figures when at the time they were seen as being perhaps a little bit conservative. This is indicative of the change. [laughter]

[omitted] Who knows what they will do next. That emergency is still ongoing; it still exists.

There was a three uranium mine policy for Australia for quite some time. That's been overturned. Most of the world's uranium comes from Australia. The Northern Territory is the size of France, Poland, and probably the Netherlands, UK, and Ireland combined. It's about a million square kilometres⁷⁵. That's a lot of fracking; that's a lot of mineral rights. You don't need to get permission to drill, explore, or develop if you don't have Native Title in place.

That's obviously at the root of it. I did just want to say to you, that you made me aware of this. I am very emotional about this, just sitting here right now.

Canada, Norway, Japan, they are some of the few countries that have the same kind of issues with regards to land and Indigenous people. Because they have the space. They have the geographical size but also areas that aren't occupied by colonial figures as much. So it's part of a worldwide conversation. One reason for mentioning all of this is that this actually fits back into what shaped how I hear now. Spending a lot of time in those areas and working with Indigenous people had — I wouldn't say radically but I would say substantially — reshaped and shifted my approach to sound, listening, territory. A lot of the stuff I learned from an early age playing music but also philosophically from my studies at university. It was a very grounded and fundamental way of bringing these things together. And in many respects it has taken me some time to understand how they all come together to produce the outcomes that I am seeking now.

So let's move towards that, sticking specifically to They tore the earth. First of all, it's just such a brilliant piece. You structure it as four scenes. There is a narrative that you have imposed or have used as an interpretive method on the materials at your disposal. Maybe that's a better way to say it.

Yep.

Let's start with the materials and maybe practical questions. If I can start with the boring questions and work towards "interesting" again. How did you first, yourself, become aware of, or start, field recording?

Probably, like a lot of things, I was doing something and then became more aware of the context within which I was acting and so followed that because it seemed pertinent or interesting or necessary. For my final subject at university (and this will come up again later) we had to produce a CD-ROM. And I decided to make a syntactical approach to using a matrix of sounds. I had twenty photo-

⁷⁵ Area is actually 1.4 million square kilometres.

graphs that a friend had taken. I made a twenty second soundtrack for each piece. Each piece occupied a unique position within a four by five matrix. A piece could function as "a verb," "a noun," this kind of thing... I can't remember all of the specifics. And some were "a beginning," "an end," "a middle," "a conjunction"... So I managed to find a unique way, with four descriptors by five descriptors, that meant that each photograph fit into that matrix. The idea was that you could, according to a set of rules that I developed, I think they were "if nots," so maybe some Boolean logic (although I haven't read enough about Boole). So, you start with one, and the idea is that it would play through to the end, if you follow the rules. So, working with matrix concepts has been really important for a long period of time.

For some of the pieces I was recording some sounds, so just in a concrete kind of way but with no transformation, that was either the soundtrack or part of the soundtrack. And the recorder that I used was just a Tascam DAT recorder. Really liked it, really good quality of sound, great processors on them. Just assembling everything in Pro Tools. Not long after, I was in the position to be able to afford some microphones and a DAT recorder. So more than twenty years ago I bought two Rode NT-2s which are modelled on those Neumanns⁷⁶, very sensitive studio microphones that you can hear things quite a long way away from. Just as a matter of chance. It was mainly so I could record some piano stuff that I was working on, in a house that I was living in, by the coast. And I noticed at this point, to bring it all together, that I was getting as much from outside as I was from inside. I was tending to play along with what was happening at the time. Then I started just recording stuff outside. Because being near the coast it was a particularly interesting area. I was just under an escarpment; it had its own kind of weather system. And, I was quite close to the beach. And, it turns out, one of the ten best breaks in Australia. They have surfing competitions there every year, because it's reliable. There's always a swell. There's always some interesting weather happening.

Not long after that I ended up in the Northern Territory. I didn't own a camera for many years. I noticed some interesting interplays between weather happening and fauna and flora around me. So I would use this setup to record things largely for personal use, no real interest in using them further for anything. It wasn't even documenting, but it was an interesting thing to do. Sometimes people write stories, sometimes people take photos, they might make a film and not show them to anyone, and this is what I was doing. I was often in remote areas. So, noticing the ten degree temperature drop that you got just be-

⁷⁶ The Rode NT-2 is rumoured to be based on the Neumann U-87.

fore a tropical storm. Equally you would notice that the wildlife would change. And then you would get these intense downpours that could see up to a metre of rainfall in twenty-four hours. And then after the storms, you would notice that the air was moving differently, the humidity had changed. According to where different insects were, along different terrain, be it along a ridge line or in a savannah, you would be able to hear the air moving over that area. So that was the kind of thing that I would record. And it's something that I did, on and off, over a ten, twelve year period, when I was often in remote areas. They became the source material that I drew together for the album. Originally, it was an installation over twelve channels. I was trying to find a way to turn it into a two channel presentation. As the concept got honed, the audio got honed, and the narrative got more precise. Much the same as you would with a screenplay or a treatment.

Were you aware of other field recording practitioners, even the historical ones like John Hutchinson, or anyone like that?

Hutchinson I only became aware of in 2014 through some work with the National Film and Sound Archive in Australia. They told me about him. Again, really interesting, because he was dwelling within a specific territory and was very engaged with the land. Bruce Pascoe⁷⁷ has an Indigenous background but his work with plants and farming techniques. It's interesting to see how this inhabitation and relationship to the earth informs people's understanding and their epistemologies. And Hutchinson seemed to (at a surface level, because I am not entirely familiar with his work) demonstrate a lot of these land management practices and also an engagement with the earth.

At the root, it's worth mentioning that before colonisation, it is argued that there was a single land management practice for the entirety of the continent, with local iterations. And this is what is referred to as the Law. The land management being part of the Law, which is how people are to work with the land and also behave with each other. It has different words in different places: Tjukurpa in Yankunytjatjara and Pitjantjatjara languages. There were six hundred different nations in Australia before colonialisation. So understanding the specificities of a territory and what lives in that territory. I came at it from either the middle or the opposite perspective, depending on how you want to look at it. The Deleuzian idea: rather than producing an inversion you take it from the middle and shake it and see what comes out. I found that interesting, and so maybe I came at it from the middle.

⁷⁷ Bruce Pascoe (1947-) of the Kulin nation is a researcher into agriculture and language, author of well over a dozen books.

I listened to a wide variety of music for a long time. I had the *Throne of Drones, Storm of Drones, Swarm of Drones* six CD set⁷⁸ from about 1997, which was around the same time. I had studied *musique concrète* but I was slow to understanding — because I didn't know what a ring modulator was, and all that sort of stuff — how they had transformed the sounds. I was more interested in the natural sound itself. I'm a hick from Australia; I am not terribly sophisticated. These European concepts were like the fancy things that came to the city. I am from the city but I am still from the suburbs. There is a bit of remove there. So I have been slow to understand the provenance of all of these things. And from the environmental CD, the second CD of the *Storm of Drones* I studied Jonty Harrison's piece, for one subject⁷⁹.

Francisco Lopez had come to Darwin. So by this time I already had a bunch of field recordings that I had made while I was living on a three-hundred acre block of land. It was like, oh! other people use these things, but in an unprocessed way. And I thought that was interesting. Because one thing about the Northern Territory is that the weather is really totalising, it's intense. Cyclones, bush fires, that sort of stuff. So hearing people use these things in a different setting, I was "oh!" But ultimately, because I'm from a small backwater myself, I didn't think people would be interested in what I was doing. Even though I had done radio for years, it didn't occur to me to put them together for release. Even once I had moved to Europe, I was still someone from the middle of nowhere, so trying to convince people that it was of interest, completely separate from having any cultural capital. It takes a while. And I guess it also takes confidence.

It's great that you have approached things from your own path, because obviously if we all approached things the same way, how interesting would the world be?

Yes.

[more on Hutchinson] In the late forties, early fifties, it would have been. He built his own gear and he started doing the recording. But then he also put it at the service of the local people. So, for example, they could record messages on his tape machine that would then play in some other community when he visited them. And so it was...

That's beautiful. He was like a bush telegraph.

⁷⁸ In 1995 Sombient (USA) released the single CD compilation *Throne of Drones*, closely followed by the double disc *Swarm of Drones* and triple disc *A Storm of Drones*.

⁷⁹ An excerpt from Jonty Harrison's "Hot Air" is included on A Storm of Drones.

He was a bush telegraph. And that aspect... when I read that I went "holy shit" basically. That's not an anthropological perspective, he's...

Bush telegraph is a thing. It's like the human internet in a way. The gossip vine. This very specific way of functioning. I think it's also the precursor, the background to what produced a lot of the cinema in the sixties and seventies and eighties in Australia. The Aussie bloke, the man of the land. It is very male and it never really discusses women having the same agency or Indigenous people having the same agency. In the fifties Australia "rode on the sheep's back". That was the line. So this being outdoors, being true blue ocker⁸⁰, having a connection to the land... it was seen as being, it was "the lucky country". These were literally all government-used statements. You talk about an actor like Jack Thompson who I met at an Indigenous festival, who was one of the patrons out there. A lot of the narratives, like *Walkabout*⁸¹, films like that, what they draw on. You don't find those kind of people these days. And I think that it's valuable. They are like these grandfatherly types now who are like "Let me tell you a story; let me tell you how things used to be". It's less dialectical; it's less didactic.

Walkabout. Again, we can go back to your recommended viewing list because, again, if I remember correctly, that was number one on the list.

The editing was particularly interesting for me.

When I first saw it... it's an impressive film for many reasons. But I think it took at least twenty years of maturing myself, and three or four viewings, to realise how incredible that film is. [laughs] It's so other. The fact that the actor was basically hired because he was a dancer, and is actually doing real dances, for example.

But also he's faking. It's really interesting watching it and knowing the country. They go from Adelaide to Sydney as the same city. They go from the tropics to the desert as neighbouring countries. And when he's speaking, he's speaking in an Arnhem Land language, I can't remember which one it is. It might be one from Ramingining where Gumpilil is from originally. Or it could be something from East Arnhem Land. It presents some very sophisticated concepts quite well. And Gumpilil was in *Storm Boy*⁸² either just before or not long after that

^{80 &}quot;Ocker" refers to an uncultivated Australian, and can be used as a pejorative or a term of conviviality.

⁸¹ Walkabout (dir. Nicolas Roeg, 1971) stars David Gumpilil (1953-) and Jenny Agutter (1952-).

⁸² Storm Boy (dir. Henri Safran, 1976) also starred Greg Rowe and Peter Cummins.

and became one of the more significant Indigenous actors. Who also, similarly to Tom E. Lewis, who was in the *The Chant of Jimmie Blacksmith*⁸³ had really problematic issues throughout his life. Because he'd been drawn into the white man's world but his agency was undermined in various ways because of his value. They needed him to be the Indigenous actor.

Which, I have to say, he had a flair for.

Oh, the man's charismatic.

He's charismatic and completely recognisable. He just kept popping up in films that I would see, like The Last Wave⁸⁴. I know there's problems with that film but I love that film.

Charlie's Country was one of the more recent films that David did with Rolf de Heer, who also did *Ten Canoes*, which was the first Indigenous film in Australia filmed in language⁸⁵. Charlie's Country is a response to the Intervention. David wasn't very well, and it's also partly his story. And it's moving and very wonderful. I'm not sure if Jack Thompson is... no, it's another film in which he's a policeman in. But Walkabout equally. Those films from the seventies. It seems as if you couldn't make a film without having Jack Thompson, John Meillon, or Bill Hunter in it. And it's got John Meillon in the beginning, who was the voice of the VB ad, the Victoria Bitter beer. So it's become [iconic] in many ways. It's very much embedded in an Australian identity, and trying to extend that into understanding the bush better. It succeeds in a variety of ways; it's quite complex. And the juxtapositions, I think, are very notable.

Getting away from one's tendencies to have a continua where one uses one sound or maybe one note for a long time, I thought that it was interesting the way the tone was cut up, in that film, by sudden jump cuts between the city and the bush. Or a shooting scene and a butcher's shop. So I thought that it was useful for me to try to use that as a tool or a device within the album. So I could cut across scenes and also within scenes.

I know the mixing process for the album went through many stages. You added other instrumentation to the field recordings. I know it was a long process of dealing with this. In one sense it's a very highly aestheticised work. It's not a

⁸³ *The Chant of Jimmie Blacksmith* (dir. Fred Schepisi, 1978) stars Tom E. Lewis (1958–2018).

⁸⁴ *The Last Wave* (dir. Peter Weir, 1977) starred Gulpilil alongside Richard Chamberlain.

⁸⁵ Charlie's Country (dir. Rolf de Heer, 2013), Ten Canoes (dir. Rolf de Heer, 2006).

work where field recordings are presented as pure field recordings, even though that's what they were to start with. You are trying to tell a story.

Yes.

Which you lay out in the four scenes. In some ways that's a very hard thing to attempt given the political side that you are addressing. It's totally possible for people to hear the album, as an album, without knowing, or getting, any of the politics. Because that's how sound operates. Unless you have someone didactically speaking something.

That's what happened during the tour in 2013 when I did about thirty shows of it. I'd introduce it. So the text that's on the back [of the album jacket] came from how I would introduce the piece. The conversation with some people was "Oh yeah, I could just listen to that as a noise piece or as a sound art object sonore or whatever." And I was "yeah, that's a way to listen to it". Sometimes people would go "I felt like I was in..." or "I felt like I went to.." So I was trying to ground it out into a concrete reality. There's a point in the last track where there's almost no mid-range, there's a bit of guitar feedback sound going, just a guitar leant against an amp. And there's a very low frequency underneath and the sound of a vute being unpacked out in the middle of the Barkly country in central Australia. And the net effect being this very low frequency produces a small modulation in the upper register. And it's eerie! It actually feels like a huge space. And it's the same way that our bodies process the proprioceptive "where we are" in space. And I feel like it was successful in that moment, because you feel like you are in a very large but also potentially... it sets the fight or flight instinct. You are not sure what's about to happen. It's this feeling of fear or... yeah, the fight or flight situation that I was interested in instilling in that. It's trying to use sound in a cinematic kind of way, but it's working with a cinema of the body, rather than moving images.

If you look up a definition of cinema, then it's referring to moving images but also the pictures in the head. I am interested in how the body exists in space, specifically the location, the duration, and the context. We don't ever just feel happy or sad, it's a complex series of emotions at any given point in our lives that we are feeling. So, trying to use sound pressure and particular combinations of frequencies to elicit a range of emotions that aren't necessarily universal but that have a dramaturgical coherence to them. So that within a lot of the field recordings, they are both a recording of something that may or may not be happening in a particular location, but that within those things that happen, or that don't happen, there is a discrete dramaturgy. Layering field recordings over each other was done hesitantly because I was literally layering different recordings of different countries over each other. So there is a processional notion to

how it goes from one place to another, over a duration. But also at any given point if there is more than one field recording playing at once. And then also the tonal aspect interrogates that further. So it's trying to use multiple instances of dramaturgy layered over each other to produce a gestalt dramaturgy that hopefully hits at some kind of point.

I would say that it's very successful in that. It obviously reached a certain point at which you felt it was successful enough to release, after so much work. Maybe it's curious then, that in 2016 you went back to shoot video.

The video was shot, actually, straight after the tour in 2014. During the tour in 2013 when I was finally playing the album in public as a live piece, I felt that a film might be good. And during a conversation in Poland I suddenly said "I am going to go make a film". And then found myself purchasing a camera for the first time. I'd edited video before. And within a year I had a live A/V version.

So the impetus was... that took a lot of work, obviously. You purchased a camera, had to learn how to do certain things, go back to Australia...

So we had a trip to Australia planned, a three-month tour. I had nominally used a camera before, but not really. So I learned to use the camera on the first day of shooting. We bought the camera, drove a thousand kilometres and was in Lake Mungo. Which incidentally is where the oldest human remains that have been ritually disposed, had been buried through ritual, outside of Africa, are located. I think they are 43,00 years old or something. Where Mungo Man and Mungo Lady were found, the Willandra Lakes Region. Learned to use the camera on the first day. And we'd planned a five thousand kilometre trip over ten days and shot seven-and-a-half hours footage. We were listening back to the album edit that I had, often, in the vehicle. We had a new model Toyota Land Cruiser so we could go pretty much anywhere. Both going back to a variety of those places where the original recordings were made, and had other specific places in mind. And we were largely shooting at dawn or dusk, which meant that we had a very strict travel regime. It would often be: get up early, shoot at dawn, drive a thousand kilometres, shoot at dusk. It was all very carefully planned.

Well, it does seem like it because the result is a bit hard to imagine, how good the result turned out to be. Because it actually seems, for me, that the sound was composed to the video and not the other way around.

I did go back and do some pickup shots on a trip in 2015, because I wanted to make it into an installation from being just an A/V piece. I didn't feel like I'd got the editing quite right. And there were a few establishing shots that were needed. I was visiting out in the desert and so managed to get a few of them. The

specific gestural movements that had been captured within the recordings I was trying to get with the camera. So it's kind of like a reverse Foley, if you will.

There are a few specifics I can think of. There is a travelling shot when you are carrying the camera through a ravine with sedimentary rock on either side, where the gestural aspect of the video and the fact that it is revealing the territory that you are moving into... it's very much... not that the sound is doing that, but they work in some sort of parallel motion.

How the high frequency hissy stuff opens up and is modulated is going to be similar to how you would feel about moving through... I know precisely what you mean. It's either Emily or Jessie Gap and that's a gap in a 350 million year old range in Central Australia just outside Alice Springs. The way that you feel when you are moving through space, for want of a better word, and how you hear reflections off surfaces, trying to capture similar movements that you would also be hearing in the field recordings. Because you are getting that modulation in real-time from the microphones. So if a bird flies through you can hear how big the area is, because you are hearing the splashback from the wings on the edge of the chasm. It's like an assemblage. And I did a lot of reading about film theory: Eisenstein versus Tarkovsky, and all that sort of stuff. I watched a lot of films, because at first I was thinking of editing it from existing films and then started to work out what it was that I was looking for. So I literally had a shot list of approaches and did the same things in a lot of different places to try to find the best combination of light, territory, location. And that they would go for the right duration, that they tie in.

[Aside about watching film.]

The trailer came from the original live thing and then has been substantially reworked for the installation. I am looking to try to show that again because it seems that the conversation is coming up more.

It deserves to be seen. The amount of work that went into it is one thing, but it just deserves to be seen. [checks status] Where were you born specifically, for the biographical bit.

Fifth generation Sydney-sider, born on Dharug land, I think it is, in the Eora country⁸⁶. I was born on what would have been, sixty years earlier, bushland, in the north-west suburbs of Sydney.

⁸⁶ Curgenven notes this correction: "Dharug and Eora are neighbouring nations within what is now metropolitan Sydney" [personal correspondence].

[Note about place name checking.] When you do location recordings, you tend to use a pair of omni mics. Physically, how do you mount or carry that to get the sound you want?

I practised over the years holding them and having the gain up very high, and moving my hands carefully so you couldn't hear the bones in my wrist grinding together, because that would be quite loud. How people move when they do Tai Chi, or perhaps butch. You've got an awareness of both where your joints are and how they are moving against each other. So I am trying to produce no body noise whatsoever, be it from my feet or my knees or my wrists or my elbows, because you are going to get a body sound, a körperschall on the microphone, if the thing that is holding it is experiencing some internal mechanical movement.

I was only wondering because those are very sensitive mics.

Very. I tested a bunch of mics and for some reason I liked them. I have since discovered that they just happen to actually match a specific area of phase change that you get. There's this sweet spot in, I think, four to six k, and I forget where the other region is. A mastering engineer told me years ago when I happened to ask him. I was buying some DAT tapes. So that's the profile of the mics. But it happened to pick up what I liked, well. I have a set of binaurals that I use occasionally, when I go guerilla or when it is too windy for the big mics. It's not determinism, at all, but the equipment that I chose happened to reflect what I later understood to be the direction that I wanted to head in, or the outcome that I was after.

Do you use contact mics at all? Or did you?

I am not smart enough to know how.

[laugher] OK. I am only asking because some of the sounds you get are, rather than air-borne vibration, they have that quality of material-borne vibration, which is what a contact mic can supposedly represent.

The place that you are drawn to and the place where you are recording are going to be reflective of that. If you are shooting an action sequence for a film, then the cameraman needs to be in the right place where you can get everything into frame, if you don't want to have multiple cuts. There is a sweet spot. If you're drawn to that then you can engage with the sounds. What you hear in the recording is what I would have been feeling with my body. Through the movement of my body and being quite judicious with that movement and economical with the movement, you are going to be capturing what was happening in that specific location. Very small movements of the microphone yield big shifts in phase change, which give the impression of the field increasing or decreasing in size. If

there is a waterfall off in the distance, you move the microphones left and right a fraction of a millimetre, then the position of that waterfall appears to change.

Exactly how we, as binaural beings, locate stuff. These fractional movements of our head.

Except you can take these ears off and put them wherever you want. It's not binaural entirely but you are creating this near-impossible ontological state.

I do write a section on binaural recording. My research is not technical; I am not that interested in technical minutiae, except that it is very important for the perceptual. How we have to use these microphones which are not ears and somehow translate that into something that is a felt sonorous image. It's magic; it's a trick.

Someone said to me once that there are no such things as tricks, there's only moves put together. He did ridiculous things on BMX like multiple metre drops, and that sort of stuff. "Wow, how'd you do that?" He just put a bunch of moves together.

The phase anomaly stuff that I really went down the wormhole with, got really obsessed with, that led to the techniques behind *Climata*. Even though I am using two microphones and even though most of the sonic information might appear to be coming from just one channel, when you look at it, the other channel is producing the phase difference. When you combine these recordings, that are all made in different chambers and different air movements and different tones, it gives the impression of it either coming from nowhere in particular or everywhere. It's again just moves put together. So multiple phase anomalies combined with frequency modulation across a range of registers can give the impression of something that shouldn't be possible. That's part of my fascination with very low frequencies.

It's like cantilevering multiple concepts together. If you wanted to suspend an object in space, you could use several cantilevered platforms, each taking the centre of gravity further away from the edge. So then you can actually balance something in a way that looks like it's not physically possible. But again, it's just moves put together. Trying to be aware of the first principles behind each thing. You might not understand the total outcome. Rather than a reduction, I've often been trying to get back to first principles like "this is fascinating, what's really going on here?" Not pull it apart, but try to get inside of it.

In *Climata*, the motor is the beating frequencies and it's about, not just the specificity of the tuning, but how far apart those two tones are. So the specific difference frequency as it relates to also both the specific frequencies. So you could have the same difference frequency but it wouldn't work with that volume

of air, if each of the beating frequencies weren't already moving that volume of air. So it's three things coming together to produce a fourth thing.

Interesting. I would conceptualise it as two things coming together to produce a third, thinking of it as a ring modulator setup. But your conception of it is...

Sometimes I would go "yes, they are the right two frequencies but the beating frequency isn't doing the thing". You've got a tone centre that alone would resonate the room but how much each tone goes either side is significant, as is how fast the air ends up moving relative to what's happening outside. And that's going to change over time, over the discretionary duration of the recording, be it a few seconds or a few minutes, as the weather is changing as well.

Going back to the tropics and also the desert and the extreme weather, it took me years to realise that it was the air that I was specifically interested in. Perhaps that's why contact mics haven't been as interesting for me. You do get surface sounds but I am less largely interested in surfaces. I am interested in the mode of being: where you are, how you are, how you came to get there. How I happened to be in the desert to make those recordings, or in the Skyspaces across Europe, it was a sum of privileges of knowing the information, being able to access the information, being able to access the resources. So, for someone to say "Oh I did this immaculate recording out in the desert" it's like "How did you come to get a really fancy four-wheel drive that could get you all the way out there, and that you had enough supplies to get out there?" Going back to our earlier discussion on Heidegger, it's disclosive but doesn't necessary disclose all of the processes and class and social situations that allowed it to transpire.

In a practical sense, it's one reason why I've adopted certain field recording practices. Ninja practices, someone described them as. They are just low impact. As opposed to what it would take to film Walkabout in the bush — it takes a lot! It takes all the catering and the equipment and that has an effect on the land that you are attempting to represent.

And getting out the film, once it's used, to a place that's not that hot. You need to be constantly ferrying things in and out of a remote location.

Whereas if you or I could go perhaps with an assistant or some low impact method, it might not be anything anyone realises from the final result. But it obviously affects how we approach the place.

And I couldn't have done any of those projects on my own without Kathleen. She drove, she also was cooking: we both did both those things. She helped planning; financially she assisted. It was a team effort. And she trusted that I wasn't just talking out of turn. I needed to have a concrete outcome and that was also part of the motivation. I try to thank her wherever possible be it publicly or

privately. That was part of the context. It would have cost me a few thousand to get a vehicle but I got up every morning checking these websites for moving vehicles across the country. And I managed to find a window to move a Land Cruiser over ten days from Sydney to Darwin and all I had to do was pay for the fuel. So I basically made the entire thing, including the cost of the camera, for about two grand Australian.

That's pretty amazing in itself.

I think that maybe includes the food. No, it was maybe two and a half, because it was about six or eight hundred dollars for the fuel. But we managed to get the vehicle for free. We were doing a service for them. But it was at that specific time of the year when they needed vehicles up in the north because they were all down in the south. So they didn't need to pay for a driver. They didn't need to pay for the relocation. We were doing a service for free that they would have had to have paid for otherwise, the hire company.

When I was young I did that: moving cars between dealers. "Dealer trades" as they were called. Because my friend's dad owned a car dealership. So that's hilarious.

Knowing that that's even a possibility, logistically, those little pieces of knowledge that may not be useful or applicable now, you store them up. I met Rashad Becker from Dubplates and Mastering in 2008. And then had the idea to make this first dubplate. And I'd had an idea for years of putting field recordings onto dubplates. But had never been to a mastering studio and didn't know who did them. So, actually meeting the person rather than just going "Oh, I am going to call up and make this happen" in a forceful, economic fashion. Organically the two things came together. And then the idea of recording it in a specific way and then documenting it... one thing led to another. Literally there is a kind of organic thing where different aspects within a discrete field of operation tends to bear out a result, which is indicative of the intention.

So of all the field recordings that I was making over the twelve years that I talked about earlier, I wasn't thinking about colonialism. But I was part of that whole thing. So one could argue that the intention underlying a lot of the recordings of engaging with the land and trying to see past my own myopia... A lot of the projects that I make are about doing something without being able to hear all the other instruments, in isolation, and then sticking them all together. Combining them in the hope that the internal intention is borne out. It's the matrix concept that I was describing earlier. And I think that was very specifically carried out with *Climata*. I was intentionally building a matrix of possibilities over two hundred recordings. Sometimes I am fumbling around and come upon an

idea and pull it off successfully. And then sometimes I really emphasise one thing and maybe it's too forensic for people. But it's also part of the process to try to understand it better.

Just to go back to the dubplates for a minute because that's a particular technique that you use that few others would use, at least not in the way you do. So what sort of material would you get pressed?

I would get it cut and the way that it was cut was very specific. How much minus dB it was. So I got one cut and it's maybe 3 dB too loud, so it doesn't work as well. But it's still super quiet. There was some discussion about the specific volume. It's mixed and then made at a certain volume. Seeing the turntable as being a series of nested resonators. The body, which is designed not to resonate, resonates at thirty Hz or below. The tone-arm resonates at around two to three hundred Hz. Then there's the head-shell and the stylus, which can often resonate at around six hundred Hz. So if you have made a recording within a discretionary room or chamber, you've also got the resonant functions of that. And how they come together to produce a series of overtones through feedback recording. When those feedback recordings from the room or even from the turntables themselves are put onto a dubplate (and that has a specific mass) the contact microphone or the stylus and the rest of the system that is the series of nested resonators is going to produce a series of discretionary results. There's a large tolerance of movement but there's a whole bunch of median possibilities. I am trying to use the dubplate, with its specific mass. And different dubplates have different softness. Only three companies make them, presently, as far as I understand. They are each going to have slightly different acoustic possibilities. But I am using the dubplate as a kind of patch to play the turntable. And the turntable is a resonator within the room of playback, as a resonator. So it's a series of meta representations where each one is a concrete concept. So they are not meta as in they exist purely as possibility. They are a series of nested concepts like [Matryoshka] dolls except that they are all inside each other rather than a hierarchy of one inside the other.

What do you actually cut? What do you put on the vinyl? Do you start with a field recording of some sort?

I am using the mic to drive the air within the room.

So you start with a resonant room tone.

I literally chuck the mics out somewhere that sounds logical to me in the room. The first one in 2008 was during a residency in a gallery with very specific acoustics in Milan. I was recording the feedback, but it's the point just before when it starts to honk. So you are getting a fluttering, so it produces a kind of

beating frequency. So you are hearing the movement of air as a heterodyning tonal relation that's specific to the phase relationship in the room between the mic and the speaker, and also specific to that place at that time. Because you are also going to be getting sounds from outside, that may be enough to produce an attack within the room. It's a living situation. So even the things that I would maybe do that might approximate a studio are still a kind of field recording, because I am not just interested in *an* object, it's the total relation of the air around it. So everything has been placed in a specific spot, much as you would with a studio recording, but I am trying to not just zoom in on one thing. It's the total relation that I am after. Because that might not be evident or useful in that one part of the recording but when you combine it with one or two other recordings then they start to cross-modulate each other.

This is a good segue into your use of the church organs, because it seems to me it's exactly the same as what you just described. I think you treat the organs and the church space as a resonator, with all of these subcomponents. And I would say you are making field recordings of organs.

Yes, pretty much. And the specific humidity and temperature in the organ at that time, and also the time of the day, is going to have a bearing on how the air moves. A lot of the Cornish churches are made of granite, which sucks up a lot of water, so it's very humid. And it's also very cold in there. So motivating the air can be a little bit harder. Whereas the cathedral that I was working in, here in Cork; it's heated in there. And it's made of sandstone I think; I'm not sure. So, subtly different acoustic qualities. It's this realisation that the air and its meteorological properties of temperature, humidity, and pressure, are all very specific to how a recording is going to turn out. Because essentially the microphones are measuring and converting the movement of air pressure into electrical signals, that are then getting stored on tape.

Was there a selection process for the churches or was it basically ones you could get access to for the time you were there?

Will they let me in? Is there going to be a problem? Are they OK with this? Do they know entirely what I am doing? There was an issue with one church. Former traffic wardens who had become church wardens who confused custodianship with ownership. Because there wasn't a minister in action at that time. The organist was very sweet and had given me access to the key. But then things changed around. I guess the ecumenical nature of those things is that you are entering a very specific system to be able to access those instruments. Some of which can be more specific and particular than others.

Your training on the organ... I presume, or maybe I read, that was early in your life.

From age seven. So nearly forty years.

Seven is pretty young to be on the organ, isn't it?

We had a piano at home when I think I was five. My folks got rid of that. An electronic organ can be put on headphones so that people don't have to listen to it, if they don't want to. Everyone in my family is musical. Actually, most people in my family aren't musical. I was interested in Bach and stuff like that. I liked the complexity of them, but it's a very simple kind of complexity. This approach to matrices and systems and resonance. I took a plate off a shelf when I was nine or ten. It was a metal plate in the next room and I had been holding down some bass pedals. The plate got shaken off the shelf. And so at an early age I understood that's what bass can do. I went around the entire house thinking I had broken a light and I didn't know how. And then, thirty years later, I am doing the same thing on that tour in 2013. In Bratislava I took a glass off the shelf at the opposite end of the venue. The pressure backed off in a transition from a loud bit to a quiet bit and suddenly there was this loud crashing noise. I've done concerts where we've had to remove the light fittings, because one had already come loose in the soundcheck. And there was a danger that the lights would start raining down on people.

So it's kind of like the final scene of Stalker⁸⁷.

Or maybe one of the middle scenes in *Mirror* where the fire is going off and the plaster is all falling out. I've taken a variety of things out of the ceiling over the years. And it's largely from complex (or not so complex) uses of low-end sound pressure. Concrete, lights, light fittings, dust. That's the other thing. In really old buildings it's not so much how loud it is, it's how low it is. If there's old dust, you get ozone released as that dust is moved. It smells like the speakers are burning, but it's actually the photocopier smell or the smell you get from ozone-based swimming pools. But there's different kinds of ozone smells based on what is going on.

I hate those smells, I have to say. Those irritate me a lot, those ozone smells.

I learned what they were and I came to warn people that it's possible that it might start to smell partway through the room. Because also if you are doing a performance, as opposed to a recording, over the period of the performance people will be expiring and sweating, so the humidity in the room will increase.

87 Stalker (dir. Andrei Tarkovsky, 1979), Mirror (dir. Andrei Tarkovsky, 1975).

And the pressure in the room is going to increase as you pile on more sound. The temperature is going to increase. So acoustic possibilities at the end will be different to those at the beginning. Kinetic energy produces these different kind of environmental effects upon the structure and on the air on which the action is being wrought.

[omitted] This one I am kind of embarrassed about, because I am not sure if I should know this or not. With They tore the earth, where does the title come from?

I made it up. It's fake poetry.

Oh good! I love it! That's perfect.

I think it just occurred to me one morning and I wrote it down. It's one of those rare moments when "this seems good" and then later it still seems good. [...]

There had been a big gold rush — 1850 gold rush in California and then 1851 there was a gold rush in Australia, down in the south, which was the largest alluvial gold rush in the world, at that point. There would be hundreds of thousands of people out in these areas, mining for gold. And then when they've all gone, it appears to all disappear. So it looks like bush and like "ah, the wilderness!" And wilderness is based on two falsehoods. One, is that the land always was and always will be Indigenous land. And, second, that "wildness" is some kind of natural state. But as part of the Indigenous land, and the discussion earlier about land management, is that the land has been managed for some period of time. Fire farming being a strong part of that. And when you displace people then those land management practices don't persist and you end up with high fire loads which result in bush fires, that sort of thing.

So, this gentleman took me — this is up in the north, away from the alluvial gold rush area —to where there had been a town, outside of Hay's Creek, of which there was no longer any sign. We got out of the van and he took me to a spot and he said "Right there is the only permanent source of fresh water". And it was just like a puddle, literally. And then we walked a little bit further and he pulled back a bit of a bush and there's a footing for an old building. Two right-angled stacks of bricks that were largely hidden under the earth. That was where the town hall used to be. So there had been a few hundred people living out there, and to the untrained eye there was no trace any more. Trying to do the mining, they had literally torn the earth, to take out what they needed, what they wanted. They had created a kind of scar upon the earth. For those who didn't survive or who'd moved on and left some trace, the earth swallowed them up, but only that scar remained. So it's a comment about how the extractive no-

tion of settler colonial practice can play out upon the land and the substrata, as well as how that presence changes it.

[...] I had a similar experience to what that title evokes when I visited in Minnesota the town of Hibbing. Which is famous because that's where Bob Dylan was born, and it's also where the Greyhound Bus Company was formed.

I've spent a lot of time with them.

And it's also the largest open pit mine in North America. I had never been to such a site and I haven't been to places like Australia where you get this vast scale of everything. And this mine... "tore the earth" is the only way to even represent what's going on there. So I went to his area which was quite close to the mine itself. You could see right across the mine from this vantage. They let you go there. It was where the town used to be. And all that was left were the outlines of the streets and some of the [street] furniture, and the foundations of the buildings all overgrown. They had literally moved houses off their foundations further away from the blasting. And it wasn't quite yet swallowed, but it was on its way. Perhaps today — this was already twenty years ago — perhaps right now as I speak, all of that is swallowed into the mine.

Same sort of things in Cornwall. Where it's more humid or where it's more tropical, the plants tend to grow faster. And we found old mine workings that were covered up by plants, when we were wandering around. I am specifically interested in the application of this idea, not as a romanticisation of ghost towns, because it's largely economic. They would pick up the buildings and move them. The company owns it all. So it's like "we don't need this here any more" and so this area is being abandoned because it no longer has an economic use value.

Your piece, in four movements and all, is a tragedy, in the classic sense.

Yes.

In that there is a fatal flaw. The characters, in this case the settlers, they have this fatal flaw in how they engage with the landscape, the land itself. And this causes grief on all sides, which ends in ruin.

Yes, to both them personally and everything else. A lot of people wouldn't have survived.

That is a different narrative, a different perspective to how colonialism is usually critiqued.

Yep.

A typical critique wouldn't spend a lot of time identifying with the settler.

It's shot, and you try to listen to it, from a first-person situation. Trying to conjure what it's like to be completely alone and totally unprepared. "I don't have spares for my car, and my car's broken down, and I left the vehicle, and then I died 48 hours later"... like still happens these days, because of the heat. It's not so much identification with them as presenting their viewpoint as a character. Then you see that there's a shortcoming to it. There's no glorification. And I think that if we lead comfortable lives we try to avoid the "when things go bad" scenario.

Sound has less of the trappings, but it's also more visceral than some of the other senses. So you can create something that would otherwise be violent, intrusive, difficult. There's a lot of things in films that I literally don't want to see, because I don't understand why people dwell on them. And that they felt so motivated to tell a story about it. I am not literally showing any of the violence, it's all unseen and insinuated. As are the characters. You can hear some people off in the distance, at one point. That's the closest. There's a shadow, at one point, of a person that crosses in the installation.

Oh! Is there? I didn't notice88.

It's there. Someone walks past, and it's actually an Indigenous tour guide out in Mungo. This notion that the characters are all there but people simply don't know how to look for them. The people might have been off hiding in the background because, like "who's this person" — I think one quote was — "who is the colour of the sky on sunset". They didn't see them as white people, they saw them as a bit pink, probably because they were sunburnt at the time. There was knowledge of Dutch people. And people for hundreds of years coming to Australia had become part of the stories. You look at the stories as being codified ways of transferring information from one generation to the next, much the same way as The Iliad. If you take it as being a series of metaphors, each adventure is referring to the specificities of a place. Be it the sirens where you are travelling in the gap between two rocks, out in the sea. The codifications you get in oral storytelling, that's going to be passing that information on for years. By contradistinction to the settler or the colonist who is on their own... people were never on their own. There was always a system of knowledge. There was always a vast matrix of possibilities between nations. Communicative and survival possibilities of knowing where water was, being able to read the land as a text, so you would know where water would occur. It shows the ridiculousness of "they died alone with no food," when in fact they were surrounded by water and sur-

⁸⁸ At this point in time, the author had had only one opportunity to view the video.

rounded by food. They just literally didn't know how to access it. And by charging out there on their own, in a non-consultative fashion, they brought about their own demise. And probably were not far away from people.

Recently it has come up that there were extensive farms in Australia. One party came upon some Indigenous people, and were riddled with scurvy, on the edge of death. They were given cake, and roasted duck, and water, food that had come directly from farms that were being tilled in otherwise completely arid environments. They were living in houses. All of the suppositions that they were walking around naked with little more than a spear are completely false. Early accounts, early diaries, communicate this and are evidence of this. This has been turning up in some of Bruce Pascoe's writing.

My understanding is that the basic misunderstanding is that they were people who live in the desert in the first place. They would live in the places that best supported their communities, which were the places the colonists took.

Some of the place the colonists took were *really* nice and no-one lived there because it was so nice. If you live right next to the supermarket you tend not to do as much hard work. It tends to make you a little soft. They would be meeting places — Alice Springs, Broome, Darwin — a lot of these places were meeting places where people from different countries would meet and do business, and then go back to their country. People could live in the desert, in really arid areas, and they were really tough. It was 1984 that the last people came in from out there. And they had been living off the land the whole time. It was because their families were concerned about them that they were found. Think about it: 1984 for the last first contact to be made, to big changes in how sovereignty was given in the same areas in 2006 is quite a short distance in time.

It really is. It's all very recent. And then of course there's been all the backsliding as well.

The underlying concepts that I keep reiterating that inform most of the approaches, and this includes field recording because it is disclosive in that particular way. Because someone is recording it, whether they are audible or not. You are hearing through someone else's ears and someone else's approach and technique. Those three things are location, context, and duration. People talk about place but it's not specific. A location is. You can refer to it by GPS, or elevation, or relation to surrounding features, be it a chasm, or a desert, or a savannah, or what-have-you. But you are trying to understand all of these things as a matrix of possibilities that come together to present something very specific that happened. Rather than it being about space-time, it's about location-duration. Because these are more subjective and it's how we experience the world. We

have watches because we want to measure time, not because this concept of time exists entirely outside of our species' being.

You are probably familiar with Plato's concept of khōra, which is exactly what you said. It is the matrix; it is the womb. It's very interesting because it is both this place, this arena in which things can be born and happen. But it is also those things themselves. It is both material and container. And I find that a particularly rich way to approach place. Because it stresses the process, first of all. Place is always being formed.

Yep. And equally, beyond creating matriarchal mythologies or othering... If we look at the container and the material, that's what our meat-packets are, our bodies. They have been developed over the experience and the process of our lives and shaped by that. Be they scars, or muscles, or strengths, or weaknesses that can become strengths, when seen a different way. The way these meat-packets exist, the way we carry them around, and where we take them, the container and the material are distinct and shaped by our mode of being in the world.

[aside about Maturana]

Another album that I've just finished at the moment: I have created a bunch of parts, literally just fragments, according to a similar set of conditions, without necessary regard for the total outcome. But when they are combined, according to another set of rules that I've developed, it's not so much that they speak to each other, but they are alive. They appear to be interacting with each other. So from these three different layers you start drawing inferences: all of these bits are talking to each other, there's a connection between them. Whereas it's the total system that is the connection and it's borne out at specific moments by the interactions. You could say the same about capitalism or any other methodology of social aggregational practice. Rather than the specific events causing capitalism, they are actually reflective of the ideology. This is why the context keeps coming up again and again. And also trying to look at things with a certain amount of rigour. Does this idea hold up? Am I clinging to an idea or should I abandon it because it's problematic? Or its contradictions.

The same issues are going to come up over and over again, because we live in the same problematic, right now. Until our existential "problem" is "solved," not that there is a solution, until we move on from it, which perhaps is impossible or unlikely, we are going to have to keep addressing it.

While we have this silicon conversation between two points, something kilometres apart.

We can still do that now. But who knows about the near future.

It's indicative of the process that you described.

Yes, it is. It's another way in which our technology is affirmative, in that it permits connections. It's not this schizophonia, this negative characterisation of remoteness.

That's one thing I was going to mention before, when you mentioned the mine in Minnesota. Seeing *Koyaanisqatsi* and *Powaqqatsi* in my twenties was also... wow⁸⁹! *Baraka* was nice and Ron Fricke's work is nice but Godfrey Reggio managed to... it was the first time it was done, in the early eighties, in that way. He'd filmed the entire world over a series of years and it wasn't a documentary. He presented it after all those years in the Buddhist monastery. That mine at the opening of *Powaqqatsi* which is huge. And you see people just as cogs in a massive machine, and the machine is extracting. And you see the point where they are carrying the body out of someone who's died while working. This is literally that kind of process. And here we are, nearly forty years later, adopting the same kind of dialogue saying "it's all out of balance". And it was a Hopi word in the very beginning that was describing this. It's gone from aestheticisation, discussion of peak oil in the eighties and nineties, to "we're at that point now". In a Baudrillardian sense it was already always apparent.

It was. In fact, as far back as you go, you can find that there was knowledge of this.

Simulacrum of things being out of balance.

It might have been Plato as well, writing about agriculture. And he was writing about how agriculture was destroying the soil and putting things out of balance. This was back when these practices were on a scale that we would now consider to be sustainable. And yet in local instances damage was being done. So, Koyaanisqatsi, I am glad you brought that up. I was well into Philip Glass at that time. I went through a big minimalism phase with Steve Reich and all sorts of people.

Our guilty secret all.

And Philip Glass when he was still doing stuff worth listening to.

It was new to us at the time. It was of a scale that was appealing.

⁸⁹ Koyaanisqatsi (dir. Godfrey Reggio, 1982), Powaqqatsi (dir. Godfrey Reggio, 1988), Naqoyqatsi (dir. Godfrey Reggio, 2002), Baraka (dir. Ron Fricke, 1992).

When Koyaanisqatsi came out, I only went to see it because of the Philip Glass connection. So I actually had no idea what I was going to watch. And my mind was blown.

I made a VHS copy of *Powaqqatsi* when it was on TV late at night, in the eighties sometime. And the soundtrack was great. But that opening scene in *Powaqqatsi*. It just had a lot of techniques that hadn't been seen before, in terms of editing and presentation. It's similar in the way that *Star Wars* presented a whole bunch of new editing techniques and a different way of telling narrative. I'm not a *Star Wars* fan. But the barn doors, all the different fades and dissolves that hadn't been shown in that way before.

And Reggio was definitely utilising the film technology, the camera technology... a lot of aerial shots and the time lapse. The use of the aerial shots to present a totalising view of a landscape but one that was also completely beautiful.

And presented without comment.

And then without comment. In fact you could take things more than one way. Well, in the first film you could. He became more didactic.

I haven't even seen *Naqoyqatsi* and I am still not super interested in seeing it. *It's actually terrible*.

I didn't want to get the confirmation.

It's just boring and the content is just not interesting either. We'll pretend it doesn't exist.

I was going to talk briefly earlier about listening and hearing and post-digital tools, to connect what you were just saying about camera technology. There's the confirmation bias. If you are trying to find a specific frequency and you have got a spectrograph open to you, then you see that and say "yes, that's it." [...]

But Heisenberg's Uncertainty Principle came up in the notion of tuning a violin. The more you try to tune it without using a tuning source, the more uncertain you become about whether it is in tune or out of tune. So if you've used digital tools, you can actually get around the confirmation bias. You see a frequency and you can visualise the spectrum. You go: "that sound is about *there*".

For me, I found it useful — and other notable people use this technique — you map frequencies onto your body. So that when you hear things you know that you can feel it in your chest, or in your sinuses, or whatever, and you know which frequency, roughly, that corresponds with. You are using the container and material to understand the world around you. But also you are getting around that Uncertainty Principle because you have a very concrete thing

grounded out. As opposed to trying to find A440 when it doesn't necessarily correspond with anything concrete. So rather than it being a techno-optimism, it's that if you use these tools they can teach you a new technique that can advance something further.

Like with work: work is force over time. You are rewarded and it's useful to apply that force over time to learn that technique, and the work is worthwhile in producing a more useful outcome. So that the tool in itself becomes transparent. You go from using a hammer for everything to then discovering that there are more useful tools. And you specialise. But then you are using them as a suite, rather than relying on any one thing. So they become like a prosthesis where ultimately you don't need the prosthesis any more. Like how a lot of people that do Iyengar yoga become reliant on the blocks and the straps, rather than it's a means to an end. You move beyond the blocks and the straps rather than ending up with a church three-hundred years down the track where you've got the God of the Strap and the God of the Block. Ultimately not necessary.

And I think that this is what happens with artefacts and technologies that people come to worship, or place authority or agency within the artefacts or the technology itself. Conceptual art existed in the sixties, or documented an early period of it, which no doubt had occurred many times before. But those who held on to the artefacts, and are exploiting them now, they become the economic benefactors from the thing that could not be bought or sold. It has now taken on a material form. But these artefacts are false signs. They don't point towards the thing, they in fact point away from it.

Could you explain that last point a bit more?

So, the immateriality of, say, light and sound. They are both inherently material. There is a recent theory that bass waves move mass. And that would include the air. So there is a physical aspect to it. So they are both inherently material. But you can't sell sound or light. You can set up a situation within which they operate. Or you can sell media that then activate actuators that...

The phenomenology of light and sound are very different.

Yes, one is mediumistic and one is non-mediumistic.

Yes. I don't know who wrote this, now, but I read a very concise statement of this. We say that we hear sound, but we don't ever say that we see light, as such. Well, sometimes we do if it's the sunset or something coming in the window. (Oh, this is Tim Ingold I am quoting, I just realised.) But normally we see things in the light. A similar thing would be to say "We hear things in the sound". Which is a step Ingold doesn't take.

We feel the vibrations through surfaces, and we hear the movement of air. And it's a discretionary fluctuation at a discretionary number of times per second, at a discretionary pressure.

My next theoretical project, once I finish the dissertation, is a theory of sound. [laughs] Which sounds pretentious and ridiculous, but the thing is: philosophers have only been studying sound for about fifteen years.

Steven Connor wrote a book about air and doesn't mention sound once.

It's ridiculous, right.

Yeah. *The Matter of Air*. But this is one of the principle ways in which we become aware of air.

Some sort of a different idea, theory of sound as something which is a series of potentialities impacting one upon the other. And not this idea of any purity of the sound object. Or that we are hearing any one thing. We can never even hear one thing, right?

It's always a suite of things. And that's why there's this emphasis on field recording. The social and economic situation that produces a sound-proof room is often within an institution. To isolate that requires a great deal of time, money, and effort, at a variety of levels. So it's an expression of a social situation. But sounds otherwise are going to make their way in. Vibrations will work their way through. Air will get displaced. If you accept that stuff happens, rather than trying to go "Is this a chair?," "How can we know that it's a chair?," "What is the process of knowing?" Then you go down this existential wormhole. Well, stuff exists and I'm here, so I've got to get on with it. Hit the ground running rather than stand there and wonder how you ended up on the ground in the first place. There's a different inertia to the situation.

Yes, that sounds like Merleau-Ponty, really.

I guess I need to read it then.

You would find a lot of accord there, for sure. His second book Phenomenology of Perception is the main place people start. Later on he, in some ways, retreated from some of the ideas in that which are the most interesting, or will be for you and I.

Reluctantly I mention Turrell. In his schpiel he frequently mentions the "thingness" of light. It's not about the thing that it reveals; it's about light itself. There are a variety of constructs that he uses to present light in a specific way. And it also relates back to the system response and the parameters of how our corporeality, both container and material, respond to the situation around us. So in-

herently our subjectivity, as opposed to there being an objectivity to the world that we are seeing and reporting, and hearing.

So with regard to the notion of artefact. When you consider that Newgrange has managed to work as a celestial observatory for a few thousand years, very well. Even when it fell into disrepair, when they opened it up again and cleaned it up, they didn't need to do anything and it still worked. So that's a sign, quite possibly, that generations of developed oral history and wisdom were passed on and encapsulated in that artefact. As opposed to "I've kept a piece of paper that fell off a set-list from a band that played in the nineteen-sixties." And that the piece of paper ends up superseding the set-list that is indicative of the pieces played on that night. Say that I have a fragment with no writing on it from the edge of the set-list from that famous Sex Pistols' performance at the Manchester's working club, or whatever it was, that supposedly everyone in the world was at. If that becomes the symbol of punk and anarchy, as opposed to the social movement that came out of it, the thingness of the object can be bought and traded within a capitalist system. So then the use value of that object, rather than the system of knowledge behind which that object is hiding. It's the only thing that's apparent, so it appears to be the system of knowledge that's hidden now.

I became interested in Turrell's stuff because I was interested in the way air moves in and out of chambers, and this fluttering, and all these other things. It was a useful foil, for me, to present a series of known chambers, rather than just opening windows on random rooms. I wanted to be able to present it as a map of "these are all of the places". It was also testing a hypothesis of how air moves. But also it was also a kind of veiled critique. This is the context within which a million Euros has been used to make a room with a hole in the ceiling. Literally, because there's intellectual property on how it was devised.

But also the specificity of how it's capturing a volume of air. So it's the volumes of air that I am interested in. Because if it's about, not the thing that light reveals, but the thing that light *is* itself that's the revelation, then the question followed: "What then about sound?" So that sound equally *reveals* things. It's not necessarily the sound in itself, but it's the culmination of a series of geographical, geological, locational, contextual, durational, and meteorological concepts that produce... Well, not concepts, even, but fundaments that come together to produce a sound. So rather than, say, Brandon LaBelle's idea that sound travels through, that it's a disembodied force, it's actually closer to Douglas Adams' concept in *Last Chance to See* where he talks about a puddle becoming self-aware. The water says "Oh isn't this puddle just perfect; it fits me so neatly". The puddle is actually the expression of the ditch, as much as the ditch is the thing that creates the puddle. So the two are the same thing.

So there's an inseparability. But if one looks to the artefact, and a recording, or an abstraction of that concrete... The thing itself is concrete but we can't comment on its existence outside our existence, so we get caught up in a series of meta-representations, that at each contra-indicated and interconnected level reveals something of itself and each other. But we can't necessarily say that this thing exists independently of ourselves, but that it *shows* something. So to take any one thing in a hierarchy of objects over the other... Is the water in the puddle more important than the ditch that makes the puddle itself? Is the recording of the sound more important than the city in which it occurred? Or the open savannah that was days ahead of one of the most devastated storms that it ever saw. So at the time appeared to be completely quiet, but it was literally the calm before the storm. Depending on how far you want to zoom back on the system, you are seeing discretionary things interact to produce complexity, that might itself be simplicity within something else far more complex. It's not tricks, it's just moves put together.

Right. I think we are lucky that we have this term "field recording". The word "field" has come up in so many contexts already in what you have said.

Yeah.

In a world where we have to argue about terms so much, and where so many of them are problematic, I think "field recording," for me, is a perfect term for what we do. Because the "recording" acknowledges the fact it is this secondary product, and that it is technologically mediated. And we should always acknowledge that, as you do. And the "field"... Originally it just came from anthropology, from "field work". Which just meant getting off your ass and going out; it just meant everything you do outside the office. Obviously field means so many more things than that, in terms of systems, in terms of weather systems, as you reference.

And technologically, in terms of electromagnetics and physics, if you were to make an electromagnetic field recording then capturing that, the inverse-square of the distance from the source, would be the diminishing returns on that recording. [discussion of numbers] That's how an electromagnetic field behaves, but it's less concrete how a field of action — without getting all Buddhist, but it's a useful term. At different humidities, sound is going to travel at different speed, and it's the same at different pressure, and different temperature. So there will be a point sometimes where the sound just floats straight towards you, and everything sounds perfect. So the field has a different diffuseness, and it diffuses, and there's a different diffusion to it, when the meteorological situation changes. So there is no one "the field".

No, no, exactly.

Hysterically, I was living in a house, on a small cul-de-sac called The Field, and I was living at number four when I did most of the pipe organ recordings. We discovered after I moved in that we were living at "for the field".

Perfect.

It was ironic, amusing, and somehow apt.

Definitely!

I again found that by a series of accidents that led me to the situation. Not even accidents, but I guess an intention was borne out. It was apt at least.

Well, Rob, I think we should conclude soon!

It's all good.

This is going to take me so long to transcribe, but it's been a vast conversation.

It's like with the lectures, I try to make things interconnect. So I try not to bring things up too lightly in the hope that they'll be useful later, and that I can reflect back.

There is one problem term that I probably should ask about, and that is "soundscape," a term that I know you don't use.

I had forgotten that I had written a short article about the bastard term sound-scape. "Bastard" was used because its lineage is disrupted. I did have an interesting brief discussion with Salome Voegelin. She had been moderating at a thing and she had some critical points to make about Tim Ingold. Who I have read very little of. But I guess maybe it's a patriarchy thing; who knows. But she said that it's useful to use terms, and that it's helpful to find new terms, rather than just dismiss a term out of hand. If you get rid of a denotator, then you lose the ability to denote that thing. One can disagree with John Stuart Mill's treatise *On Liberty*. But to say that liberty is a terrible concept and shouldn't be discussed, then you end up with this vacuum where the concept of liberty used to exist. So you are kind of shutting down an argument, in a way.

On soundscape, much of what Tim Ingold says in the four pages in his article is very useful. Trying to step away from a visual way, largely, of hearing. It's more the diffuseness, to use that word again, with which soundscape is regarded. That it's not seen as structured. "And then there were some soundscapes in the background." It's not constructive; it's literally deconstructed. It removes its power. It removes its structural ability to denote and indicate. Much as I was saying a second ago, when you undo a system or structure, then it loses its ability to effect change. Without the denotation of the specifics of soundscape —

anything ending in "scape" — it becomes generalised. Hence my tendency, rather than to say "it was a beautiful landscape," I might refer to a variegated granite structure adjacent to the North Atlantic. Which would be describing the cliffs of Cornwall. Rather than saying "it was a landscape meeting a seascape" which does very little to describe any of the particulars that made it what it is. You could use all of these words to describe the coming together of all of these different concepts and attributes to produce a structured piece, a work of sound, or even just a recording. Then to finish it off by saying "and a lovely soundscape" you've generalised it and removed the particular that made it what it is, that denotes the field of action. Its impending universality means that it's both everything and nothing at the same time, but ends up being more nothing.

It's interesting I suppose as a historical thing because when R. Murray Schafer first proposed the term, which had scarcely been used prior to him (though it had been, actually; it came from an urban studies person), it was to point out something that had been overlooked. To point out the role of sound in an urban situation, generally, at first, where it had been overlooked. I think that there was positive intentions there. But it was immediately defined to be two different things. [laughs] First of all, just sounds as you hear them somewhere. And I'm not sure we need a term for that. And then also to mean an aesthetic product, a composition with sound.

The same as with the colour field movement: We're sticking our flag in the sand and saying we've invented this term. So as an author I give authorial intent and authority to this word, which then in turn reflects intent and authority to me. But we've started this new school and these are soundscape compositions. So it's kind of like a new beginning of history. From here-on in, we will refer to it as this. To refute that term as being a good thing is literally undoing a school. So there's a degree of heresy within that.



Appendix 10: Timeline of environmental music

This timeline outlines significant developments in audio reproduction, field recording, and environmental music, up to 1970.

- 1850 Claude Pouillet (1791–1868) publishes a book containing the first visual representations of sound that have been subsequently reproduced.
- The phonautograph, the first sound recording device, is invented by Édouard-Léon Scott de Martinville (1817–1879) in Paris.
- 1860 First recording of music: de Martinville sings "Au Clair de la Lune" on 9 April 1860.
- The phonograph, the first sound reproduction device, is invented by Thomas Edison (1847–1931) at Menlo Park, New Jersey.
- First animal recording: a captive Indian shama bird is recorded by Ludwig Koch (age 8) on an Edison cylinder, Frankfurt, Germany.
- Alexander Graham Bell (1847–1922) and Volta Laboratory introduces the graphophone, a wax cylinder recorder.
- 1889 Phonographs available to the public in arcades.
- Jesse Walter Fewkes (1850–1930) makes the first field recording (using a phonograph) while documenting the Passamaquoddy Indians.
- 1892 Richard Lynch Garner (1848–1920) records captive primates in USA for bioacoustic study.
- 1896 Béla Vikár (1859–1945) records folk songs in Hungary.
- 1898 Valdemar Poulsen invents the wire recorder (patented 1900).
- 1898 Birdsong played at the American Ornithologists' Union 16th Congress.
- ~1900 First wild animal recording (now lost) made by Cherry Kearton (1862–1928) in England.
- "Song of a Nightingale," recorded by Karl Reich (1885–1970) in Bremen, becomes the first animal recording published commercially (Gramophone in Germany, Victor in USA).
- 1914 Eric Tigerstedt (1887–1925) demonstrates the first sound on optical film technology in Germany.
- 1915 Cornell Lab of Ornithology founded.
- Lee De Forest (1873–1961) patents optical sound-on-film in the USA while the Tri-Ergon partnership do the same in Germany.
- First use of a field recording in music: Ottorino Respighi (1878–1936) includes a Reich nightingale 78 in his score for *The Pines of Rome*.
- First live-to-radio broadcast from an exterior location: Beatrice Harrison (1892–1965) plays cello with nightingales on the BBC.

- First extant recording of wild birds, made by Arthur A. "Doc" Allen (1885–1964) and Peter Paul Kellogg (1899–1975) for Fox-Case Movietone Corporation in Ithaca, New York.
- Ludwig Koch and Lutz Heck release sounds from Africa as *Schrei der Steppe (Cry of the steppe)* for Verlag Knorr & Hirth, Munich.
- Multimedia songbook *Songs of Wild Birds* released by Albert Brand (1889–1940) and the Cornell team.
- Danish ornithologist Carl Weismann (1906–1999) releases a five disk set of birdsong.
- Ludwig Koch and E.M. "Max" Nicholson release their songbook *Songs* of *Wild Birds* in the UK.
- 1937 Koch's first BBC broadcast on The World Goes By.
- BBC Radio debuts *The Naturalist* (host Desmond Hawkins), the first natural history programme.
- Soundmirror BK 401, the first commercially available tape recorder, is released by Brush Development Company (USA).
- 1948 Pierre Schaeffer (1910–1995) inaugurates *musique concrète* with the broadcast *Concert de Bruits* on Radio France.
- 1951 First portable tape recorders made by the Amplifier Corporation of America, Nagra (Switzerland) and Uher (Germany).
- John Cage (1912–1992) initiates Music for Magnetic Tape Project and begins work on *Williams Mix* (completed 1953).
- Jean-Claude Roché (1931–) releases *Birds of Camargue*, which sells 10,000 copies in the first year.
- John N. Hutchinson (1928–2015) makes his first bird recordings in Western Australia.
- Luc Ferrari (1929–2005) premieres *Hétérozygote*, an anecdotal composition incorporating field recordings.
- 1969 R. Murray Schafer (1933–) publishes *The New Soundscape*.
- 1969 Environments: New Concepts in Stereo Sound released by Irv Teibel (1938–2010) on Syntonic Research.
- 1970 Songs of the Humpback Whale, compiled by bioacoustician Roger Payne (1935–), is released by Psychology Today magazine.
- 1970 Ferrari completes *Presque rien ou le lever du jour au bord de la mer*, a composition consisting only of field recordings.
- 1970 Beaver & Krause (Bernie Krause, 1938–) release *In a Wild Sanctuary*, incorporating field recordings into popular music.



