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From inputs to outputs: an investigation of process in sound art practice

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This thesis and the accompanying portfolio of practical works
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Abstract

This practice-based thesis aims to expand sound art discourse by considering process in sound art practice through an exploration of artists' experiences.

There is still relatively little debate about or critical reflection on the location or nature of process in contemporary sound art's discourse. This thesis addresses this lack of debate and reflection by developing a framework through which artists can explore and then communicate their perspectives in order to extend sound art discourse. Three key areas emerge from this approach: process, practice and discourse. This thesis investigates how they relate to and interact with each other.

In order to explore process, I have borrowed from and extended concepts from the model of *conceptual blending*, a theory of cognition developed by Gilles Fauconnier and Mark Turner in *The way we think: conceptual blending and the mind's hidden complexities* (2002).¹ Through the notion of inputs, which are blended through process into outputs, the model of *procedural blending*, adapted from conceptual blending, illustrates how new meaning is created, providing a basis for the investigation of process in sound art practice for inclusion in its discourse.

This exploration is carried out through a modular approach to methodology, which I have termed *Modular Field Methodology*. I first examine my own past and current work, which offers me the opportunity directly to observe process within my practice and to observe how new themes and views emerge from an engagement with new inputs. The examination of my past and current work also provides a space to gain a deeper understanding of *procedural blending* in sound art practice. This 'introspective approach' is then calibrated by an investigation of the practice of other artists, through collaborative workshops, interviews and an online magazine, each providing different spaces for a wide range of practitioners' voices reflecting on the diversity and complexity of multimodal sound art practice.

¹ Please note that, while *The way we think: conceptual blending and the mind's hidden complexities* was

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List of exhibitions, performances, recordings and publications taking place during this research

1. Performances, recordings and exhibitions

September 2014: Showing of my film *objects as process* as part of the Disposable Film Show, Cinema Museum, London.

July 2014: Development and performance of a new vocal piece entitled *Unwitting Scores* at IMT Gallery, London. Commissioned for *Forms of Ventriloquism* curated by Maria Papadomanolaki.

May 2014: Release of my CD *Bedroom Symphonies* on Linear Obsessional, a label for experimental and improvised music. *Bedroom Symphonies* is an album of eight compositions made from voice practice sessions during a number of tours and residencies, and is accompanied by a booklet containing a selection of my photographs from the trips and a text about my work by Brandon LaBelle.

May 2014: Performing of an improvised voice and drawing duet with Jude Cowan Montague at Full Stop Café, London.

April 2014: Release of a 13-minute long extract from a live performance at the Barbican (August 2013) on Audition Records, as part of *Voix Brutes*.

April 2014: Release of Brixton Lullaby, as part of the temporal benefit release *For Syria* on *Linear Obsessional*. The piece is an extract from a collaborative live improvised studio session originating in 2007 and edited in 2014.

April 2014: Performance of a stereo version of *Traces in/of/with Sound* at the Horse Hospital in London as part of a night featuring various takes on extended cinema performance.

April 2014: Performing an unamplified improvised voice and drawing duet with Jude Cowan Montague at Scaledown, London.

March 2014: Site-specific performance at SonicueB Festival, London, curated by Luca Nasciuti.

March 2014: Collaborative residency and event with Tansy Spinks at Wimbledon Space, as part of ACTS RE-ACTS Festival, produced by Wimbledon College of Arts. We explored collaborative, site specific sound performance through objects and improvisation.

March 2014: Showing of my film *Twine* at Sprawl, Troyganic, London.

February 2014: *In A Day's Work* was presented at Sound.art event at the Tin Tabernacle, London, curated by Lara Pearl.

December 2013: Performance of an acoustic duo with Viv Corringham at GV Art, as part of *Sprawl / Noise and Whispers*.

08 November – 14 December 2013: Showing of an installation version of *Traces in/of/with Sound* at Noise and Whispers, GV Art, London, curated by Martin Smith.

August 2013: Live improvised voice performance at the Barbican Centre, London, as part of *Hack The Barbican*. Curated by Music Hackspace.

July 2013: Live improvised concert as part of the *European season of live-looping festivals*, curated by Georgina Brett.

June 2013: Extract from a previous improvisation with Viv Corringham published as part of *Museruole JukeBox On The Air – women in experimental music*, Italy, curated by J.D. Zazie.

June 2013: Performance of a stereo/two projection version *Traces in/of/with Sound* at the Aural Detritus Festival, Phoenix, Brighton.

June 2013: Presentation of a nine-channel sound installation entitled *Remembering World* made for the BeOpen Sound Portal in collaboration with LCC sound art students Peter McKerrow, Robbie Judkins and Charlotte Desborough. Commissioned by CRiSAP for the *Sounding Space* symposium, University of the Arts London.

June 2013: *over ride* was presented at the Camberwell Arts Festival, London.

April 2013. Live improvised performance at *Open Provocation Festival*, Polruan, Cornwall, curated by Robert Curgenvin.

December 2012: Improvised collaboration with David Aylward, Tom Scott, Adam Bohman and more at Utrophia Project Space, London.

December 2012: Performance of my recorded piano piece *November Song* at 60×60, PianoForte Foundation, Chicago.

November 2012: Artist talk and performance of *Traces in/of/with Sound*, four-channel sound/one-screen projection, SoundFjord, London.

12-18 November 2012: Residency at SoundFjord, London, as part of their research projects series *Sequence Series: Turn, Move, Change*.

November 2012: An excerpt of my piece *Room With A View* was published as part of *Ex-trauma*, part of the Experiments and Intensities series published by Winchester University Press, curated by Annette Arlander, Yvon Bonenfant and Mary Agnes Covey-Krell.

October 2012: Live improvised voice performance at the Liverpool Biennial, as part of *Electronic Voice Phenomena*. Curated by Mercy.

May 2012: Performance of an eight-channel/ two projection version of *Traces in/of/with Sound* as part of City Lights: Transonic Transformations, City University, London, curated by Holly Ingleton.

March 2012: Performance of a mono/one projection version of *Traces in/of/with Sound* as part of the Dismantled Cabaret, Performance Space, London.

July 2011: Live performance at Café Oto, as part of the opening concert for Simon Whetham's Active Crossover at SoundFjord, London.

June 2011: Live voice performance at *Text Festival*, Bury. Curated by Tony Trehly.

2. Some of the ideas contained within this thesis have been presented in earlier, reduced forms on the following occasions:

November 2013: Paper at *Seeing Sound* symposium, Bath University, entitled *Traces in/of/with sound: an experience of audio-visual space*.

June 2013: Presentation of *Remembering Worlds* and hosting a panel discussion with participating artists at *Sounding Space symposium*, University of the Arts London.

June 2013: Paper at *Sound, Sight, Space and Play* symposium, De Montfort University, Leicester, entitled *Reflections on Traces in/of/with Sound: the experience of sonic space in audio-visual performance*.

November 2012: Artist talk introducing aspects of making *Traces in/of/with Sound* at SoundFjord, London.

July 2012: Paper at *Sound, Sight, Space and Play* symposium, De Montfort University, Leicester, entitled *Reflections on over ride – an experiment to interrupt sensorial interaction in audio-visual relationships*.

13 July 2012: Discussion of *over ride* and other works at radio radeq, V22 Summer Club, London.

17 May 2012: Paper at SOUND::GENDER::FEMINISM::ACTIVISM symposium at London College of Communication, entitled *Escaping gender through technology: sonic freedom and the machine*.

06 February 2012: Presenting *over ride* to the Sonic Art Research Unit listening group (SARU), Oxford Brookes University, Oxford.

30 May 2011: I was interviewed on Resonance FM by composer Peter McKerrow, discussing the development of my practice.

3. Websites

The following webpages have been designed and maintained during my research:

<http://www.reflections-on-process-in-sound.net>

<http://irisgarrelds.com/category/research>

<http://bridgeofsound.tumblr.com>

Contributions to knowledge

This research makes the following major contributions to knowledge:

- It develops and tests a new framework anchored in process, which allows the artist to both explore and express their practice, thereby focusing on the primacy of the creative experience. This framework, which I term procedural blending, models process in sound art practice based on conceptual blending. See Chapter Three, pp. 51-53.
- Through this new framework, I also develop a system by which essentially subjective creative experiences can be made explicit and brought into relation with each other. It allows us to place dissimilar categories such as childhood experiences and tools in conjunction with each other as inputs to process.
- Consequently, this new framework allows me, the researcher, to consider both theory and practice as inputs to process, and equally both theory and practice as an outcome of process, supporting the work of the practice-based researcher.
- Furthermore, I have established a substantial collection of viewpoints from a range of contemporary practitioners by engaging with them from the perspective of a fellow maker. This includes conducting interviews with respected artists in the field, and the inception of a new online magazine. The latter has already gained recognition in the form of a review in *The Wire* (September 2014). A selection of interview recordings and three issues of the magazine can be found on the accompanying data DVD (see pp. 184-185 for a list of contents).
- From these substantial primary research materials, I was able to develop the beginnings of a taxonomy of inputs to sound art practice. This taxonomy contributes to the discourse by exploring central concerns from the practitioner's perspective and can be found in Chapter Five (starting on p. 105) and Chapter Six (starting on p. 134).
- These materials were the result of the development of a mixed methodology, termed Modular Field Methodology, which aids the researcher to theorise personal process within a wide field of practices. Each of its components allows the participating practitioners, including the researcher, to express their experiences in helpful ways. It is already being adopted by others and is set out in Chapter Three, section 3.5 (starting on p. 56)
- The creation of a unique body of creative works as set out in Chapter Four. These can be found on the accompanying data DVD (see pp. 184-185 for a list of the DVD contents).

This research also contributes the initial phases of generating new knowledge:

- I initiated the development of a new method for developing new works, based on procedural blending, which I believe are also applicable for educational purposes or in interdisciplinary research settings. I envisage this as a contribution to the development of sound art practice by extending how new inputs may be integrated into it. It is outlined in Chapter Four pp. 92-96.
- I have created and made available a collection of interviews, new writing as part of the online magazine, and workshop reports, which will allow future researchers to test my conclusions and develop others (the see accompanying data DVD).
- In addition to the main concern of this thesis, I developed the notion of audio-visual spatiality in screen-based works and explored respective strategies. These were set out in a paper delivered at *Seeing Sound*, a practice-led research symposium at Bath Spa University in November 2013.

Introduction

1. Background

This practice-based PhD research emerged from my own creative practice as a sound artist and curator. This has involved, for instance, engaging with continually developing technological tools (ranging from early stand-alone MIDI sequencers to software such as Max/MSP), crossover into other genres, for example, 90's IDM² and improvised vocal performance, and working in different creative disciplines ranging from music to video. This complexity, described as *multimodal*^{*3} within this thesis, brought with it the need to evaluate and possibly to absorb a continuous flow of experiences into my practice, a situation that is challenging, but also provides immense inspiration and keeps practice fresh, while still developing central concerns. I have found it difficult to identify and communicate the central concerns within this constant flux and change. Furthermore, music, an important aspect of my practice, continues to inhabit a problematic position within sound art discourse and I will explore this situation in Chapter One. By and large, I believe that this multifaceted aspect of my work provided the breeding ground for the inception of this thesis and that it will also be particularly useful for the study of such practices.

In my understanding, such personal experiences can have an impact on the wider world of sound art as a source of change and development, underscoring the need to explore such experiences further. For example, throughout the 20th century, engagement with developing technologies lead to paradigm shifts in how sound was understood and made use of, often leading to different and sometimes even opposing outcomes when brought into different personal creative practices. While, in the United States, John Cage used sound recording technologies to draw attention to the source of a sound it (LaBelle, 2007, p. 24), in France, Pierre Schaeffer's *musique concrète*^{*} responded to the same technologies by aiming to detach a sound from what produced it (ibid, p.26).

Some differences can be attributed to the diverse routes by which artists enter the realm of sound art. Many artists, such as myself, come from a music background, while others were trained in fine art (Rolf Julius), movement (Marianne Decoster-Taivalkoski) or even landscape design (Carsten Nicolai). These differing routes bring with them divergent understandings of sound as a medium and how it can or ought to be used. The variety of creative approaches found within sound art has contributed to producing somewhat fluid

² IDM (intelligent dance music) is an electronic music genre that developed in the early 1990s.

³ Terms which on first use are followed by an asterisk can be found in the Glossary on pp. 186-188.

boundaries around sound art as a field, as I will show in Chapter One, and there is currently no agreement within the field as to what exactly sound art is.

2. Research aims

In common with others who have voiced the need for a re-framing of sound art, for example, Seth Kim-Cohen (2009) and Christoph Cox (2011a), both of whom I will come back to in Chapter One, I believe that there is a need for a different approach to the consideration of the field, one that facilitates debate within its rich and fluid environment, rather than focussing on how to establish its exact territory. However, whilst Kim-Cohen seeks a solution by concentrating on the concept of a work (which, as my primary research shows, may itself emerge from practice), and Cox foregrounds an audience's sensorial experience, I turn towards the experience of the maker in all its facets, to include the senses and the mind as aspects of process*. How can we talk about, for example, from a point of practice, what flowed into John Cage when he was creating his percussive works in response to 'Schoenberg's structural harmony' (Cage, 1990, online),⁴ or into Max Neuhaus when moving from percussion performances to site-specific public art pieces such as *Listen* (1966 -1975)?⁵

The wealth and diversity of influences found in sound art practice initially prompted me to ask how artists integrate the experiences and influences they encounter and how these experiences are reflected within the work produced. Furthermore, can the exploration of such matters lead to the development of a new language that bridges sometimes seemingly opposing views, such as whether extended notions of music ought to be included within the discipline or not? Can we use process as a starting point to unravel such conundrums? These questions condensed into the following research question: Can sound art process provide a language through which to discuss practice from a practitioner's perspective?

In this thesis, I will show that focusing on the creative process in sound art practice can reveal what lies behind, or within, the art works produced and help contribute to the discourse by exploring process. Furthermore, due to its multi-disciplinary background, a precise definition of what sound art means is elusive. I will examine this in more detail in Chapter One. In an attempt to pre-empt the problems of fluctuating boundaries on the one hand, and opposing views on the other, this practice-based research proposes to focus not

⁴ Austrian Arnold Schönberg was a significant 20th-century composer who developed the new twelve-tone composition technique (also known as dodecaphony or serialism).

⁵ *Listen*, the earliest of Neuhaus' public art works, was essentially a series of 15 sound walks, conducted between 1966 and 1975, where he stamped participants' hands with the word *listen*, followed by an exploration of the local soundscape.

on the works of sound art as discrete entities, but to explore the process underlying their production. This process is shaped by and shapes the individual artist's understanding of sound, both of which in turn contribute to the wider field. The aim of this approach is to establish a model for the consideration of sound art practice and develop a framework through which the practitioner's perspective can be foregrounded.

Although I believe that personal aspects are relevant to process, I do not plan to focus overly on personal narratives, but to add to sound art discourse by shining a spotlight on process from an artist's point of view. Along with other artists and writers, such as Brandon LaBelle, who called for process to be made more central (2013, *Reflections on Process in Sound* Vol. 1),⁶ I intend to emphasise the role of process by providing a strategy for artists to investigate and communicate practice.

3. How the aims are explored

This thesis introduces the model of *conceptual blending**, or *blending theory*, developed by the cognitive scientists Gilles Fauconnier and Mark Turner (2002).⁷ I use conceptual blending as a model for understanding sound art through the process of creating, by viewing aspects such as bodily experiences, inspirations, methods, materials, world views and theoretical models an artist may bring to bear on any given project as inputs* to it.

I will explore my research aims through a set of modules, as part of a Modular Field Methodology, in an attempt to investigate the field of sound art process from as wide a variety of perspectives as possible and at different levels of accessibility. For example, my own practice, past and present, is used as a laboratory in which to observe closely how process unfolds, to determine underlying principles and to test *conceptual blending* as a model for process.

This 'introspective approach' is calibrated by investigating the practice of other artists in a similar manner, through collaborative workshops, interviews and the provision of a platform for new writing, the online journal *Reflections on Process in Sound*. Each of these modules provides a space for a wide range of practitioners' voices to reflect on the diversity and complexity of multimodal sound art practice.

⁶ The magazine can be found in PDF format on the accompanying DVD. It is also available online at <http://www.reflections-on-process-in-sound.net>

⁷ The book *The way we think: conceptual blending and the mind's hidden complexities* was originally published in 2002. However, I will later be referring to the first paperback edition, published in 2003.

4. Key terms

A number of key terms emerged from this research: process, experience, input and output*.

Process:

What is most important here is the notion of process. This became apparent in the research project. My current understanding of process relates closely to the following testimony of Hildegard Westerkamp describing how she composes:

It is not unlike a traveller's encounter with a new place. The journey itself becomes the point of balance between the traveller's own inner reality and how he or she meets the new place (Westerkamp 2002, p. 54).

The significance of this statement for me is twofold: it firstly acknowledges the temporal aspect of making, and, secondly, recognises an interconnection between the maker and her creative situation. Westerkamp's view mirrors my own experience of making work, where encounters with places, thoughts or materials are negotiated, incorporated into the work or are rejected, and where I often have little idea what might happen until it does (I will relate my past practice in more detail in Chapter Two, starting on p. 34). Exploring process, as emerges from this research, does not end with a description of the steps or procedures used to make a work, but expands to consider all aspects that potentially might be part of the creation of a work, even personal aspects such as feelings or bodily conditions, in an interconnected unfolding of making.

Experience:

In this extended view of process, by experience, I mean an artist's personal and subjective, lived encounter with her journey of practice, which incorporates her sensorial perceptions and cognitive activities. However, not all experience is necessarily reflected in the work.

Input:

The concept of an input – a term borrowed from blending theory as set out in Chapter Three (see p. 48) – denotes everything of relevance that flows into the making of a work, such as tools, techniques or theoretical concerns. Applied to Westerkamp's view of process an input represents the new places encountered, but also embraces the already familiar ingredients of practice.

Output:

Following on from input, the notion of output refers to all that might result from process. This may be an artwork, or a realisation that carries on as an input to subsequent works (see my earlier comments on process as a continuum). It could equally be a theoretical

commentary, underscoring the possibilities of the artist as ‘thinker’ and writer. With regard to this, it is illuminating to relate Westerkamp’s description of her composition process to her practice of soundwalking, as an input to actual compositions and to her writing about it.

5. Chapter outline

In Chapter One, I will give an account of current discussions within sound art discourse and consider the field’s emergence throughout the 20th century, mainly through developments in visual art, music and technology. I will demonstrate the discipline’s manifold trajectories, still reflected in practice today. Music, which is an important element of my work and that of others, is discussed within the context of recurring debates around its role in sound art.

In Chapter Two I will present a first engagement with process, exploring my past practice history in order to illuminate the role of personal process and how wider concerns arise from this process. I will also demonstrate the route by which the concerns of this thesis have emerged and provide a base from which to consider the new works that are part of this submission.

In Chapter Three, I will consider the theoretical framework of this thesis, beginning with a brief description of the journey that led me to encountering and recognising *conceptual blending* as a suitable model for exploring process. Firstly, I will present the notion of *multimodality* (Forceville and Urios-Aparisi, 2009) to address how the field’s complexity may be described. I will then introduce *conceptual blending*, developed by cognitive scientists Gilles Fauconnier and Mark Turner (2002) and consider the changes it underwent in order to arrive at procedural blending* to describe how several modes*, or inputs, can flow into something new, a work of sound art, for example. This chapter also contains a section in which I consider how my primary research was conducted, exploring process through four modules: my own practice laboratory, interviews, an online magazine and one-to-one workshops.

In Chapter Four, I will turn towards my practice, where I apply the key principles of blending to a selection of four of the ten projects I completed during the research. For reasons of space I have restricted the discussion to those projects that would allow me to present different facets of how blending can be used to articulate practice. I also regard these four projects as key works in the development of the ideas presented in this thesis.

This discussion culminates in the identification of a set of inputs as constants in my practice although I chose to work with these inputs in different ways.

These findings are then calibrated and expanded upon in Chapter Five and Chapter Six where I explore other artists' work. I do so through a taxonomy of inputs as an examination of how artists experience the inputs to their practice. Chapter Five will cover the areas of sight and sound, approaches to listening, as well as tools and methods. In Chapter Six, I will explore how artists expand their inputs, their notions of freedom and the new, the artist as human being and how artists choose from and integrate inputs.

In the Conclusion, I will draw these threads together and summarise the findings of this thesis. Furthermore, I will consider the unique contributions to knowledge this research has generated and evaluate the research in terms of how well the methodology has served its aims, what could have been done differently, what further questions have arisen from this thesis and how they might be investigated.

Chapter One

Inputs to sound art practice: trajectories of fine art, music and technology

1.1 Introduction

In the Introduction, I established that this research focuses on process from a practitioner's view and aims to enrich sound art discourse. In Chapter One, I introduce the field of sound art and some of its ingredients. Sound art emerges as a complex discipline, with multiple histories, the main trajectories being fine art, music and technological developments throughout the 20th century. I will show that, arising from these trajectories, individual interpretations of sound art differ. I will also show that the way in which some of these ingredients are understood or expressed in practice is by no means clear or fixed. Whilst the position of sound art within the fine arts context is now widely acknowledged, its connection with music is far less well established, some would even go as far as to exclude it from the discipline altogether. However, music is a feature in my work and that of others. In this chapter, I will advocate it as an input to sound art practice. I propose process as an underlying principle by which divergent views or practices can be bridged without the need to resolve them, through understanding diverse aspects as potential inputs to sound art practice. What is meant by this exactly will become clearer throughout this thesis. Furthermore, mapping* comes within the scope this chapter as a way by which artists connect or explore aspects of practice. Mapping, or understanding one domain in terms of another, is a key aspect of blending in Chapter Three and leads me to identifying blending as a potential framework.

However, this chapter is not to be understood as an attempt to generate a definitive history or definition of sound art, but as a consideration of complex, sometimes opposing, views. The intention is to set out my own understanding of the field, as it is relevant to this thesis. It needs to be understood as a narrative describing a shifting field of activities, where personal experience intersects with other such narratives within the wider environment of sound art practice and discourse.

1.2 Diverse understandings of sound art: an outline

I will begin by considering some of the diverse understandings of what sound art may or may not be. Sound art pioneer Max Neuhaus, for instance, asked in 2000: 'Let's examine the term. It is made up of two words. The first is sound... The second word is art. The implication here is that they are not arts in the sense of crafts, but fine art' (Neuhaus,

2000, online). Neuhaus also warned against using sound art to rebrand what is ‘essentially new music’ (Neuhaus, 2000, online), thereby positioning sound art in close alignment to fine art, moving it away from the world of sound-as-music. In my view, such an exclusive alignment is proving problematic and I understand both visual art and music as inputs to sound art practice.

Nearly a decade later, Seth Kim-Cohen (2009) even proposed a move from the phenomenological experience of the artwork as *sound-in-itself* in an acousmatic sense⁸ to a conceptual, semiotic evaluation of *sound-as-meaning*. He was, thereby, aligning sound art closely with conceptual art, advocating, for example, that to appreciate Alvin Lucier’s *I am sitting in a room*, ‘one need not – perhaps even *should* not – listen to *I am sitting in a room*’ (Kim-Cohen, 2009, p. 193).

More recently, in 2011, and in contrast to Kim-Cohen, Christoph Cox⁹ highlighted the value of experiencing sound as material beyond meaning:

I’ve come back to Nietzsche as a way of offering a materialist conception of sound, to think of sound not in terms of signification, representation – all those terms that have dominated the study of the visual and the textual over the past few decades – but in terms of a flux or becoming that precedes and exceeds representation and signification. (Cox, 2011a, online)

Like Neuhaus and Kim-Cohen, Cox interlaces sound art with the wider art world. However, whilst Kim-Cohen threads aspects of fine art into the appreciation of sound by focussing on concept, here, Cox aims to fold sound art approaches into the arts by foregrounding the sonic experience, rather than what meaning it contains.

Trevor Wishart puts forward a musical understanding of what he called *sonic art*. He describes it as ‘the arts of organising sound events in time’, thereby paraphrasing the term *composition* for ‘those who cannot bear to see the word “music” extended’ (Wishart, 1996, p. 4) and using the notion of a sonic continuum as distinct from traditional ‘latticed-based’ composition (ibid, pp. 23-30). Here, sonic art becomes a home for artists excluded by the music community, although Neuhaus warns against rebranding music (Neuhaus, 2000, online). Wishart considers the conceptual aspects (as construction) of sound in conjunction with its experience.

⁸ Acousmatic sound describes sound heard without seeing its cause. In acousmatic music, loudspeakers are used to relay fixed audio compositions allowing listeners to focus on sonic characteristics.

⁹ In her PhD thesis, Louise K. Wilson remarked upon their contrasting opinions: ‘Essentially this battle [between Cox and Kim-Cohen] contrasts the materiality of sound with a sign-based, conceptual model, and was publically “fought” both in the pages of *Artforum* (in 2009) and at the Issue Project Room in Brooklyn, New York (as part of the Issue Project Room Series “Theoretical” on April 7, 2010)’ (Wilson, 2012, pp. 3-4).

The *Sonic Arts Union* is an early example of composers using the term *sonic art* within the (US) experimental musical context. Active in the 1960s, the collective was founded by composers Robert Ashley, David Behrman, Alvin Lucier and Gordon Mumma. Brandon LaBelle firmly sites them within the music context by explaining that

The Sonic Arts Union is one of the more adventurous indications of experimental music's ambition to further the scope of sonic and acoustic experience and musical strategy of this time. (LaBelle, 2007, p. 124)

However, he goes on to describe Lucier's compositions in particular as vehicles for sonic investigation, rather than musical considerations, admitting to at least an overlap between experimental music and sonic or sound art practice. In his book, *Reflections of an American composer*, Arthur Berger surmises that '... perhaps Lucier continued the process [composing dissonant music] on his own until he finally arrived at the non-music genre that is sometimes called Sound Art' (Berger, 2002, p. 227). This statement suggests that the creative use of sound has moved beyond music and is, hence, called sound art.¹⁰ It is not merely an act of changing label from music to sound art, as Neuhaus warned. It seems, however, that what is being talked about here are essentially concepts of music and what is meant by music or sound art, rather than absolute criteria. Lucier himself did not necessarily separate the two, stating that

I did retain, somewhere in the work, the "musical" sensitivity, timing, and so forth, I had developed in years of more conventional composing... I am one person; my ideas come from the same place. I get ideas, then execute them in the ways the material seems to suggest. (Lucier, 2003, online)

Lucier clearly notes the personal thread of process throughout his work; for him, the skills and methods developed within music are also employed outside it – encapsulating a perspective on practice that this thesis seeks to foreground.

From another practitioner's point of view, the label sound art signifies freedom from both the traditions of visual art and music. In an interview with *Ear Room*, Hildegard Westerkamp explains:

... I am free to do what I want to do with sound! It is a liberating term, free of constraints of classical music traditions as well as of visual art traditions. Many sound artists come from the visual arts and experience sound art as a liberation from the silence of galleries and museums. It has given them licence to use sound as an expressive medium and insert noise, sound and music into a traditionally silent medium. (Westerkamp, 2011, online)

¹⁰ With respect to terminology, whilst sound art practitioners use the terms sonic art and sound art interchangeably, those from an electroacoustic background may distinguish between the two, sonic art being understood as relating to musical practices. In the quotation above, Berger himself uses sound art.

Rather than focusing on what is allowable within a discipline, Westerkamp emphasises how sound art frees the visual from traditional constraints.¹¹ This is brought about by injecting sound into art, in a way reminiscent of Attali's more political views of noise as a challenge to authority (Attali, 1977). Whilst liberating for some, the term sound art is still an uneasy fit for others. Douglas Kahn, for example, favours the phrase 'sound in the arts' (2006, online), which implies the subsumption of sound into the arts – where sound becomes another material within that spectrum – rather than the existence of an equal partnership between sound and art favoured by Neuhaus.

The view that sound art is defined as a synergy between two equal partners: sound and art, seems particularly strong in Germany with its *Klangkunst* (sound art in German) tradition. On the Goethe-Institut's website, for example, musicologist and curator Carsten Seiffarth, instigator of *singuhr*, Germany's first sound gallery, bemoans the fact that, in the field of contemporary music, people generally misunderstand *sound art* as indicating performative music works that do not use notation, predominately within experimental and electronic music (Seiffarth, 2009).¹² In an article in *Organised Sound* entitled "Sound art or klangkunst? A reading of the German and English literature on sound art", Swedish authors Andreas Engström and Åsa Stjerna (2009) make the case for two diverse understandings of what sound art entails in the German and Anglo-Saxon discussions of the field. They argue that the German understanding centres primarily on the relationship between sound and space through sound sculptures and installations*, whilst the Anglo-Saxon view offers a broader and more vague understanding by also exploring the implications of sound as a medium, cultural context or sound design (Engström & Stjerna, 2009). That said, as interpretations and the exact content of what sound art entails may differ across regions, they also shift over time in both practice and discourse.

In this section, I have discussed a variety of ways in which sound art can be understood. For Christoph Cox, however, this does not negate the usefulness of the term, but rather it becomes a means by which disparate practices can be combined:

It's amazing to me how much the term is rejected or disavowed by artists, and even by critics and scholars. For me, the term is really useful, because it provides a way to group together forms of artistic practice that pay special attention to the sonic and that consider the sonic aesthetically – your [Luke Fowler] films, for example. You might not describe your work as "sound art". But I find it important and fruitful to consider your films alongside work [of] Christina Kubisch, Steve Roden, Stephen Vitiello, and other sound artists. For me, the term "sound art" draws together a

¹¹ Her practice, as does Lucier's, includes the input of composition.

¹² My translation. Original: Vor allem im Bereich der zeitgenössischen Musik scheint oft das Missverständnis vorzuherrschen, dass sämtliche nicht in Noten notierte performative Musikdarbietung – vor allem in der experimentellen und elektronischen Musik – Klangkunst sei.

cross-section of artistic work in a range of media: film, video, sound installation, sculpture, drawing, recorded work on CD, etc. (Cox 2011a, online)

Sound art becomes a method of reflection, bringing together difference under the banner of reflecting on the heard, not as a sonic construct, but rather in terms of sensorial responses arising out of the material aspects of sound, their 'texture and temporal flow' (Cox, 2011b). In Chapter Five, I will consider listening as an input to sound art practice in more depth (see pp. 116-119).

In the following statement the broadcaster and composer, Robert Worby, expresses his view on why sound art (at least as far the UK is concerned) is as diverse as its practices and their respective histories:

The history of sound art has many strands and threads and they don't join together neatly at one convenient source like the branches of a tree. Tradition plays an important role here. Some sound artists feel an affinity with traditions firmly rooted in music, others associate themselves with the fine arts, with sculpture, installation, performance art and conceptual art. Some are connected with the spoken word, with poetry, text and the voice. There is a tradition rooted in environmental concerns, noise pollution and ecology. Soundscape composers use sound to articulate something of the characteristics of a particular place or places. Radio and broadcasting have established their own traditions within the broad sweep of sound art. Some sound artists also work in film, video and photography. And, of course, there are sound artists, many sound artists, working across these traditions, borrowing ideas, aesthetics and techniques to make work that refuses to be neatly categorised or labelled. So the various threads of sound art weave together rather like the fabric of a tapestry and unpicking them into historical strands can be quite difficult. (Worby, 2008, p. 15)

This statement illustrates sound art's many trajectories and practices that make it difficult for artists at different ends of the spectral field to relate to each other. Although sound art has become established as a new field, it operates not just across media, as Cox highlights, but also across disciplines or philosophical approaches. What is meant by the term is influenced, literally, by where one is coming from. For this reason, and together with others like Brandon LaBelle or Salomé Voegelin, I advocate a closer examination of process, foregrounding the practitioner's perspective within discourse.

In the next chapter, I will set out my own journey in order to illustrate my position, but, for now, I would like to follow some of the historic trajectories mentioned by Worby (above) that brought about such a complex discipline as sound art. I will illuminate some of these concerns, focusing on music, art and technology.

1.3 The emergence of sound art throughout the 20th century

In the last section, I presented an overview of how sound art is understood. Now I will consider the emergence of sound art in the 20th century, and, with it, some of the connections that were established between fine art, music and technology.

Sound art is a relatively new discipline in Western arts. Sound artist and composer Alan Licht identifies as its main crystallisation point the advent of technologies such as the telephone and sound recording equipment that allowed sound to be separated from its physical origins and cultural spaces (Licht, 2009).¹³ This separation enabled sound to be perceived as both a liberated and liberating material in its own right, a notion that initiated changing views of sound in the fine arts world as well as in music in the West, laying the foundations for understandings of sound as a material in, for example, *musique concrète*.

Developing technologies influenced changing appreciations of musical texture. In 1913, for example, surveying music from the point of view of a visual artist, Futurist painter Luigi Russolo described in *The art of noises* feeling far more attracted to dissonances, machine noises and everyday sounds than those of an orchestra as 'Musical sound is too limited in its variety of timbres' (Russolo, 1986, p. 24).¹⁴ Russolo's views expressed an expanded, and indeed favoured, notion of musical textures that included sounds other than those emitted by traditional instruments. Russolo's friend, Edgard Varèse, on the other hand, regarded electronics as an addition to traditional instruments citing Westerns music's ability to embrace technological developments as a reason for its wealth (Varèse, 1936-1962, p. 19). By extension, it could be argued that sound art may also derive its richness from embracing multimodal practices. Furthermore, even within this strand of musical development, opinions were divided as to what music should include, mirroring attitudes to the discipline of sound art.

The American composer, John Cage, continued this trajectory of musical expansion, stating in 1937:

I believe that the use of noise to make music will continue and increase until we reach a music, produced through the aid of electrical instruments, which will make available for musical purposes any and all sounds that can be heard... The present methods of writing music, principally those which employ harmony and its reference to particular steps in the field of sound, will be inadequate for the composer, who will be faced with the entire field of sound. (Cage, 1961, pp. 3-4)

¹³ In my own practice I explore introducing a new technology to my work, resulting in new kinds of works (see Chapter Four, pp. 73-77).

¹⁴ The use of 'found sounds' in sound art echoes the use of 'found objects' in visual art.

This statement expresses similar concerns to those raised by Russolo from a composer's point of view, rather than a painter's. It primarily recognises the qualities of sounds that had not been classed as musical, but as noise, and the belief that, through this inclusion, music and the ways of creating it would be altered. Cage later went one step further expanding the conceptual aspects of music, if not its praxis, to silence. It could be argued that, by doing so, he brought this line of theoretical investigation to its natural conclusion: after embracing all possible sounds and non-sounds, after including even the un-heard, there is nothing else into which musical materials could conceptually expand. Although, on a practical level, human beings cannot experience complete silence, as Cage found out when visiting an anechoic chamber, which absorbs sonic reflections, and encountering the sound of his own nervous and cardiovascular systems.

Throughout to the 20th century, avant-garde visual artists and composers explored shared concerns, for example, an interest in spatiality. Edgard Varèse's contribution to the Philips Pavilion for the 1958 World's Fair in Brussels, *Poème Électronique*, employed over 300 speakers to create a sonic space by diffusing three synchronised tracks via a spatial sound distribution system, a precursor of later conceptions of multi-channel diffusion. It is still considered one of the main works of 'electronic music' (Lombardo, Valle & Tazelaar, 2010, p.1).¹⁵

The other elements in the pavilion, contributed by equally luminary contemporaries, Le Corbusier and Xenakis, consisted of:

... artificial lighting, a black and white film, two dimensional shapes superimposed on the film by projectors, three-dimensional forms illuminated by ultraviolet light, and finally architecture. (Kiyak, 2003, p.162)

This collaborative set-up anticipates two further recurring elements of later sound art: the relationship between sound and image, and that between sound and architecture.

Brandon LaBelle explains that interactions such as these leave their mark on the artist and the field they work in, for example by 'nurturing mutuality between sound and space', and offering an exploration of how the concepts and realities pertaining to fixed materiality and vibrational sound can enrich each other, even when conflicting (LaBelle, 2007, p. 150). 'Whereas sound installation generally moves from the "time of music" to the "space of sound", Neuhaus' work suggests that it does so by *temporalizing* space...' (LaBelle, 2007, p. 162). Maryanne Amacher also notes the 'tone of place' (LaBelle, 2007, p. 172).

¹⁵ Max Neuhaus pointed out in 2000: 'When faced with musical conservatism at the beginning of the last century, the composer Edgard Varèse responded by proposing to broaden the definition of music to include all organized sound. John Cage went further and included silence' (Neuhaus, 2000). Here, Neuhaus emphasises an expansion of the term music. First, all structured sounds is included, then the absence of sounds.

In this thesis, I intend to foreground artists' articulations of their experiences, to make transparent the route by which such complex understandings arise, proposing conceptual blending as a framework.

In a joint paper, musicologist Jorg Jewanski and media historian Sandra Naumann discuss the wider reciprocal influences between visual art and music during the 20th century, leading to many 'structural analogies', for example in spatial applications internal to structure:

In similar manner to how, at the start of the twentieth century, the visual arts adopted music as a model for the depiction of movement and temporality [e.g. Paul Klee], music in the latter half of the century looked to the visual arts for inspiration regarding the execution of spatial structures. The ways in which pictorial space was structured and the relationships between various forms or visual levels of a work were now to be applied to the organization of audio material. (Jewanski & Naumann, 2009, online)

In other words, whilst early on, musical space was mapped onto vision, later visual space was mapped onto sonic structure. The authors cite Jackson Pollock's expansion of focus from the centre of a canvas to its whole surface as having a direct influence on Morton Feldman's piano pieces *Intermission 4* and *Intermission 5*, which resulted in compositions without '... center, no clear beginning, and no cadence' (Jewanski & Naumann, 2009, online). Mappings such as this, where notions of spatial structure are transferred from visual art onto sound, can offer a fresh perspective to the artist, and I understand them as a key feature by which connections between inputs are established. I will explore this further in Chapter Three, p. 48.

Jackson Pollock also provided the inspiration for another instance that brought together visual art and music, through a mapping of method. In a lecture at the London College of Communication, free improvising tabletop guitarist and painter Keith Rowe described how, as an art student when also beginning to play jazz in the early 1960s, he mapped Jackson Pollock's method of discarding the easel and painting on the ground onto music making (Rowe, 2010). The result was a tabletop electric guitar, first used in 1965. In addition, he applied *found objects* (another principle imported from fine art) to the instrument, for example playing its strings with a kitchen knife.¹⁶ Rowe summarises it thus: 'There appears to be music, well, maybe, but the process is painting' (Rowe, 2010).¹⁷ Rowe expresses clearly how a visual arts procedure was combined with playing the guitar,

¹⁶ Other composers, such as Henry Cowell and John Cage, modified the sound of instruments through the application of objects much earlier.

¹⁷ Rowe also recounts very different notions within both art forms where authorship resides: whilst a musician brings other people's compositions to life in the present moment, a painter has no permission to recreate other artists' paintings. This would be considered plagiarism.

bringing together two aspects present in his personal life at a specific time: an art student in the 1960s who also performed jazz music.

Jewanski and Naumann describe another instance of how a visual arts method is mapped onto the creation of sound, again made possible by technology:

Thus, with the emergence of acoustic recording media, the collage technique was used to arrange sounds, whereby, as in the visual version, entirely disparate and often already existing material was combined. This procedure had a formative influence as of the 1940s, above all on *musique concrète*, whose initiator, Pierre Schaeffer, made magnetic tape recordings of individual notes and fragments of sound from his environment and existing musical works, then pasted them together to create new compositions. (Jewanski & Naumann, 2009, online)

Such collaging or montaging of sounds, splitting recorded materials and collating them in a different configuration as a base for composition was made possible by recording technology, later expanded upon by digital sampling and editing techniques. This method, in which composers, as Schaeffer puts it 'isolate the various sound fragments, manipulate them, and link these "sound complexes" together' (2012, p. 14) is now widely used – my own work being one example. Trevor Wishart (1996) describes how early electroacoustic composers, building on Schaeffer's work, relished the possibility of taking recorded sound materials, from machine noises to improvisations,¹⁸ and moulding them into a sonic structure, effectively mapping the notion of sculpting onto sound.

At the roots of such methods, made possible by the advent of sound recording, lies the notion that sound is a material that can be manipulated as such. However, in *Sound and the city – the anthology*, which documents the British Council's major sound art series in China, Robert Worby reminds us that unlike visual art, which produces solid material artefacts, sound is produced through such objects, be they of a recent technological manufacture or not:

Sound is very strange stuff. In fact, it's not "stuff" at all because it has no discernible substance or mass. It's actually a process, a complicated process – of particles moving, of objects moving, of air moving and, sometimes, liquids moving. (Worby, 2008, p. 13)

This statement refers to the immateriality of sound, its ephemeral characteristics of unfolding in the present and vanishing into the past, ameliorated by sound recording devices that enable repetition and an access to sound that is 'almost as if it did have a tactile physical form like clay or paint' (Worby, 2008, p. 21). This view sees mapping as a tool, which can open a new perspective onto practice: sound is not equated with material,

¹⁸ Jewanski and Naumann cite the increased use of improvisation as a way of producing materials, within both the visual arts and music (Jewanski & Naumann, 2009, online).

but rather, it can be treated like a material, something audible is explored as something tactile, such as collage or sculpture. This realisation led me towards conceptual blending which I will introduce in Chapter Three. In Chapter Five, I will come back to how some of the artists participating in this research consider the immateriality of sound (see p. 121).

Audio-visual relationships that were more immediate than the procedural mappings detailed above were of interest to many creative practitioners throughout the last century with one particular strand condensing into *visual music*. In the 1920s, film-makers such as the Russians Arseny Avraamov and Yevgeny Sholpo used ink drawings on film to generate soundtracks (Hutton, 2003). Since then, other artists have created music from graphics applied to film-based material. Both Norman McLaren in Canada and Daphne Oram in the UK became involved with such techniques, the latter developing the Oramics Machine in the 1960s, which is credited as one of first synthesizers. This, however, was supplanted by Moog synthesizers, for instance, and other more mobile devices (Hutton, 2003). Oram's invention remains essentially a personal, technological development that facilitated the realisation of her own musical ideas. It reflects the way many current composers or sound artists are involved with creating at least some aspects of their software as part of how they create work. One instance is Trevor Wishart's sound transformation package Sound Loom,¹⁹ another is Joshua Kit Clayton's contributions to the development of Max/MSP,²⁰ a software now frequently used in both performance and sound installation.

On the whole, the development of technological tools, the 'electrical instruments' that Cage envisaged (Cage, 1961), has fostered the exploration of an increased sonic spectrum imagined in the early 20th century. They are now used routinely in fields from electroacoustic music to electronic pop and field recordings*. In addition to the kinds of sounds used, the audible spectrum also includes a notion of scale (Kahn, 2001), made possible by the technology of amplification and follows from viewing sound as material object. This amplification can act as a 'microscope' (Cage quoted in Kahn 2001, p. 230); granular synthesis, for example, makes use of microsecond-long sound sections. Furthermore, subtle sounds can be brought to the forefront through amplification. Sounds can also be scaled up into very loud and physical dimensions as explored in *Fluxus* by Higgins (Kahn, 2001, pp. 224-227), which was reflected in popular music from the legendary Marshall tower set-ups to bass-driven club experiences all over the world. In sound art practice, the interest in the physical effect of sound can be found in Kaffe Matthews' *sonic bed* series (2005). In this work, she invites audiences into a bed-like

¹⁹ Sound Loom runs in conjunction with the sound-processing software developed by the Composers' Desktop Project.

²⁰ Max/MSP, or Max, is a modular software produced by USA-based company Cycling '74.

construction that hides a multi-channel speaker set-up under its mattress and side panels creating a musical, yet physical experience that involves the whole body, not just the ears.

These examples demonstrate how, as new technologies provide new tools to execute ideas, these tools, in turn, can contribute to the generation of new ideas. Moreover, as wider cultural developments can become an aspect of individual practice, they may in time contribute to historical developments.

1.4 Sound art arrives towards the end of the 20th century

The label sound art itself emerged in the latter part of the 20th century. Licht (2009) locates this event in composer William Hellermann's Sound Art Foundation, established in the late 1970s, although the Sonic Arts Union, the American composers' collective, was active a decade prior to that. The UK composer, Trevor Wishart, who originally published his book *On sonic art* in 1985 (1996), took his inspiration for using the term from the collective's name (Wishart, 2011, personal interview). Therefore, neither Varèse, Schaeffer nor Cage were, at the time, in a position to consider themselves sound artists. Their concern was with the extension of music. Many methods used in composition, however, were imported from fine art, and Neuhaus felt his works were aligned with fine art, rather than music. The trajectories of these artists clearly show the importance of experimental music, fine art and technology as inputs to the development of sound art as a field.

Sound art came into its own in the 1990s, made possible by the arrival of affordable and portable digital technology. In his book *Haunted weather: music, silence and memory*, David Toop examines its impact on the sound world, particularly noting that the laptop offered the possibility to record, perform, edit, produce, manufacture, promote and sell a piece of music through one tool (Toop, 2004, p. 224). The use of this technology led to a re-evaluation of what performance might mean and the introduction of concepts such as 'liveness' (Emmerson, 2007). This development has proved to be a rich area of inspiration to sound artists working today, and it was an important part of the trajectory towards the development of complex interactive installations, sound sculptures or live coding, working with environmental sounds or field recordings. Each practice, or set of practices, infuses different flavours and approaches to the mix of sound art, contributing to its diversity and richness. However, this diversity also presents a situation where sound art practitioners from the furthest reaches may find it difficult to establish a common ground. An examination of the creative process that, although it differs between individuals still

features sound and listening as prevailing concerns, can provide a base from which to communicate and find continued inspiration in a diversity of approaches.

A number of academic courses in the UK now offer the study of sound art in various guises, situated within different contexts. Whilst some emphasise the technological and musical aspects (for example the BA Creative Music Technology at Anglia Ruskin University), other courses are embedded within a fine arts context (for example Oxford Brookes or Middlesex University). I believe that the development of a strategy that facilitates reflections and debate between artists, as attempted in this thesis, may also benefit the education of the next generation of sound artists and their work.

Within this century, sound art in the UK has become further established, mostly within fine arts. The exhibition *Sonic Boom – The Art of Sound*, curated by David Toop, at the Hayward Gallery, Southbank Centre in 2000, is widely regarded as a milestone show; in 2010, artist Susan Philipsz won the Turner Prize for her piece *Lowlands*. Whilst explicitly using a song, a Scottish lament sung by the artist herself, as base material, Philipsz does not have musical aspirations and understands herself primarily as a sculptor working with sound (Philipsz, 2011). Her notion of sonic sculpting, however, appears to be different from that of Wishart. Where Wishart is interested in moulding instances of sound directly, Philipsz shapes a larger spatial sonic structure or environment for audiences to inhabit. This illustrates how, even if similar concepts such as sculpture are used, how they are explored in practice may differ. With conceptual blending, I propose a strategy through which we can set such differences next to each other as inputs to practice from which different elements are used (see Chapters Five and Six).

In the same year, John Wynne's *Installation for 300 speakers, pianola and vacuum cleaner* was acquired by the Saatchi Gallery, a collection noted for visual contemporary art, rather than any connection with music. Both examples show that sound art has found a position within fine arts. However, the role of music, which I have demonstrated to be another important factor in the development towards sound art, has so far been far less widely acknowledged. Intending to redress this balance, the call for contributions to a forthcoming special issue of *Organised Sound*, which has the theme of *Sound art and music: continuum and fissure*, goes as far to state that sound art's close connection to the visual arts discourse has 'obstructed the discussion of its sonic materiality and processes and has neglected its musical heritage and those aspects of its practice that recall that history' (Voegelin & Gardner, 2014, online). In what follows, I will offer my own arguments as to why I consider music to be a mode of sound art practice.

1.5 Music as a mode of sound art

I will begin this reflection on the relationship between sound art and music by considering the argument that says that music cannot play a part within sound art. In her guest lecture at London College of Communication, writer and researcher Kersten Glandien argued that the interplay of sound and art as described by Neuhaus excludes music altogether (Glandien, 2010). For her, as for Neuhaus, a work of sound art consists of two equal partners, sound and art. The sonic component in this configuration should not be too complex and it excludes music; in her estimation, musical complexity demands the audience's entire attention, leaving no room for other, namely visual, elements of the work to be simultaneously appreciated.

How this may look from the point of view of practice is illustrated by a conversation between German sound artist Rolf Julius and writer Rahma Khazam in experimental music magazine *The Wire*. They explore the notion of an interplay of pauses to enable the switching of focus from one sense (hearing) to another (seeing): 'Say you have a piece consisting of red and black pigments... You play a sound, then the pause is too long, so you look at the red and black. Then you play another sound, then you look, and so on' (Julius in Khazam, 2005, p. 83). The audience views, and then listens in an alternating engagement with sonic and visual components, an interplay that could be interrupted by the complexity of music. Such a view of music presupposes that it is always complex in nature and unable to function or remain coherent without the audience focussing continually upon it.

Considering the effect of structure on the function of works, we see that musical composition itself is already dependent on factors other than internal construction. These factors include the instruments used and how they interact with each other; the genre or medium composed for and the dissemination route used, such as an eight-channel diffusion system, a hi-fi recording or internet stream. Each of these aspects has different requirements that composers adapt to, or, indeed, are inspired by. If music is flexible enough to adapt to such variety, the possibility exists that music can function in collaboration with other media and other senses without diminishing the joint impact.

In fact, music as a discipline has its own difficulties describing its increased territory. Musicologist Lawrence M. Zbikowski, for example, states: 'Determinations of what counts as an instance of a particular musical work are thus one of the ways members of a musical community construct and negotiate their identity' (Zbikowski, 2002, p. 18). This notion shifts understandings of music away from concrete attributes such as pitch or rhythm and

their changeable relationships, to one where musical communities decide what is acceptable.²¹

It could be argued that, whilst music seems to represent communal conformity, non-music (noise) represents the outsider. Plato, for example, identified music with societal order as opposed to anarchy and unlawfulness (Plato in Henderson, 1999, p. 395), and, in 1977, the French economist and scholar Jacques Attali, proposed that, 'The only thing common to all music is that it gives structure to noise', relating it to the 'political process for structuring community' (Attali, 1977, pp. 9-10). He also compared the structure of music to that of society. In inverting such parallels, by working with the non-musical, one may position oneself outside convention, and with Hildegard Westerkamp. I have already detailed one instance where the use of sound is considered as a liberating element, as least as far as the constraints of an art tradition are concerned. I will return to this theme in Chapter Six (see pp. 142-144).

There is debate about where to draw the line between sound art and music. Alan Licht (2009), for example, notes how music functions within a finite timeline, as experienced listening to a recording or performance, whilst sound art works with indeterminate durations, comparable to a piece of visual art that takes its length from the audience's willingness to participate in it. However, this distinction holds only partially; some improvised concerts, for example, are 'understood' without having been experienced in their total length, and the ubiquity of fade-in and fade-outs in recorded pieces points towards music being conceived of as interminable, each composition presenting an audible snapshot of its inaudible continuum. Conversely, in sound art, an installation is taken to be of indeterminate length. However, in practice, installations often are of finite length, determined by gallery opening hours or the overall timeframe of the show, although this may be longer than most performances will permit. Jem Finer's *Longplayer* (1999) blurs boundaries. It is a musical, computer-aided composition that is envisaged to last for 1,000 years without repetition and sets out to investigate the 'problems of representing and understanding the fluidity and expansiveness of time' (Finer, 1999, online). Currently operating as an internet stream using the sampled sound of Tibetan singing bowls, performances with human beings and actual instruments have also taken place.

²¹ Zbikowski also states that not all sound is equal to music, and that human beings cognitively handle music in different ways to how they do sound (2002, p. xii). However, the field of music cognition is itself such a complex one that it lies outside the scope of this thesis, especially in view of the fact that, to date, no definite, all-encompassing classification of music has been formulated.

Rolf Julius identified another possible dividing line between sound art and music:

If I combine a normal clear piano sound with a dirty red pigment, it will strike you as odd... This is the kind of experience a sound artist acquires because he knows about the texture of sounds. A composer would not work this way. He doesn't know about the texture, or what I would call the surface of the sound. (Julius in Khazam, 2005, pp. 82-83)

In Julius' view, a sound artist knows about textures of sounds, whilst a composer does not. However, this is evidently not the case as many composers have a strong interest in sonic texture. Composer Trevor Wishart, for example, since his early contact with IRCAM (Institut de Recherche et Coordination Acoustique/Musique, located in Paris) and later with the *Composers' Desktop Project*, has been engaged for decades in the making of software tools to realise specific qualities of sounds, which he appreciates as an integral element of composition. Even 'classical' music was concerned with the texture of sounds to some extent, addressed through the orchestration of works. Richard Wagner, known for his ideas on the *Gesamtkunstwerk*, even 'built his own opera house, the Bayreuth Festspielhaus, just to get the sounds he wanted' (Kloc, 2009, p.1). Whilst in the statement above, Julius does draw a link between personal experience and an artist's work, he judges the work of others through criteria based on his own experiences, rather than theirs. However, doing so risks misunderstanding other artists' practice and intentions, and I believe we need to foreground artists' voices in order to avoid such pitfalls.

A further dividing characteristic is sound art's concern with space, as opposed to music's temporal connections, which I looked at when considering the influence of architecture on sound art. However, Douglas Kahn contests this strict dividing line:

The recently trafficked idea that sound art is really about space whereas music is about time is truly a caricature of earlier positions. For most of the people working in the 1990s it was not important to say one way or the other... That is, not much would be accomplished by keeping old fences if what was desired initially was a terrain upon which artists could move freely. (Kahn, 2006, online)

Nevertheless, on Max Neuhaus' official website, the biography describes his pioneering sound installations since the 1960s as 'works without beginning or end, the sounds were placed in space rather than in time' (The Estate of Max Neuhaus, n/d), thus confirming that these links have validity at least for some. This again points to how personal understandings, or implementations can differ, and highlights the importance of making them transparent.

Furthermore, music has its own relationship with spaces and architecture, for example the impact that a performance venue has on the sound, as in the case of Wagner. Creative spatial investigations have also taken place within the field of music, early examples of

surround sound are Edgard Varèse's piece *Poème Électronique* described earlier and Stockhausen's four-channel tape piece *Kontakte* from the late 1950s. Different creative minds are interested in exploring sound and space, a connection that may also be influenced by other aspects of our lives as is illuminated in the following conversation between David Toop and Carsten Nicolai:

I asked him [Carsten Nicolai] if his training as a landscape designer overlapped onto his sound work. "Landscape architecture and gardening," he replied, "is still about space and the complexity of thinking." (Toop, 2004, p. 179)

This illustrates how various aspects of our lives may connect, intersect and even influence each other, although not necessarily with easily predictable results. Blending can help to understand and make transparent such relationships, as I will show in Chapter Three.

Kahn tries to ease the conundrum of where music ends and sound art begins by distinguishing between music and '*musicalization*' as expanded from the original concept by Canadian sound artist Dan Lander (Kahn, 2001). The term differentiates the use of sound that appears to be musical from actual music. How we may understand what is meant by *musicalization*, may be gathered from Kahn's assessment of John Oswald's *plunderphonics*:

...with its complex weaving of conceptual and affective references to musical cultures, intellectual property issues, technological repetition, etc. Thus, plunderphonics may sound like music but it has not retreated to proscriptions against hearing the world anew in all its myriad attributes, i.e., the presence of music cannot be equated with musicalization. (Kahn, 2006, online)

Here sound art facilitates a different way of perceiving the world. As long as '*musicality*' does not stand in the way of liberation, it can be included in sound art practice, making freedom an indicator of sound art, and social conditioning an indicator of music. This brings me back to my earlier consideration of music representing communal conformity. Whilst allowing for the improving influence of musical '*craft, discipline, and virtuosity*' as elements to practice, Kahn, nevertheless, sees music as encapsulating old conceptual ways of listening, rather than opening new and experimental understandings of the world (Kahn, 2006, online). In this context, I would like to return to my earlier speculation of music representing communal conformity (see pp. 28-29), which I believe connects with appreciating notions of freedom as an aspect of sound art. I will return to this idea in Chapter Six, pp. 142-144. In Kahn's position, listening is a key theme, as it is for others – Pauline Oliveros' *Deep Listening* practice or Pierre Schaeffer's notion of reduced listening both being a case in point; in Chapter Five I will discuss listening as an input to sound art practice (see pp. 116-119).

From another sound art practitioner's perspective, Annea Lockwood explains that, for her, music:

.... is often structured to carry a flow of interrelated "ideas" (rhythmic motifs, chord progressions, timbral ideas, etc.) which tend to create an audio narrative – often at the emotional level as well as perceptible structural levels. (Lockwood, 2003, online)

This adds another potential ingredient to how people identify what they hear as music as the evocation of emotions, an assessment supported by my own experiences as an artist and as a curator. If music relates to emotions, a decoding process that involves cultural learning of what qualities represent a specific emotion, works of sound art are often said to demonstrate more objective, conceptual concerns, which perhaps explains Kim-Cohen's aim to focus on non-cochlear sound art as mentioned earlier (see p. 17).²² However, as the effect of emotions on decision making in general (Pham, 2007, pp. 170-172) and on the perception of an audience more specifically (Voegelin, 2010, p. 172) are becoming more recognised, they also present an input to making sound art and a lens which influences the selection of elements* from inputs. I will show this in Chapter Six (see pp.148-151).

As some aspects of music have found their way into sound art, elements of sound art have also found their way into the study of music. Musicologist Barbara Barthelmes (2006, p. 45) indicates that a cognitive view point helped this expansion (ibid, p. 47).²³ In her book chapter "Sound art in musicological discourse", she points out that an investigation into sound art did not arise within the new music discourse, but within those of music psychology and auditory psychology. Stepping outside the traditions of music and allowing a temporal delay were necessary in order to gain a different perspective (ibid, p. 46). From a maker's point of view, Neuhaus (Sanborn & Fitzgerald, 1982) recognises a direct genealogy in which this shift from music to sound art had become necessary, the term composer carried connotations regarding acceptable sound materials and their structures that were too restrictive to be representative of his practice. Therefore, the experience of such limitations in conjunction with new vantage points as inputs to practice may contribute towards the development of a different kind of practice, for example in the case of Neuhaus, who shifted from percussion and contemporary music to pioneering an artistic approach to sound, creating works such as *Listen* (see footnote 5 on p. 11). I will return to this theme of changing practices in both Chapter Five and Chapter Six.

²² Kim-Cohen appeared as one of the keynote speakers at the International Computer Music Conference (ICMC) in 2012.

²³ Interestingly, Barthelmes refers to sound art as encompassing 'elements of the tonal, the spatial and the visual' (2006, p. 44).

1.6 Conclusion

In this first chapter of the thesis, I explore some of the aspects of sound art. I begin by considering current debates and their historical emergence throughout the 20th century, and show the discipline to be incredibly complex as a result of its multiple heritage, mainly – although not exclusively – combining trajectories from fine art, music and technology.

Technology has enabled artists to understand sound in terms of tangible materials, and I identify the principle of such mappings, that is, the understanding of something in the light of something else, as a way by which artists may connect or explore aspects of practice. This in turn leads me towards the theory of conceptual blending as set out in Chapter Three.

Other aspects introduced here include the relationships between sound and space, sound and vision, notions of freedom or modes of listening. I will return to these themes in Chapter Five and Chapter Six where I explore them in relation to my primary research, as the beginnings of a taxonomy of inputs to sound art practice.

However, even if artists employ similar methods or share concerns, these can be understood or expressed differently as a result of historical and personal trajectories. Some artists, for example Max Neuhaus, understand sound art as an amalgam of just two equal partners: sound and art, whilst others see music as another possible ingredient. I demonstrate that music cannot be categorically excluded from the field of sound art. Furthermore, whatever the partners are in the formation of sound art practice, they are not necessarily equal. In my own experience, balances differ, shift over time, between works, and I see no reason why this should not be similar for at least some other sound artists.

An investigation of the creative process, by which the voice of the artist is emphasised, is identified as a means to bridge divergent understandings. In Chapter Three I propose blending as a model that supports this aim, by introducing the notion of inputs from which artists may choose different elements – or indeed none – and connect selections in individual ways.

Whilst sound art appeared as a confluence of trajectories, a confluence that encapsulates their languages and understandings, individual artists may still journey from one discipline into sound art, drawing on their respective backgrounds. I will come back to this in Chapter Five and Chapter Six. In Chapter Two, I will consider my own trajectory, showing how my understanding of sound art and the concerns of this research emerged from my practice.

Chapter Two

A personal journey through process

2.1 Introduction

In the previous chapter, I considered the emergence of sound art as a discipline and in this chapter I will now set out my own artistic history. My aim is to demonstrate the route by which the concerns of this thesis have emerged and to illuminate the perspectives underlying it, in particular the view that 'thinking' emerges from practice and folds back into it – that is, I 'theorize by doing' (Cassar, 2009, p. 230). This chapter will also serve to illustrate process in my practice and examine how an investigation into this process may prove useful to extracting meaning on an individual basis. Additionally, as my practice incorporates a wide range of modes, it seems particularly suited to an investigation of multimodal sound art process. Indeed, an outcome of this practice might be the realisation that such an investigation is needed. It needs to be remembered, however, that the language through which to do this investigation is still in development as part of this PhD and that direct observations of process are not available in retrospect. This chapter, therefore, presents an account of what happened, rather than an explanation of how or why.

This account is separated into two parts: the first deals with my artistic development up to the year 2000 through the condensation of events into eight temporal nodes and an analysis of their significance. The second part considers the experiences encountered and describes the resulting changes since the year 2000 through the examination of seven of my key works. This part discusses their relevance by exploring how my ideas were affected by an expansion of practice, for example, by working with installations and visual materials.

This trajectory of making is continued in Chapter Four where I will consider the new work that has emerged as part of this thesis.

2.2 My artistic development to the year 2000

It is difficult to know how best retrospectively to chronicle a complex narrative involving the influences and meanings in my life concisely or how to identify significant points across several trajectories which developed into my current practice. In what follows, I will examine my artistic development up to the year 2000 through a consideration of eight such subjective, temporal nodes. These nodes encapsulate key experiences, to which I will refer in the latter part of this chapter when discussing seven of my individual works showing how an artist's early experiences can filter through to later work.

Node 1: My conscious memory is focused on an early scenario. My parents sang in the village choir. They often practised at home, in the kitchen with its blue and white patterned curtains and matching wicker lampshade. I remember singing along, making up my own melodic lines to fit in with the music already filling the room. These experiences encapsulate a joyful and intuitive sense of how music creates itself through the voice.

Node 2: I loved singing whilst travelling in cars, mostly improvised, possibly proto-psychogeographical responses to a landscape slipping by and moods evoked. However, I hated piano and guitar lessons, which included unquestioningly reproducing something to a teacher's idea of somebody else's idea written on paper. At the time, my teachers and parents considered this attitude to be a failure, but I regard both as important experiences that laid a foundation for how I now create work through site-responsive improvisation and collage rather than writing notes. These themes also play a part in the new pieces developed as part of this PhD.

Node 3: As a teenager, I found my father's sci-fi magazines, with their lurid stories of alien insect invasions and glossy technology, which I was not allowed to read. Unsurprisingly, however, I did. There, in the 1970s, my interest in space-age technology was born, a key aspect of later practice and also a feature in new work emerging from this thesis. For example, it directly influenced the making of *Remembering Worlds*, a collaborative installation created as part of this research.

At the same time, I was also given a brightly coloured orange cassette recorder, which, together with a friend I promptly used to record imaginary radio plays. I remember how much I loved creating imaginary worlds in such an immediate fashion.

Node 4: A little later, still in my teens, I was also introduced to early 20th-century visual art, and I became very interested in *Die Brücke* (The Bridge) and *Der Blaue Reiter* (The Blue Rider) in particular.²⁴ With hindsight, knowing my curiosity about the artist's inner world and how our senses connect, the reason for this interest becomes clear: *Die Brücke* was, amongst other things, interested in expressing inner states, whilst *Der Blaue Reiter* included the artist Wassily Kandinsky, believed to be affected by synaesthesia, hearing tones whilst painting.²⁵ It also included the early work of Max Ernst through whom I was introduced to the method of collage. Notions of expressivity and linking sight with sound are explored further in several of the new pieces, for example *over ride* (see data DVD) or *Traces in/of/with Sound* (see Chapter Four pp. 77-89).

²⁴ *Die Brücke* and *Der Blaue Reiter* were German artistic movements from the early 20th century, both of which had a major impact on the development of modern art.

²⁵ Some date the birth of the sound art to the early 20th century, when not only Kandinsky sensed a connection between art and music (Wolf, 2004, p. 19).

Node 5: A little later on, I became part of a high school rock band, where I made up the melodies to chord progressions put forward by the band. I also wrote the lyrics. Whilst enjoying the process of creating music, I was not happy with embodying the stereotypical role usually assigned to female band members.²⁶ With these experiences, live performance entered my life, as did the search for means of expressing myself outside gender stereotypes.

Node 6: Jumping forward to the 1980s: I had left the village near Hanover in Germany where I grew up and moved to Berlin where I met Russian-born artist Alexander Selski. I discovered that one could use computers to make music, without needing to be able to read music or the constraints of other (possibly male) band members. I had already encountered this technology as part of a school leaver's job, which consisted of me transferring data from punch cards to magnetic reels for a large oil company. However, my first Atari ST, featuring a massive 512K of memory and running the Cubase sequencing software, was a revelation. Alexander and I began to work together, which resulted in several video pieces and one CD, collaged together from very tightly arranged MIDI events and voice. However painful this process, (to this day, I have an aversion to the use of MIDI) it presaged my working method of first collecting, and then collaging material. Whilst stretching my working definition of what music might be, I still thought of the material produced at this time as songs, my vocal lines needing something to sing about, a lyric.²⁷ Here technology is the bridge between my interests in music and art. Working with computers facilitated the transfer of the visual arts collage method onto composition.

Node 7: Fast forward to the 1990s: I had moved to London, initially commuting between Berlin and London, later settling in London. Alexander and I continued to make music, releasing a number of vinyl white labels that,, to my amazement, were played by various clubs and radio stations around the country, despite being rather quirky interpretations of prevailing dance-floor tracks. I also stumbled across the medium of photography and began working for various magazines, especially within the electronica scene, for example, *The Wire* or *Keyboard Japan*. Portraits of musicians using digital technology were a particular interest of mine. I also performed with jazz bands to audiences of differing sizes and social make-up. However, all these activities remained very separate from each other, something that kept puzzling me: Why could I not connect them into one coherent practice? What was different? After many years of successfully evading formal education, I

²⁶ This, however, did not lead to me taking up the guitar once more and/or joining an all-female punk band, which, it could be argued, might have been the immediate way out of the situation.

²⁷ We also produced an experimental radio play, which was thoroughly panned by German radio stations, but introduced an element of extended and imaginative narrative outside songs.

embarked on a City & Guilds certificate in sound engineering and a BTEC HNC in design (photography), followed by a BA in sound art at Middlesex University in 2003.

Node 8: In the mid-90s I met composer and musician Douglas Benford, with whom I started to curate and produce a regular music night, which we called *Sprawl*, in honour of William Gibson's vision of the urban future. This took place in a sonic London very different from what it is today, with much less room for any kind of experimental music. Until our tenth anniversary in January 2007, we held monthly events at various internet cafes around the city. Internet cafes were rare at the time, but we used the opportunity to conduct internet linkups and also to introduce laptop performances to London. We also produced a number of festivals such as the *Interplay* series, which was co-produced with the Goethe-Institut in London and instigated new collaborations, many of which have lasted to this day. One-off special events included a co-production with Tate Modern and the Finnish Institute. In addition to curation, *Sprawl* also introduced me to the production of a blog-like newsletter²⁸ and the art of DJing. During this time, I continued to compose, slowly shifting to live improvised voice using manipulation devices, initially using guitar pedals and similar standalone electronics. My favoured unit was Korg's KAOSS Pad, which allowed me to manipulate the voice by running a finger over a touch pad, thereby intuitively controlling a chosen effect. Later on, I began to use a laptop, running software such as Max/MSP. Additionally, I curated and produced a number of live events in collaboration with Kaffe Matthews, entitled *Field 61*, and co-hosted several regular as well as sporadic shows on Resonance FM. In this way, curation entered my practice, again as an initially separate activity just as photography and music had been.

The eight nodes set out above record the development of discrete visual and musical practices, expressed in and influenced by events encountered throughout this journey. For example, improvisation was stimulated by singing with my parents; the appeal of technology was inspired by an encounter with science fiction and experiences of limiting gender stereotypes, resulting in voice-based live improvisation and manipulation, facilitated by a laptop. Technology also made possible my collage/montage composition method and later also led to my involvement with *Sprawl*. Mostly, however, visual and musical practice remained separate activities throughout this period. Nevertheless, they began to meet through my work with the painter Alexander Selski, and exposure to electronic and digital music. These three strands of technology, visual art and music are paralleled throughout Chapter One, where, in considering aspects of sound art practice, they were explored as key elements in the emergence of sound art. Moreover, they are present in the new works discussed in Chapter Four, albeit to differing degrees. Curation is

²⁸ This newsletter can perhaps be seen as a precursor of the e-magazine that emerged as part of this PhD.

a further facet of my practice and has found expression in one of the methods used in this thesis, a curated online journal,²⁹ described later in Chapter Three.

What follows is an examination of what I consider to be seven of my key works, reflecting the merging of the three early strands of music, visual art and technology in my practice since the year 2000. This point in time reflects a move away from separate endeavours in music and photography towards a more integrated practice. The progression of this fusion shows the changes that took place as a result of encountering new situations and experiences.

In order to make these developments explicit it seemed necessary to move from a primarily temporal narrative to an examination of individual works within this timeline. As part of this examination, I will relate the developments to the early experiences, and establish a connection with the way they express the emergence of the issues relevant to this thesis.

2.3 My artistic development 2000 – 2011

Since the beginning of the millennium, the divergent trajectories presented above have converged. Despite this convergence, to an extent, a musical perspective has been maintained throughout. This perspective echoes that of composer Alvin Lucier, who says, in an interview with artist N.B. Aldrich in 2003: 'I did retain, somewhere in the work, the "musical" sensitivity, timing, and so forth, I had developed in years of more conventional composing' (Lucier, 2003, online). He continues: 'I am one person; my ideas come from the same place. I get ideas, then execute them in the ways the material seems to suggest' (Lucier, 2003, online). Working with both composition and installation, Lucier anchors his work in the development of an extended musical practice, which leads to an embedded core practice as a basis from which to express new inspirations and engagement with the world.

In the following discussion of seven of my key works, I shall, therefore, explore in what way my 'musical sensitivity' has responded to engagement with an expanding creative practice that merges the discrete strands of music and visual art. I will explore both the resulting works (for example, later audio-visual pieces), but also approaches (such as mapping a visual arts method of collage onto musical composition and the composition across media). This will be shown as a continuing developmental thread, where influences encountered in the work have led to changing views about the construction of music and

²⁹ In a publishing context, my role would be identified as that of a commissioning editor, although for me it extends my curatorial practice into a new format.

sound art. It will take as a starting point the first work I engaged with outside the field of music.

Work 1: In 2001, together with Sprawl colleague Douglas Benford (See Node 8 on p. 37) I was invited to contribute an installation for the re-opening of the Centre for Contemporary Arts in Glasgow after its extensive redevelopment. This work, entitled *Shiftage* (2001), constituted my first engagement with installation following purely musical endeavours and separate involvement with photography. In this collaborative work, like many installation artists before us, we ‘took on the role of “sound architects”, reconstructing the physical space in sound’ (Benford and Garrelfs, 2001). We independently researched the history of the space, settled on a number of images to use, and then digitally mapped the visual information into sound via the MetaSynth software. After further processing, the resulting audio files were re-assembled into a six-channel installation.³⁰ *Shiftage* set the scene for future work. It encapsulated many of my current interests, for example multi-channel sound, creating musical works from data or conceptual ideas, and responding to a specific site or situation. These characteristics arose partially out of the parameters set by format and brief, but also out of the methods we used to respond to the format and brief. *Shiftage* was an extrapolation of my ideas of musicality into a three-dimensional space and allowed for other influences than just those considered music to manifest themselves within sound.

In contrast to my previous work, which always included some aspect of my voice, *Shiftage* uses no voice, thereby shifting sonic source material from sounds created inside my body to sounds outside it. This project, therefore, made me realise to what extent my composition practice arises out of the interaction between bodily components such as my voice and mental imaginations of sonic and conceptual relationships. However, I still conceived of the piece as music. *Shiftage* also brings visual elements to my composition practice, prompted and made possible by technology, in this case by image-to-sound software. It also introduced the question of how circumstances encountered can influence notions of composition. The work made me understand the importance of the body in my thinking about sound generally and composition more specifically.

Work 2: *Parallel Textures* (2002) is an installation for the Berkshire Record Office, commissioned by Art at the Centre in Reading, which took place in September 2002. Here I combined historical images (again mapped onto sound with the MetaSynth software) and original sound recordings found in the archive into a six-channel audio composition. The piece represents the beginnings of my realisation that individual channels of sound can be used as discrete entities weaving themselves through space and time into a spatial

³⁰ A CD release accompanied the project for which we re-expressed the piece in a stereo format.

composition, by which I mean a composition that considers the effect of the physical space and the movement of sound within it. *Parallel Textures*, therefore, encapsulates how my ideas about music broadened to include a spatial element as I began to realise the necessity of composing differently when working with several channels and in different spaces. More specifically, this meant that space, and the sound moving within it, needed to be embedded into the composition. Furthermore, a reliance on a stereo delivery format (three CD players were used) led to the inclusion of, the further aspect of randomness into my composition practice. Whilst it was possible to fix two strands of one stereo track in relation to each other, it was not viable to synchronise three such pairs. To enable phrases, gestures and trajectories to come together randomly throughout the day, they had to repeat across the stereo pairs whilst also becoming less dense, thereby leaving enough 'space' in the whole of the composition for one another. Using low-end technology directly influenced how I thought about sound.

In this context, I would also like to refer to Kersten Glandien's view on the complexity of music in sound art (see p. 28), and Rolf Julius' account of the switching of sensorial focus between sight and sound (see p. 28). In *Parallel Textures* I needed to leave space between the musical elements, rather than between visual and sonic aspects, so they would not interfere with one another. I would claim, therefore, that such considerations are less an argument for how the complexity of music interferes with the appreciation of sound art, but rather take it as an indication that each work has its own requirements with regards to the inputs or elements that are useful and those which are not.

Additionally, the installation also included objects from the collection, which visitors were encouraged to handle and through this the ephemeral experience of listening was anchored in a more concrete one, that of touch, a development which to me further emphasised the significance of the body in artistic experience, for audience and creator alike.

Parallel Textures connects to the three main themes of my earlier development by strengthening how I work with sound and vision as aspects of one practice, exploring notions of musical composition in space, and how technology, in this case lo-fi technology, impacts on composition. These concerns also link the piece to my current research as it stimulated curiosity about how moving sound through space and introducing random aspects may affect composition, in turn leading to my current question of how the resulting changes can be articulated as an aspect of process.

Work 3: *Spoor* (2003), at Grafisch Atelier in 's-Hertogenbosch (Holland) was the result of an artist's residency, commissioned by *EARATIONAL* for their festival in 2003. It went much further than previous work into combining sound and image. The resulting piece was based on a photographic trail (Dutch: spoor) through the town, which was

transformed into sound and sited in a gallery space. From this, a live four-channel installation-performance hybrid emerged, which was combined with a talk on the closing day of the festival. This work brought together live performance with installation and continued to align my interest in photography closer with my musical work. *Spoor* was the first piece in which I used my own images. On the one hand, it still used images, visual data, as a starting point, rather than creating images from sound, for example, or any other relationship. On the other hand, it developed my practice by giving the audience access to the images and space for reflection on the relationship between images and sound, through the installation/performance. Furthermore, I also used abstract sounds achieved through data transfer for the first time in combination with my voice.

Spoor explores the notion of creating a structure, or composition, across modalities: senses (sight/sound), media (photography/music) and formats (installation/performance). It relates to my core practice by bringing together live improvised voice and performance with the, for me, still relatively new installation format. It also incorporates my own photographs for the first time. By creating work that functions across formats, media and the senses it touches on ideas explored in this thesis, such as multimodality.

Work 4: *Dumplinks* (2003) also began life in 2003, as in interactive four-channel/single-screen audio-visual installation based on recycling issues. It was commissioned by the Watermans Arts Centre in London, and has by now transmuted from an installation into '*a rubbish film for duck and other water-based artefacts*' (the subtitle of the work as it is now). In this piece, the visual and the sonic are still rather separate, linked mostly by the concept of recycling, but also by the overall atmosphere and mood, which is reflected in the film's slow pace. The images were filmed around the Thames in Brentford, where the river's considerable tidal range exposes a large amount of garbage. These scenes were initially edited separately, from the sound. When working on the film, visual glitches accidentally worked themselves into the frames, which seemed appropriate given the theme of the installation. The sonic element came from field recordings around Brentford's business community, focusing on their recycling endeavours. This was also edited independently. However, unlike the visuals, the sound was heavily processed and composed into a very dense sound piece, which functioned on a musical level. Furthermore, the sound was experienced in four channels, whilst the visual element was displayed on a single screen. The original installation also featured an interactive element: visitors could access some sound files through a recycled children's 'piano pad', a colourful plastic pad that, when stood upon, originally played children's songs, but now triggered treated field recordings. When condensing the work into a film after the end of the installation (both a stereo and a

four-channel version are available), sound and image were shortened and adapted to work with each other.

Dumplinks is relevant to this thesis on several levels: Whilst the installation used approaches explored before (multichannel sound, space and situation specificity), it also added an interactive element to the repertoire where the audience could inject pre-composed sounds into the composition. Furthermore, moving image in time was combined with moving sound in space and time. When working on the condensed film version, further changes were made. For the first time, I attempted a 4.1 audio visual piece for DVD, which required a further evaluation of the relationship between sonic movement and the listening environment, between moving sound and a moving image. This provided convincing inspiration for my multi-channel as well as stereo voice performances, resulting in what I have come to think of as *fragmented counterpoint*, a very disjointed dispersion of sonic snippets across channels. However, *Dumplinks* remains a piece where sonic and visual levels function independently of each other; the sound can be appreciated without the image and vice versa.

Dumplinks connects to previous practice by continuing to merge sound and vision. Furthermore, it moves from still photography to the moving image. Its links to current concerns can be found in furthering my understanding of how sound is affected by space and changes in format.

Work 5: *(Talking) Space to Space* (2004) was a radio art project for Resonance FM's *Radio Art Riot* at the Frieze Art Fair in 2004. It used captured radio emissions from celestial bodies, which were processed into a composition and broadcast back into the heavens via FM radio. This project was conceived as a 'poetic gesture, a sensual fiction which takes the past, reshapes it in real-time and travels with it into the future' (Garrelfs, 2004) and regarded images as internal, imaginary elements, which were stimulated by the music, rather than being supplied with it. As with *Dumplinks*, the work came to exist in different versions and formats. As an improvised, performed radio art piece, each instance used differing sonic textures combined into a different structure with a different overall duration and channel configuration; condensed versions on a fixed format are now also available, for example on a 10-inch vinyl release on the German art-label *lich-tung*. With *(Talking) Space to Space*, the idea of 'sound moving in space' shifted to its extreme verge. A composition was produced for an imagined *outer space*, with imagined properties and an imagined audience. Despite the vision of several channels of sound spreading out into boundless space, the composition functions as an intertwined stereophonic strand of sonic elements traveling together through space and into the future, becoming a carrier of imagined situations and events. It appears as a soundtrack to an imagined journey through space, in which composition is regarded as a personal sonic illustration, open to equally

personal interpretations by the listener. Sound in this work includes a narrative, rather than being a pure abstraction of sonic interactions.

(Talking) Space to Space relates to my previous work in two main ways. Firstly, it continues the closer relationship between sound and vision. Secondly, it introduces the notion of an imaginary visual space, shifting ideas about creative content further away from my original, more traditional musical approach. Its significance for this thesis lies in an increased understanding of how changing formats affects composition.

Work 6: *swannsong* (2008) was a sound installation at Leeds Crown Court for the Evolution Festival 2008. The piece took its inspiration from the case of Emily Swann, who, with her lover, was convicted, in 1903, at Leeds Crown Court, of the murder of her husband. It combined sculpture with sound. The sculpture takes the form of gallows from which two speakers are suspended. It alludes to the historical background, whilst the sound, which was recorded inside the court and its underground prison cells, references the current reality of the space and my interaction with it. In this piece, the sound is much less processed. It fluctuates between musicality and spatial documentation in a structure that is much looser than my previous work. Through the use of sculpture, my engagement with the physical world increased.

As is the case with *(Talking) Space to Space*, *swannsong* also provides a soundtrack for an imagined situation. Like *Shiftage* and *Parallel Textures* this imagined situation was anchored in historical facts. These facts, however, were distributed in a transmuted form across the whole of the installation, not merely encoded within the sonic strand. This sonic strand engaged in a complex interaction with the sculptural element, with the past and the present. On the one hand, even if viewed as an acousmatic transposition that removed the sound from its source (the building), the sound regained a body in the form of the gallows, from which the voices of the historic figures spoke through the speakers. Furthermore, as the piece made use of two speakers, an impression of a conversation between the two condemned lovers arose, which in turn prompted the use of some slight processing and a left-right channel alternation within the sonic strand. I also wanted these sounds to stimulate imaginings on the physical reality of the materiality that originally produced them, pointing back to both the present and past environments.

swannsong is linked to my past work in its exploration of another visual art medium: sculpture, and its extended notion of composition across the media. It relates to more recent concerns by exploring the correlation between sound, voice and the body.

Work 7: Later that year (2008) I worked with the artist collective Urbania on an installation for *the GSK Contemporary* show at the Royal Academy of Arts in London. In preparation, we spent a week at Parkamoor, an off-grid isolated farmhouse in the Lake

District. During this time, we worked on individual pieces. As the space was rather small, we were able to observe each other's practice closely. We also worked together on joint activities. Through this close relationship with visual and performance artists and their differing practices, I began to incorporate new aspects into my work. For example, I created simple sound-making objects from found material, thereby increasing the physical aspect of my work.

Additionally, I developed a composition that could be performed by the group. Each artist was assigned to one of these objects, or 'instruments', and responded to simple instructions communicated by graphic scores. I also developed a piece entitled *Room With A View* (2008), which once more combined images and sound. Here, photographs of a specific space were combined with a recording of fellow Urbania artist, Harold Offeh, in which he describes the very same space as a site-specific performance. Unlike my previous work, the sound in *Room With A View* consists of a voice creating meaning, 'observed' merely by a recording device. This voice was left completely unprocessed and unedited. With *Room With A View* my work practice underwent a shift. Where *swannsong* contained elements of an imagined conversation, *Room With A View* used actual speech rather than abstract sound. Most importantly, when creating the piece, I became aware of how photographs and sounds flowed together as one. They were edited as one. The visual plane assumed a musical character by acquiring a rhythm that intermeshed with the voice, and the voice extended its meaning through the content of images and the pulse of the frames progressing in time. This work presented an amalgamation of modes, observed and anchored directly in the process of making. However, the musicality expressed here may not be apparent to the observer, resulting in divergent classifications and understandings of the piece. Whilst such an outcome, or object-based view, may not necessarily present a problem, it does lose sight of the shifting notion of composition as expressed in Lucier's notion of a 'musical sensibility' (Lucier, 2003, online) rather than an actual use of sound or any other mode.³¹

Room With A View relates to past endeavours in that it connects audio-visual relationships through 'musical sensibility'. The recognition that process can present part of a piece's (tentative) identification as sound art establishes its relationship to the focus of this PhD.

2.4 Summary

To conclude, the eight nodes and seven key works presented above identify three of the main themes in my practice, music, visual art and technology that emerged in different

³¹ In this context it is notable that Christoph Cox counts film-maker Luke Fowler amongst established sound artists such as Christina Kubisch, an inclusion Cox does not, however, attribute to an identification of process but to Fowler's investigations of sound through the medium of film (Cox, 2011a).

ways, engaging with a variety of situations, in earlier development. This engagement had an effect on my practice and how I think about this practice, its main themes and interconnections. The realisation that thoughts emerge from practice as it engages with the world, but also flow back into it, aroused curiosity about process, a curiosity about how this recursive interconnection of thinking and doing, inside and outside may be identified, communicated and talked about when removed from the personal and juxtaposed to other creative worlds. However, process is hard to access in retrospect. In this chapter, I have tried to present some key periods and key works, indicating the changes that occurred, although I was unable to document them at the time.

That said, my past practice has expressed itself in the way I think about sound art, by identifying music, visual art and technology as key themes. Further parallels emerged between my practice and that of other artists, for example, the mapping of visual arts methods such as collage on structuring sound (I talk about Keith Rowe in Chapter One, see p. 23). Differences also emerged, such as the acceptance of music as an aspect of sound art. Additionally, a view of sound art as multifaceted and fluid emerges from practice and the divergent categorisations of my own work. For example, *Room With A View*, might be seen as an artist's film, but, for me, it encapsulates a sonic understanding of rhythmical flow expressed as image. The new works, undertaken as part of this PhD, follow on from these earlier pieces, and are influenced by new inputs, such as new tools or methods, in an attempt to more consciously experience process.

In Chapter Three, I introduce conceptual blending, which was developed by cognitive scientists Gilles Fauconnier and Mark Turner (2002). I am proposing conceptual blending as a framework that will allow artists to explore and express process more fully on an individual level. Conceptual blending also allows us to place personal process, views and experiences side by side, by understanding the various areas, tools and concepts we work with as potential inputs to practice from which we may, or may not chose elements to incorporate into our work.

Chapter Three

A multimodal approach: conceptual blending

3.1 Introduction

The previous chapters looked at several of the characteristics of sound art in discourse and practice and in my artistic development. Sound art emerged as a complex and multifaceted field with multiple historical trajectories such as music, fine arts and technology, but also as a field that is connected to others such as environmental concerns, the spoken word or poetry. Sound artists such as myself bring their own histories to the mix and work in a variety of different ways, across media, genres and traditions in their respective languages.

In “Intersenses/intermedia: a theoretical perspective” *Leonardo’s* international co-editor Jack Ox poses the following ‘...our artistic procedures can achieve greater and greater complexity. How does one talk about such work?’ (Ox, 2001, p. 47). With this thesis I am proposing to foreground process in its extended sense (see p. 13), and with it the artist’s voice. In this chapter, I will now introduce conceptual blending, developed by cognitive scientists Gilles Fauconnier and Mark Turner (2003), as a strategy for artists to explore and discuss their practice.

I will begin with a brief description of the steps that led me to conceptual blending, starting with the notion of multimodality, as a concept explored in the cognitive sciences, which allowed me to bring different elements, even diverse categories into one context (Forceville & Urios-Aparisi, 2009). I then look at mapping as a means to connect such modes – a principle introduced in Chapter One, where I consider how properties of materiality are mapped onto sound. This led me to conceptual blending as a model by which multiple modes (here included within the notion of inputs) are connected using every day cognitive activities such as cross-domain mapping*. I will set out the theory in its original context, describe the amendments that resulted from applying this theory of cognition to process and then explain how I propose to use these changes.

In the last section of this chapter, I will introduce my primary research, conducted through a set of modules that, through interviews, an online magazine and creative workshops, probed the essentially subjective and personal experiences of process in my own practice and in that of my peers.

3.2 Steps towards conceptual blending

For Christoph Cox ‘...“sound art” draws together a cross-section of artistic work in a range of media: film, video, sound installation, sculpture, drawing, recorded work on CD, etc.’ (Cox 2011a, online). However, sound art is even more complex in that it allows room not only for different media, but also for diverse working methods and how they are understood, for instance, whether sound is structured and whether this process of structuring is understood as composition in the musical sense.

In trying, and failing, to delineate precisely the field I was operating in, I came to realise that I needed a flexible approach in order to consider practice across categories. Exploring this practice seemed to necessitate a focus on activity, rather than outcomes, and the notion of a *mode* offered a way forward by describing a ‘way or manner in which something occurs or is experienced, expressed, or done’ (Oxford Dictionary online).

However, practice does not just consist of activities; it also includes objects, thought or sensorial experience, which the following notion of *multimodality* by cognitive linguists Charles Forceville and Eduardo Urios-Aparisi offers. It includes:

...a multitude of material carriers (paper, celluloid, videotape, bits and bytes, stone, cloth...), modes (written language, spoken language, visuals, sound, music, gesture, smell, touch), and genres (art, advertising, instruction manual; or at a more detailed level, say, “comedy”, “film noir”, “Western”, “science fiction”), many of these being further categorizable. (Forceville and Urios-Aparisi, 2009, p. 5)

As an example, in my own practice this multimodality is found in the use of technology (tools), visual art (discipline), music (discipline) and varying genres and aspects within that mode such as surround sound, seeing and hearing (sense), performance, recording and installation (format), improvisation and collage (methods). These modes appear to different degrees, in a variety of configurations and at different times. Artists have their own preferences and approaches which can find their place within practice if we understand each mode as something we may choose to incorporate, but do not have to. Sound and listening, however, remain key inputs to sound art practice. I will come back to a possible taxonomy of such inputs in Chapter Five, starting on p. 105.

As I began to understand sound art practice in terms of multimodality, a question arose as to how diverse modes might come together to form one practice. Investigating how music and other domains are connected Musicologist Lawrence M. Zbikowski³² turned his attention to cognitive approaches. In *Conceptualizing music: cognitive structure, theory and*

³² Lawrence M. Zbikowski is Associate Professor of Music and the Humanities in the Department of Music at the University of Chicago.

analysis (Zbikowski, 2002), he focuses on three cognitive processes that all human beings use to make sense of the world they live in: categorisation, conceptual models and cross-domain mapping. Categorisation is the fundamental cognitive tool by which we group experiences across the senses. Cross-domain mapping, in particular, helps us make sense of experiences by understanding one domain (target domain) in terms of another (source domain), for instance, electrical flow in terms of water flow (Zbikowski, 2002, p. 13), or indeed sound in terms of a material. I engage with this notion creatively in my work *Spoken Songs*, where I explore poems in terms of songs (see data DVD).³³

Zbikowski's approach to musicology, which applies cognitive principles to the understanding of musical works, contributed to my recognising conceptual blending as a possible framework for understanding process in sound art practice, which I will present in the next section.

3.3 Conceptual blending: an outline

In this section, I will outline the key theory of this thesis: conceptual blending (also called blending theory or conceptual integration). I will introduce the theory in its original context, focusing on the features that are particularly relevant for this thesis. For reasons of clarity, I have set blending specific terms in bold as they are introduced.

Conceptual blending was developed by the cognitive scientists Gilles Fauconnier and Mark Turner and is presented in their book *The way we think: conceptual blending and the mind's hidden complexities* (Fauconnier & Turner, 2003). It was developed as a theory of cognition that models how human beings make sense of the world. At its heart lies the notion that as part of everyday, subconscious mental activity, people select **elements** from a range of **inputs** and connect them via cross-space mapping* into a **blend***. The inputs are held in the mind as temporal **mental spaces*** (or **input spaces**), whilst the selected elements are contained within a new, **generic space*** from where they are combined into the blend (see Figure 1 below).³⁴ The purpose of this subconscious activity is to condense the immensity of what we encounter into smaller approximations that can be held and

³³ Cross-domain mapping has also been used as a method to draw out specific information, as in Inna Naroditskaya's investigation of two examples of different Azerbaijani art forms, music and carpet making (2005), which finds correspondence in a method for developing new work, which I explored as part of my work *Multilogue* (see pp. 92-96).

³⁴ As complex blends can be made up of multiple input spaces* (subject to recursive revisions), and may be governed by more than one frame, they may also feature a global generic space applicable to the whole network, although unlike a local generic space its structure 'need not apply fully to each individual input' (Fauconnier & Turner, 2003, p. 297).

manipulated in the mind. Some complex blends develop over time into **frames***, which are understood as the organising context of an input.³⁵

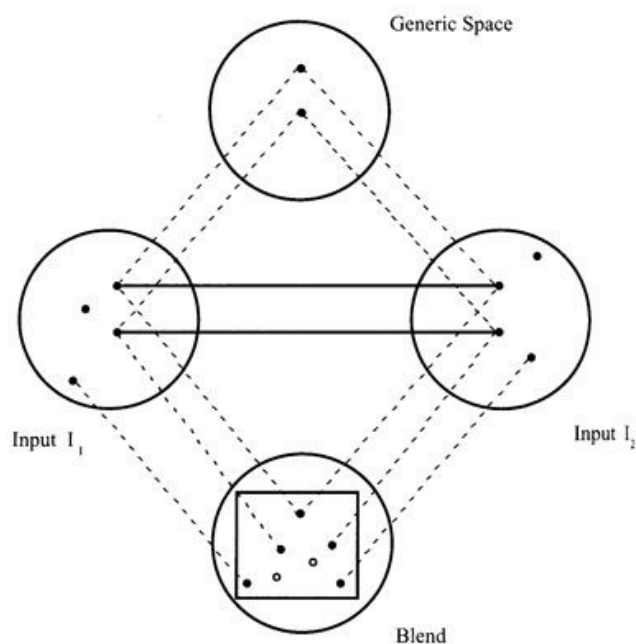


Figure 1. Basic blend diagram* (Fauconnier & Turner, 2003, p.46)

As an example from my practice, in my sound installation *swannsong* at Leeds Crown Court (see Chapter Two p. 43) one input is provided by the case of Emily Swann and her lover, who were convicted of murder and sentenced to death there (frame: justice system). From this, I took the elements of hanging and the final conversation on the gallows. Another input is supplied by my sound practice (frame: field of sound art), from which I selected the elements of field recording, composition and the use of loudspeakers. The final blend combines these elements into a sound installation, where an imagined conversation is constructed from prison cell environmental recordings and transmitted via two speakers suspended from wooden gallows inside the courtroom.

Potentially, elements can be connected from inputs across the whole of human experience, a variety comparable to the description of multimodality set out earlier:

Varieties of meaning that on their faces seemed unequal – such as categorizations, analogies, counterfactuals, metaphors, rituals, scientific notions, mathematical proofs, and grammatical constructions – turn out to be avatars of the spirit of blending. (Fauconnier & Turner, 2003, p.106)

Not all elements and relationships from inputs are, or indeed can be, projected forwards. A selection, a **selective projection**, has to be made. In situations where they are incompatible, or where elements conflict, choices are necessary as to whether only one

³⁵ An incompatibility of such frames is said to be particularly productive for the generation of interesting blends.

part should be transferred into the blend, or whether they should be incorporated unblended. Blending theory also talks about the inherent constraints that support the aims of this subconscious activity, down-scaling to human proportions. The selection of elements can be affected by how familiar they appear or how they appeal to us for other reasons. To illustrate this, in my practice I was attracted to digital technology because it allowed me to work with sound independently. We might also select elements for their relevance (Handl and Schmid 2011, p. 13). This relevance may be cultural or more personal. In this way, humans construct something new by establishing connections between very different contexts, through the mapping of elements. Mapping can be achieved, for instance, by generating identifications between selected elements or by establishing analogies, although not all aspects may find correspondence.³⁶ Furthermore, a blend can **compress** original relationships between elements; for example, events taking place over a year can be compressed into a single day, or several locations into one space. In the case of *swannsong*, a past court case taking place over time is compressed into the duration of the installation whilst locations of confinement, conviction and execution are compressed into that of the crown court.

In blending theory, a network of mental spaces is defined as a **conceptual integration network***. Four main networks have been identified: **simplex** (one input equates to a frame and the other is made up of elements without an organising frame); **mirror network** (inputs, generic space and blend share the same frame); **single-scope network** (inputs have differing frames, only one is used in the blend); **double-scope network** (inputs have different frames, blended frame uses elements from each input frame).

Additionally, we can devise physical manifestations as **material anchors*** for a blend; and my installation *swannsong* could be understood as such. However, the piece is not the material representation of a prior subconscious mental activity, as described in conceptual blending. Rather they arose out of the interaction between making and thinking in which both conscious and subconscious aspects had a role to play. In the following sections I will outline why, despite this difference, I identified conceptual blending as a potential model for this thesis and how I have subsequently adapted it.

³⁶ Selecting and mapping are part of a phase called composition. There are two further phases that facilitate the emergence of something new: completion (where the pattern of the blend is realised) and elaboration (where a blend is established and expanded upon, where we can 'run the blend' as a mental simulation) (Fauconnier & Turner, 2003, p.48).

3.4. Procedural blending: applying conceptual blending to sound art practice

As a theory of cognition, conceptual blending describes how human beings select elements from a range of inputs, set into contextual frames, which are blended into something new. This subconscious, everyday mental activity enables us to make sense of complexity and can manifest as a material anchor. However, this thesis proposes conceptual blending as a tool for sound artists to use to explore and communicate their practice. In this section, I will give an account of the differences between blending theory and what I have termed procedural blending.

Before doing so I will explore some of the key features that persuaded me to work with conceptual blending:

- In the first instance, conceptual blending describes a mental process by which something new is generated. In this I recognise parallels to my own practice, although I appreciate works do not necessarily have to be entirely novel, nor are they created by mental activity alone.
- Inputs can be drawn from a wide variety of categories, mirroring multimodal practice. Blending equalises all modes as equally valid potential inputs. At the same time, inputs are temporal and personal, meaning that, in individual practice, some may be more significant than others. The notion of input expands from that of a mode to include personal experiences such as emotions.
- In viewing inputs as flexible temporal containers, I recognise a conceptual integration network, that is, a system of mental spaces, as scaleable. This feature allows me to focus on an aspect of practice at any resolution applying the same principles and terminology. What I mean by this will become clearer in Chapter Four, where I apply it to the discussion of my own practice.
- Furthermore, this flexibility allows me to set disparate understandings next to each other, as in Chapters Five and Six where I introduce a nascent taxonomy of inputs to sound art practice.
- In addition, blending describes mapping as a key feature by which inputs are connected, which I recognised from my own practice and from the survey of several sound art characteristics set out in Chapter One.

In what follows, I will explain how I have adapted blending, beginning with an introductory model of process as adapted from conceptual blending.

3.4.1 A graphic model of procedural blending

In the next two sections, I provide an outline of how I have adapted conceptual blending as a tool for artists to use to explore and communicate their practice. As an introduction to and summary of procedural blending, the graphic below (Figure 2, p. 53) depicts my view of process in sound art practice as it emerges from my research. The model is intended to give an overview of its different aspects, rather than constituting a definite model of process. It is preceded by a very brief outline of the terms used, which I will expand on in the next section.

- An input (i/p) describes a mode, although it can be everything that flows into practice, from concepts to commission briefs to tools and physical interactions.
- An input is made up of elements (E), some of which are taken forward into the blend whilst others are dropped.
- Blend lenses* (L) denote specific views or other factors that determine this selection.
- The point where inputs resolve into one trajectory I have termed a blend node* (BN). A blend node usually presents an input to continuing practice.
- A trajectory of blends is called a blend line* (BL).
- A network of interconnected blends and blend lines is termed a blend field* (BF).
- Output (o/p) denotes a result of a blend, be it a piece of art or writing.
- For the purposes of the model, the timelines (T1 + T2) indicate that in practice, aspects may be recursive.

In principle, beginning with a set of inputs we select elements affected by lenses resolving itself in one blend node (BN1). Each choice may be affected by more than one lens. In fact, several trajectories or blend lines may be involved (BN2). The whole system constitutes a blend field although we might also examine smaller subsections as such. At any point, new inputs may be added or dropped, or we might consider those previously discarded. These steps may be repeated several times, yielding any number of outputs, although the model on p. 53 depicts only one.

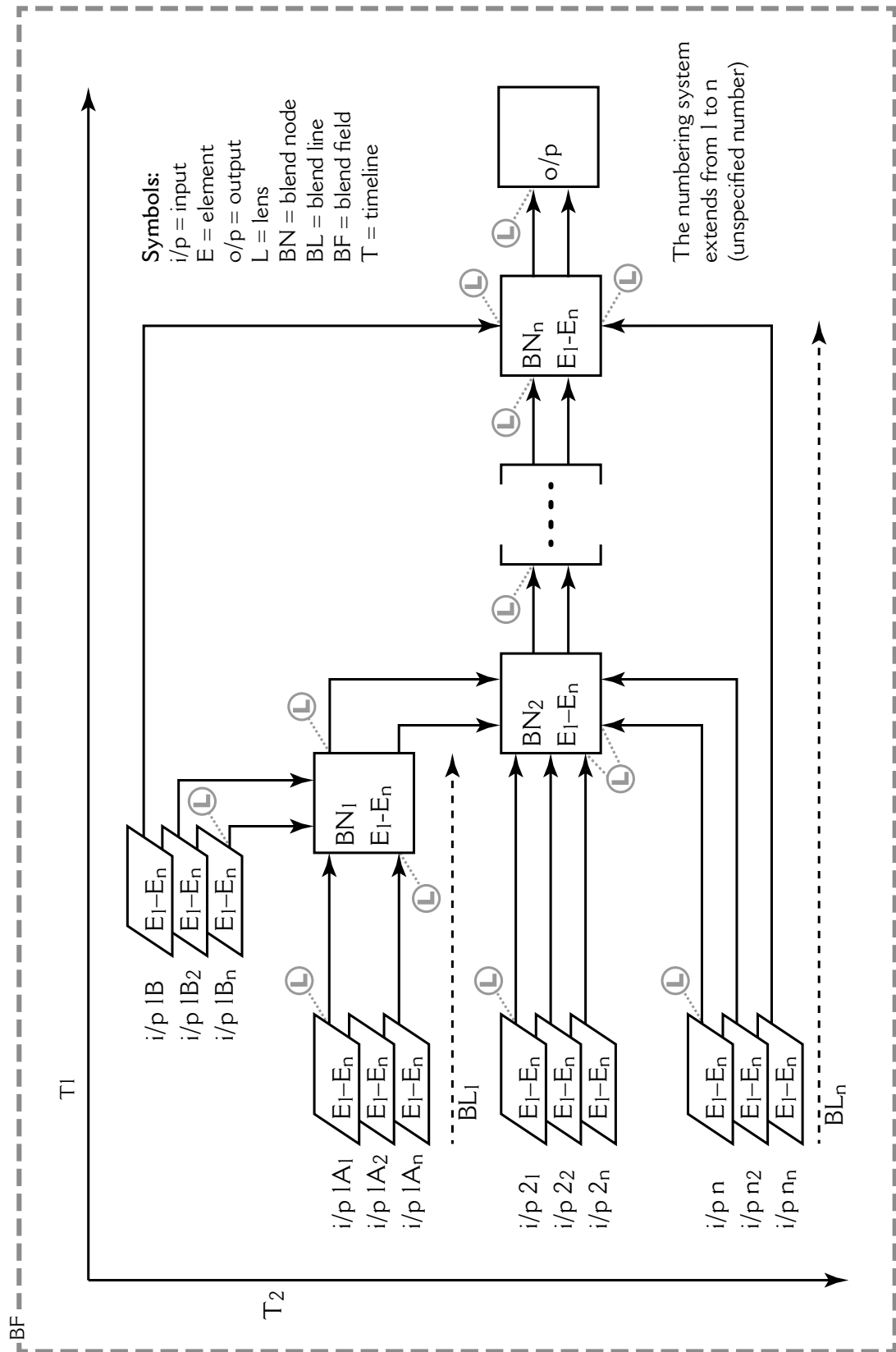


Figure 2. A graphical model of procedural blending in sound art practice

3.4.2 From conceptual blending to procedural blending: adaptations and changes

In this section I, will consider the adaptations I made to conceptual blending to arrive at procedural blending. They are the result of applying blending to the complex, and potentially drawn-out process of sound art practice and mostly arose out of creating the new works considered in Chapter Four, starting on p. 69.

Whilst some of these changes present minor shifts in understanding, some have resulted in the introduction of new terms, whilst other concepts have been set aside. These will be considered later. At this point, the changes and newly introduced terms (set in bold) are as follows:

1. An **input** in this adapted system describes a mode, but expands to everything that flows into practice from concepts or commission briefs to tools or physical interactions. It equalises the potential of all possible modes, although each artist makes their own selections from the available inputs, and the degree to which they do so also varies. Furthermore, when discussing one input across a group of artists, understandings of its exact meaning diverge.
2. A **blend lens** describes a view or indeed any factor that influences the selection of and from inputs and the elements taken forward into the blend, for example, the restraints that using a specific software or a commission brief bring with it. Emotions may also affect choices.
3. A **blend line** appears as a trajectory of blends taking place, for example, in one strand of an investigation as it unfolds over time, such as, in my case, a developing concern with voice.
4. An interconnected network of blends and blend lines created in the development of a piece I have termed a **blend field**. As with the blend line, the blend field contains a temporal component. As each input is broken down into further components, potentially several levels of such fields are revealed, creating a three-dimensional field throughout which connections can be established. For reasons of clarity, I have not used the term network. This is because, in blending theory, it is already used in the notion of a conceptual integration network.
5. Probably closest to the original concept of a blend is the **blend node**, where several trajectories and inputs resolve into one.
6. A **blend globe*** pertains to a network of inputs present as part of a trajectory of making, often as juxtapositions or polar pairs, resolved into one sphere regardless of temporal distribution (see Figure 16 on p. 85). In this, it differs from a blend field.

7. Additionally, I introduce the notion of a **connector***. This relates to the way in which elements are connected through mapping. However, it also refers to everything by which inputs can be connected, be they shared elements across inputs, a third concept through which others can be made to relate, or physical activities such as walking that promote connections.
8. The outcome of a blend is called an **output**, which may be a piece of writing or an artwork. Any number of outputs may arise from one blend field. Furthermore, the notion of an output differs from the notion of material anchor as specified in blending theory in the sense that it mirrors the concept of an input as a focal point of process, rather than potentiality; a blend does not need a material anchor. Additionally, an output is not an idea that is translated from the mind into the world; it arises out of the interaction between thinking and doing.

In other respects, the original theory of blending was reduced and simplified. For example, the notion of a frame, the contextual background designated as the organising framework of a blend, has been downplayed in one respect and re-assessed in another. Firstly, in researching a topic, its context is, to a great extent, disassembled, and individual components may find their way back into the mix as inputs. This applies particularly to any kind of historical review. Secondly, these contexts can also appear as lenses, affecting choice. Cultural world views, personal childhood experiences, or emotions also play a part in the selection of elements.³⁷

At the other end of the scale, the elements that populate each input can also re-appear as inputs to practice. As we work, we frequently 'zoom' in or out of each input. I have already explained how we may break down a frame into constituent parts through research, but we may also put a spotlight onto an element and progressively uncover more details about it. This means that neither input nor element is absolute, but is a temporal assignation, where each frame or element, at different magnifications, may become an input to our process. This is the main reason I have focused on the notion of input throughout this research. Other reasons include scope, bearing in mind that my aim is to deepen our understanding of our own practice and to enhance communication, rather than to establish an ultimate model of process. This scaleable approach revolved around the input allowing artists to examine their practice using one simple strategy, presenting different facets as needed. As we work with and develop each frame, input or element, a blend line comes into existence. We rarely follow just one line of investigation, but usually consider several; consequently, the blend lines come together as a blend field. When examining and

³⁷ Also assimilated into the notion of a blend lens were the ways in which Fauconnier & Turner see a blend being established, for example through elaboration, or by which they are restricted.

discussing our practice, we can use these principles to examine individual strands of development as a blend line, whilst the notion of a blend field can be applied to explore a specific section of our practice, in my case, perhaps, audio-visual relationships, or a single work. To give a further example, we can also consider the field of sound art as a blend field, arrived at through a number of blend lines such as music, art and technology as described in Chapter One.

However, in *The big book of concepts*, Gregory L. Murphy warns us that ‘for real-life concepts, we would do best not to assume that a single form of conceptual representation will account for everything’ (Murphy, 2004, p. 65). It is in this spirit that I would wish procedural blending to be understood. It presents a simplified abstraction that arose from a desire to understand personal process, to examine and explore its complexity with more clarity and coherence.

In the following section of this chapter, I set out how I conducted my primary research.

3.5 Primary research: *Modular Field Methodology*, an overview

In this section, I consider how my primary research was conducted, through a set of four modules enquiring into the essentially subjective and personal experiences of process in sound art practice from different perspectives: (1) My ‘practice laboratory’, which allowed me to explore process at close quarters; (2) a series of interviews with fellow practitioners; (3) the publication of an online journal entitled *Reflections on Process in Sound*, which to date has seen three issues; (4) a second creative module consisting of three collaborative one-to-one workshops with fellow practitioners. I have termed this approach *Modular Field Methodology*.

The initial aim of these procedures was not to validate conceptual blending – I was, after all, not aware of the theory until later – but rather to uncover principles of process that would allow me to develop a strategy through which to express practice, thereby emphasising the voice of the artist in sound art discourse. Later, this primary research helped me to recognise and develop blending as such a strategy. At the beginning, a number of realisations contributed to the formulation of the research procedures, which I will consider before setting out the individual modules.

Firstly, this thesis arose out of my personal experiences as a practitioner, and practice lies at the heart of this research, both as a method and as a subject of investigation. This suggested a primarily qualitative approach, understood as the exploration of direct,

subjective experiences. Choreographer and interactive dance artist Kim Vincs, who explores new and predominantly digital methods in her field, observes:

We are no longer in the era of positivist, objectively verifiable research outcomes, at least in significant areas of the arts and humanities. Understandings of knowledge have shifted from positivist to subjective perspectives. This is a different cultural moment that draws on a subjective understanding of knowledge. (Vincs, 2007, p. 99)

Knowledge appears to be closely linked to context, or frame, in blending terms, in which it is generated. For me, as a researching artist, this expresses itself in the belief that practice and theory are not separate, but can be understood as outputs of trajectories taking place within this context to which they can also contribute as inputs.³⁸ Dada pioneer Max Ernst, an early influence on my practice, may have foreseen conceptual blending when he set out his approach to collage:

I am tempted to see in collage the exploitation of the chance meeting of two remote realities on an unfamiliar plane... coupling two apparently uncoupleable realities on a plane apparently unsuitable to them. (Ernst, 2009, p. 13)³⁹

In this way, a further softening of the habitual borders that are still seen as existing between theory and practice occurs, as Vincs points out (2007). For many artists, theory and practice are inextricably intertwined:

And the ideas put forward by textuality, deconstruction, performativity and, to some extent, psychoanalysis too, theorize by doing. They are examples of intellectual projects wherein theory is practised, and indeed, where the ideological divisions of theorizing and practising become untenable: theorizing is not oppositional to but inseparable from practising – gaining critical thrust precisely by thriving on the moments that enable the undoing of the positions upon which a theoretical assumption may rest. (Cassar, 2009, p. 230)

Theory is not something that happens only at the beginning of practice, nor is it separate from thinking about practice; it is a part of a joint activity, where artistic creation presents a recursive cycle of doing and reflecting, at whatever professional level this may take place. What emerges is a situation in which all aspects of human creativity are interrelated in an equally human, untidy, organic fashion (Vincs, 2007). For me, even research is inherently multimodal in nature, blending a set of inputs.

As theory and practice are blurred, so are the stages of conducting primary research and its evaluation. They feed into each other as inputs. Even if actual activities are separate in time, ideas concerning evaluation may suggest themselves from the start situating interpretation firmly within knowledge production as a way of knowing (Pink, 2009).

³⁸ This is explicit in my works *Multilogue* and *Objects & Process* in which primary research becomes a material input to practice.

³⁹ Further parallels come from montage theory of Sergei Eisenstein, Vsevolod Pudovkin, and other Russian filmmakers of the 1920s.

With regard to the bias that subjectivity may bring with it, David Silverman states: 'Unfortunately, as most scientists and philosophers are agreed, the facts we find "in the field" never speak for themselves but are impregnated by our assumptions' (2006, p. 11). In setting out my creative background in Chapter Two, I make my personal context transparent. Rather than regarding such 'bias' as a hindrance, conceptual blending indicates that it is precisely because of such personal configurations that an emergent new is made possible by providing additional or different inputs to the outcome of this research, in which elements from the modules were connected in specific ways. In the sections that follow, I will provide details of these modules.

3.5.1 The Modules

My aim to investigate multimodal process prompted a modular approach: *Modular Field Methodology*, by which I could survey the field of sound art practice. Each aspect of research, that is, each module, is intended to capture process from different perspectives and, throughout this thesis, was refined, adapted according to my intentions, ambitions and increasing knowledge. These complementary strategies did not aim to find a static truth, but to investigate the different meanings and understandings of sound art practice.

Four modules were set up through which I intended to explore how artists experience and consider practice from different perspectives. Inputs to this thesis are provided by: (1) my own practice laboratory, (2) a series of interviews, (3) an online magazine and (4) one-to-one workshops. These modules are introduced in the following sections and a list of contributing artists can be found at the end of this section. Reflections on my practice lab can be found in Chapter Four, whereas the interviews, the magazine and the workshops form Chapters Five and Six. However, all the primary research contributed to the development of ideas contained in this thesis. Moreover, elements from the interviews and workshops also found their way directly into my practice (see Chapter Four, p. 96).

3.5.1.1 Module1: My practice lab

The aim of my practice lab was to observe my own practice closely as it unfolded, as this allowed me continued access to thinking and doing in a way impossible to achieve with another person, albeit with a narrow sample size of one.

Broadly speaking, two ideas contributed as inputs to the development of this module: firstly the 'in vivo' approach to studying cognition developed by psychology professor Kevin Dunbar (1997) and, secondly, an auto-ethnographical approach, developed in

anthropology, frequently used in other fields such as performance, psychology or sociology (Raab, 2013). The former investigates real-time or 'on-line thinking and reasoning' as it occurs (Dunbar, 1997, p. 462), whilst the latter combines procedure with outcome (Ellis, Adams & Bochner, 2010). In short, I reflected on my ongoing practice, searching for principles of process, which, at the same time, led to the creation of works of sound art.⁴⁰

As I observed practice, seeking to balance direction and receptivity and allowing new facets to emerge, I was guided by questions as to the nature of process. Later, however, once I had encountered conceptual blending, this theory becomes a way of understanding practice. It was fundamental in bringing structure and clarity to the understanding of my very varied work. At this stage, I also began to explore blending through practice, resulting in amendments to the original theory presented earlier in this chapter. Subsequently, materials from the other modules also appeared as direct inputs to practice.

The aim of this thesis was to find strategies for the expression of process, and blending provided the means of doing so. In Chapter Four, which is based on module 1, I applied and developed procedural blending to the discussion of my own practice. This introspective approach was calibrated by investigating the practice of other artists through modules 2, 3 and 4. The materials from these modules are discussed in Chapters Five and Six. The modules themselves are presented in the following sections.

3.5.1.2 Module 2: The interviews

With the interviews, I intended to obtain first hand accounts of how artists experience and think about their work, including what inputs they might recognise and how they might go about expanding their practice. I sought to examine a broad range of divergent practices together with developmental aspects in order to examine how influences are incorporated into work.

Between 2010 and 2013, I interviewed 19 artists about their practice. The list of artists, in the order the interviews took place, is as follows: Max Eastley, David Toop, Trevor Wishart, Annea Lockwood, Mike Blow, Robin Rimbaud, Jo Thomas, Julie Freeman, Aleks Kolkowski, Mick Grierson, Robert Curgenven, Jem Finer, Janek Schaefer, Blanca Regina, Viv Corringham, Jacob Kirkegaard, Theo Burt, Tim Wright and Aura Satz.

These artists were selected for several reasons. A key aim was to reflect a variety of sound art practices, between music, fine art and technology. I also attempted to include artists at

⁴⁰ The works are appended on the accompanying DVD. For a list of contents see pp. 184-185.

varying stages of their careers, those that entered the field at different stages of the discipline's development, and artists from slightly differing cultural backgrounds. Furthermore, I preferred reasonably reflexive practitioners. However, I do not claim that these interviews represent the totality of modes or approaches available to sound art practice, nor that they are truly representative of the generational make-up or any cross-section of the field. Each individual was selected mainly for specific reasons relating to their individual practice, and my own interest in it.

Interviews took place as unstructured conversations with open-ended questions in order to allow both myself and the artist to respond to themes as they emerged.⁴¹ The boundaries of the interviews were established from the context of artistic practice. A mark of this technique is the 'free spontaneity of a no-method approach' (Kvale, 1996, p.13). Nevertheless, certain themes and questions consolidated over time. The wealth and diversity of the material thus generated can be difficult to analyse, and I have certainly found that the interviews contained far more detail than I could incorporate into this thesis. However, despite the difficulty of comparing unstructured interviews, it was important to speak to artists in such an unrestrained fashion as, initially I had very little information about the nature of process. The conversations, the online magazine, the workshop, my own practice and the secondary research all constituted inputs that contributed to the emergence and development of ideas relating to this research.

Lastly, in understanding interviews as essentially personal narratives, I was not concerned with collecting historical facts about the artist's lives, but personal understandings of process. For this reason, I will provide a brief outline of participant's backgrounds at the end of this chapter. A selection of these interviews is available on the accompanying DVD as audio files for other researchers to examine and my intention is to make edited transcripts available in book format at a later date.⁴²

3.5.1.3 Module 3: The online magazine

An online magazine is not commonly used as a means for collecting information in academic research. However, I felt that an intermediate step between interview and workshop was needed, a step without my immediate personal presence. The magazine, entitled *Reflections on Process in Sound*, still allowed me to direct participants to specific topics. Furthermore, I surmised that articles were far less on-the-spot responses than

⁴¹ I also arranged for clarifications to take place after the interviews should these be necessary.

⁴² Not all interviewees gave permission to have their recordings included. For a list of which interviews are included on the accompanying DVD, see the DVD contents list on pp. 184-185. Others may be available on request, please contact iris@irisgarrelfs.com.

either an interview or a workshop, and could therefore draw out people less confident in an interview or workshop situation, thereby complementing those two approaches.

The magazine also extends my curatorial practice, which to date has focused on live events and recordings. As a speculative approach, I also intended to stimulate the debate around process and the number of downloads certainly confirms, as Brandon LaBelle states in *Reflections on Process in Sound* Vol. 2, that it is 'increasingly important to focus more on process' (2013).

Other online ventures have appeared in recent years. *The Journal for Artistic Research* (JAR), focuses on 'artistic research and its methodologies', but does little specifically on process in sound. Whilst the online platform *JSoundry*⁴³ was set up to support listening practices and conceptual concerns within sound it does so by focusing on the dissemination of works. The *Journal of Sonic Studies*⁴⁴, edited by Marcel Cobussen and Vincent Meelberg at Leiden University Press, on the whole, considers more general debates, whilst print magazines such as *Computer Music Journal*, *Leonardo Music Journal* and *Organised Sound* provide occasional excursions into the land of process, mostly, although not exclusively, within the boundaries of their particular remits. I therefore felt that a platform dedicated to process would be a useful addition to what is already available.

Commissioning articles came about in different ways. However, in all cases, save the magazine interviews, a conversation at conferences or concerts preceded the request for a contribution, a conversation that had piqued my interest to find out more about a specific topic. In total, three issues have been produced to date, featuring 17 articles. These can be found on the accompanying DVD and at <http://reflections-on-process-in-sound.net>.⁴⁵

3.5.1.4 Module 4: The workshops

With the workshops, or practice labs, I intended to observe directly how invited practitioners would engage with creative situations to complement purely verbal reflections.⁴⁶ As a starting point, I decided to use object-elicitation, a variant of photo-elicitation (Harper, 1984). Designed to focus a discussion onto specific topics with the aim to explore meaning (Collins, 2010), here it is not the significance of an object that is examined, but rather the process that engaging with it reveals.

⁴³ Available at <http://soundry.com>.

⁴⁴ The online journal is available from <http://journal.sonicstudies.org>.

⁴⁵ I intend to continue publishing *Reflections on Process in Sound*. Future issues will also be available from <http://reflections-on-process-in-sound.net>.

⁴⁶ The in vivo approach this represents was discussed earlier in the context of my practice laboratory, see p. 58.

Participants were told very little about the workshops in advance in order to keep responses immediate⁴⁷ and confined to the meetings, the underlying premise being that, in an improvisational situation, more subconscious aspects of process might be uncovered.

I conducted three one-to-one workshops, in which several objects were presented to the relevant practitioner, inviting them to respond in any way they wished, including not at all. These responses were interspersed with analytic discussions and observations. Documentation took place through photography, sound recording and note taking by myself and each artist.

I opted for artists who knew me already, judging that familiarity would provide support for possible challenges. Additionally, I considered the need for reasonably reflexive natures and invited artists I believed would observe internal processes and articulate them clearly. A spread of creative approaches was another selection criterion, as was availability and I had the good fortune to encounter suitable artists in fellow PhD candidates at the London College of Communication. Participants were Tansy Spinks, Mark Peter Wright and Dan Scott. Reports of the workshops can be found in the Appendix.

3.5.1.5 Participating artists

In this section, I will provide brief outlines of the participating artists in alphabetical order (surname), followed by an indication what module they contributed to in brackets after each respective paragraph:

Elena Biserna, Rita Correddu and Lucia Farinati worked together on *bip bop*, a monthly radio programme in Bologna. I was interested in their joint discussion of *The possibility of an encounter*, a collective reading of the book *Autoritratto* (Self-portrait) by Carla Lonzi for *bip bop*. (magazine)

When I interviewed Mike Blow, he was still engaged with his doctoral research at Oxford Brookes University exploring the relationship between sound, space and the imaginary. This often resulted in technology-led installations bordering on the sculptural, which seemed to provide a particularly interesting vantage point. He also contributed an article in the first issue of the online magazine. (interview/magazine)

Theo Burt works with sound and image in the digital domain. He makes extensive use of automatic systems, merging sight and sound with the help of technology with the aim of

⁴⁷ My own practice involves improvising to a large extent.

establishing a coherent whole. He also creates soundworks, which, in recent times, have also employed automatic systems in order to circumvent notions of romantic 'self-expression'. His ideas on systems and use of technology were of particular interest. (interview)

Viv Corringham's practice focuses on the voice from a range of perspectives, including music performances, audio installations and soundwalks, through which she explores people's personal relationships to places and how that might link to an interior landscape of personal history, memory and association. She is also a qualified teacher of Pauline Oliveros's *Deep Listening* practice. Her extension of vocal practice into a communal environment seemed particularly relevant to this research. (interview/magazine)

Robert Curgenven is an Australian artist currently living in the UK with a strong background in philosophy. His work spans immersive resonances via turntables and custom-made vinyl, instrumental harmonics and guitar feedback, through to carefully detailed field recordings from the remote areas where he lived for many years. He is also a classically trained organist and this combination of approaches and interests promised relevant insights. (interview)

Marianne Decoster-Taivalkoski with James Andean. James Andean is a musician and sound artist active across electroacoustic composition and performance, improvisation, sound installation, and sound recording. Marianne Decoster-Taivalkoski is a French interactive media and sound artist based in Helsinki. Both artists work with the Sound & Motion Improvisation Research Group in Helsinki. I was interested in the group methodology they developed. (magazine).

Max Eastley originally studied painting and graphic art in the late 1960s and early 1970s during which time he became involved with kinetic art. This in turn progressed to working with sound, kinetic sound sculptures in particular. Apart from enjoying his work on a personal level, this road of discovery seemed to hold clear information on how practice might develop over time in response to what influences were encountered. (interview)

Lucia Farinati and Claudia Firth. Lucia Farinati is an independent curator and the director of *Sound Threshold*, an interdisciplinary investigation into site, sound and text. Artist and cultural theorist Claudia Firth is concerned with the relationships between technology and the body, art and politics, image and text. I was interested in their discussion of process. (magazine)

Jem Finer, a founding member of the Pogues, has a background in computing and sociology. His sound projects realise intricate concepts relating to systems, long-durational processes and extremes of scale in both time and space, which seemed to offer relevant understandings. (interview)

Felicity Ford is concerned with domestic spaces and practices as locations for creative investigation, and I was particularly captivated by her KNITSONIK projects, which combine knitting with sound. (magazine)

Julie Freeman works primarily with data and new media, with a focus on sound. For over a decade, she has used electronic and digital technologies to 'translate nature', employing notions of mapping, which are of particular relevance to this thesis. (interview)

Mick Grierson is an experimental artist who specialises in real-time interactive, audio-visual art and research, with a specific focus on cognition and perception. This combination seemed particularly pertinent. (Interview)

Joseph Hyde is a composer, sound and media artist with a background in music. As professor of music at Bath Spa University, he is responsible for its practice-led symposium *Seeing Sound*, which was instrumental in the development of my project *Traces in/of/with Sound* (see Chapter Four). I was interested in his views on visual music. (magazine)

Holly Ingleton is a researcher and sound artist with a focus on queer feminism, publicness, collaborative practice and community, which she explores through technologically mediated and material networks. I wanted to know more about her views on how feminism might influence sound art practice. (magazine)

Rahma Khazam is a British writer based in Paris, France. Her writing has been published in artists' catalogues, thematic anthologies and contemporary art magazines including *Springerin*, *Kaleidoscope*, *Mousse*, *The Wire* and *Artpress*. I was attracted to a particular article published in German which considers the materiality of sound. (magazine)

Danish artist Jacob Kirkegaard's works focus on the scientific and aesthetic aspects of sonic perception where he is particularly interested in phenomena that usually remain imperceptible. Kirkegaard's installations, compositions and photographs are created in a variety of environments such as subterranean geyser vibrations, empty rooms in Chernobyl, a rotating TV tower, and even sounds from the human ear itself. I felt that this vantage point might shed a different light on sound art practice. (interview)

Matthias Kispert is a sound artist and composer active as part of the audio-visual collective D-Fuse, which encompasses installations, film, experimental documentary, photography, live cinema performances and architectural projects. Kispert also works as a solo artist and in collaboration with others, for example, Blanca Regina. (magazine)

Aleks Kolkowski has had a long and varied career that spans improvised violin, electronics and the exploration of historical sound recording and reproduction technology, combining horned violins, gramophones and wax cylinder phonographs. I was particularly intrigued by this use of obsolete, rather than digital, technologies. (interview)

Brandon LaBelle is an artist, writer and theorist exploring questions of social concerns through sound, performance, text and site specific projects. He was interviewed by Anna Raimondo. (magazine)

Michelle Lewis-King is an artist and acupuncturist investigating cultural concerns across art, medicine and technology. I was interested in how these diverse domains influence each other. (magazine)

Annea Lockwood is an American composer who, during the 1960s, collaborated with sound poets, choreographers and visual artists to extend her practice. In the decades that followed, she turned her attention to performance works focused on environmental sounds and life-narratives. She now frequently works with field recordings, which, particularly in its intersection with composition, was also relevant to this research. (interview)

Alvin Lucier is an influential American composer who creates experimental music and sound installations around acoustic phenomena and auditory perception. He was interviewed by visual artist Louise K. Wilson. (magazine)

Rob Mackay is a composer and sound artist who recently moved towards a cross-disciplinary practice that includes theatre, text in performance, and audio-visual installation work. I was curious about his participation in a performance project that brings together artificial and human voices as part of the work of the Creative Speech Technology (CreST) Network. (magazine)

Maria Papadomanolaki is a Greek artist creating sound design for dance and film, networked performances, exploratory workshops, installation and transmission art. I was interested in her use of annotated journal entries. (magazine)

Blanca Regina is a Spanish artist engaged with live audio-visual performances and composition, informed by an early exposure to theatre and performance studies. I wanted to learn how this trajectory has influenced her understanding of her practice. (interview)

Jez Riley French works with composition, field recording, improvisation and photography. He is concerned with detail, simplicity and his emotional response to places and situations. I was intrigued by his views on the personal in process. (magazine)

Robin Rimbaud is probably best known for his work as Scanner, which began in the 1990s using mobile phones and police scanners in live performance, in which I was particularly interested. Since then, his career has broadened considerably, as a writer, critic, member of the band Githead, multimedia artist and record producer. (interview)

Aura Satz works across various media, including film, sound, performance and sculpture, with a focus on sound visualisation. I was particularly drawn to her background as a fine artist, coming to sound later in her career. (interview)

Jane Schaefer began his career as a sound artist whilst studying architecture. Since then, he has continued to explore multiple aspects of sound, from site-specific installations, sonic sculptures, performance and DJing, including the spatial and architectural aspects of sound. This multi-dimensional approach to practice seemed to offer pertinent insights. (interview)

Dan Scott is a sound artist who explores time, memory, modes of listening and the uncanniness of everyday sound expressed in installation and performance. He is also a musician interested in song writing, and he finds it hard to consolidate the two modes; for which reason, his work was relevant. At the time of this research, he was a fellow PhD researcher at the London College of Communication. (workshop)

Tansy Spinks has a background in both photography and music. A newcomer to sound art practice, I was interested in her notions of process, as they intersected photography and music. At the time of this research, she was a fellow PhD researcher at the London College of Communication. (workshop/magazine)

Jo Thomas is a composer working with technology and sound to explore conceptual ideas, ranging from notions of frequency transformation to metaphors, designed to stimulate the imagination. She also has a separate visual arts practice. The relationship between conceptualisation and experience in her work was particularly germane to this research. (interview)

David Toop finished his visual arts education in 1970. In addition to performing live and recording, he works as a music journalist and critic, and is the author of several well-respected books in the field. I was particularly intrigued by the combination of writing about and the making of sound, which informed Toop's book *Sinister resonance: the mediumship of the listener* (2010). (interview)

Trevor Wishart is a musician and composer who extended the voice through vocal techniques and technology, as part of which he was involved with developing software tools from very early on. Both these aspects are modes that I work with, and I wanted to investigate another artist's perspective. (interview)

Mark Peter Wright is a sound artist focusing on field recordings and phonography. He is concerned with listening, the environment and notions of place and experience, which were all relevant to this research. At the time of this research, he was a fellow PhD researcher at the London College of Communication. (workshop)

Tim Wright comes from electronica, where, in the 1990s and early 2000s, he recorded for labels such as *Novamute* with projects such as *Germ* and *Tube Jerk*. *Germ* is considered pioneering by the, then nascent, IDM (Intelligent Dance Music) scene. He is now, however, working with algorithms and very abstract audio-visual material, and it is this development that specifically interested me. (interview)

3.6 Conclusion

In Chapter Three I introduce conceptual blending, developed by Gilles Fauconnier and Mark Turner (2003), as a strategy for artists to explore and discuss their practice. I include a brief description of the steps that led me towards blending, from the notion of multimodality, which allowed me to bring diverse aspects of practice into one context (Forceville & Urios-Aparisi, 2009), to notions of mapping and, finally, to conceptual blending.

Conceptual blending describes how, as part of a conceptual integration network, that is a system of mental spaces, human beings select elements from a set of inputs, guided by contextual frames, and, through aspects of mapping, connect these elements to each other in order to create an emergent new. This is a subconscious activity of everyday cognition by which humans can make sense of the world. Furthermore, a blend can find a physical expression, that is, a material anchor.

Some changes were made to the original theory in order to adapt it to sound art process, a potentially drawn out and recursive engagement with thinking and making, which, in addition to unconscious activities, includes numerous conscious choices. Furthermore, material expressions are not a translation of a cognitive activity into form (as in a material anchor) but rather engaging with making forms a part of process. This adapted model, termed procedural blending, I proposed as a model through which artists can understand and communicate practice. In procedural blending, we select from a set of inputs and connect elements into a new piece of work, although outputs can also be writings. Here, theory and artworks combine into possible outcomes of practice. In procedural blending, several trajectories or blend lines that develop initial inputs may be involved, making up a blend field. At any point, inputs can be added or dropped.

In the second part of Chapter Three I present my modular approach to conducting primary research: *Modular Field Methodology*, through which I survey the field of sound art practice. I introduce the four modules: my own practice laboratory, a series of interviews, an online magazine and one-to-one workshops, through which I intend to explore practice from different perspectives. The materials from this research form the base of the subsequent chapters.

In Chapter Four, I will explore my own practice, based on material from module 1. I will begin by chronicling my journey through practice and consider its findings, including how it resulted in changes to conceptual blending. I will then examine four key works through the lens of blending, demonstrating how the scalability of procedural blending allows me to shine a spotlight on different facets of practice, from following the development of blend lines to examining central inputs.

In Chapter Five and Chapter Six, I turn to the primary research conducted with fellow artists as explored in modules 2, 3 and 4. In bringing the material together, I use the concept of input to place individual experiences and concerns next to each other, and begin to develop a taxonomy of inputs to sound art practice.

Chapter Four

My practice laboratory

4.1 Introduction

So far, I have covered the background to this research with its focus on practice from an artist's perspective, from my own motivations and aspirations in the Introduction, an overview of the field in Chapter One and a brief survey of my past practice in Chapter Two to considering conceptual blending in Chapter Three. This chapter encapsulates what I have called my practice laboratory, as one of the primary research modules through which I sought to investigate personal process.

The aim of this module was to closely observe my own practice as it unfolded, in the belief that this would allow me continued access to thinking and doing in a way impossible to achieve with another person, albeit with a narrow sample size of one. In making work, I followed a trajectory of exploration that led me from initial questions on the nature of process, to conceptual blending, which was then adapted into procedural blending as a tool for artists to explore and communicate practice.

The aim of this chapter is two-fold: firstly, it chronicles my journey through practice, and, more importantly, it applies the key principles of blending to the discussion of four of my key projects. I will principally use the concepts of input (describing a mode of practice), blend line (a trajectory of blends), blend field (an interconnected field of blends) and output (each outcome of practice). In considering these projects, I intend to reveal different facets of how blending can be used to discuss practice, from following individual blend lines in the making of work, to conducting a survey of the predominant inputs that are encapsulated in it.

I will begin this chapter by providing a brief outline of all the projects; the creative outputs themselves are appended on the accompanying data DVD.⁴⁸

4.2 Practice overview

As part of this research, I conducted ten projects, most of which contain several works. In each project, I intended to probe specific aspects of process such as sensorial experience,

⁴⁸ Works are contained within a folder entitled 'practice projects', within which they are arranged in chronological order, following the format of this chapter. Each is supplemented by a PDF file comprising instructions where relevant and further documentation.

and, once aware of conceptual blending, its principles played a part. Furthermore, I uncovered unpredicted information.

In the following overview, I will briefly outline the key inputs and outputs of each project (listed in chronological order):

1. *Sorbet Period*: A symbolic work consisting only of a retrospective title, which describes a period of recalibration before embarking on new projects. I became aware how important periods of inaction, in the sense of not producing any actual works, can be to the development of practice. The main inputs are reading and conversation; the outputs are the realisation and the germination of the next work.
2. *In A Day's Work*: This first actual project consists of two complementary, site-specific mobile phone pieces. Each links a silent photographic slideshow (combined into a film) with location sound. Through the work, I asked what impact a new tool (mobile phone) might have, and how we can resolve opposites, as aspects of practice, through juxtaposition. These questions became the main blend lines, in addition to photography, location sound, walking and sensorial experience. I will consider this project as one of my four key works below.
3. *over ride*: A second series of two interconnected works for mobile phone, this time in combination with a double-decker bus. The aim of this piece was to gain a visceral understanding of sensorial experience, which I identified as an aspect of making. I did so by attempting to interrupt the interaction of hearing and seeing through movement. The main inputs here were the desire to understand making as a sensorial experience that combined with travelling on buses, continuing blend lines of using sight and sound, and juxtapositions. Both this and the previous project essentially functioned as cross blends between sight and sound, experiences and places, reaffirming site as an important input to my work.
4. *Traces in/of/with Sound*: A series of four audio-visual performances and one installation using live improvised and voice in combination with a film of my drawings. Here I initially wanted to understand how my conceptions of music might change when exposed to drawing. I also intended to make the notion of process as a developmental chain more explicit. Further inputs included two recurring blend lines of my practice, music and voice in performance on the one hand and audio-visual screen-based work on the other. This work also introduced another new element, drawing, whilst continuing with the idea of linking sight with sound through movement, and notions of mapping. The initial aim of the series was to study how drawing would impact on my understanding of music. By following emergent threads, I developed the notion of audio-visual spatiality

instead. This very complex project is explored as the second of my key works in more detail below.

5. *Spoken Songs*: The main input to this project was an investigation into the principles of mapping, or understanding one thing in terms of another. In this case, I explored some of my poetic texts as songs. *Spoken Songs* was also prompted by a possible commission enquiry, and, when this input fell away, I initially decided not to take project beyond considering how mappings of song onto text could be achieved, through exploring parallels of melody, rhythm and score. It was begun when I was still engaged with *Traces in/of/with Sound*, which also appeared as an input by introducing the possibility that I might incorporate creative expressions that I had considered private, such as drawings and poems, into my work as a sound artist. *Spoken Songs* continued to develop in the background and I later published a booklet of these texts as a creative output. A second output constitutes the realisation that process can appear in fragmented sections, and with subconscious undercurrents.
6. *Remembering Worlds*: A nine-channel site-specific collaborative sound installation for the *Be Open Sound Portal*, a purpose-built pavilion featuring an ambisonic sound system. It was a commissioned by CRiSAP⁴⁹ for the *Sounding Space Symposium* convened by the University of the Arts London and the brief specified that I work in collaboration with London College of Communication (LCC) sound art students. These were the initial key inputs to the work. LCC holds the Stanley Kubrick archive and *Sound Portal* designer Stephen Philips had taken Kubrick's film *2001: A Space Odyssey* (1968) as an inspiration for the development of the pavilion. Therefore, I selected Stanley Kubrick and the theme of science fiction as further inputs to the project. In addition to creating the installation as an output, I realised that inputs such as commission briefs can also function as blend lenses. In addition, I began to understand collaborations as input as well as a method by which to expand available inputs (see also Chapter Six, pp. 139-142).
7. *Multilogue*: A multichannel sound installation using extracts from the interviews I conducted as part of my primary research, which enter practice as input. By this time, I had encountered conceptual blending, and engaging with the model became an input to the project. The outputs were an installation, the beginnings of a method for developing new works based on blending, and key amendments to blending with the notions of blend line and blend field. I will discuss *Multilogue* in more detail below as the third of my key works.

⁴⁹ CRiSAP is a University of the Arts London (UAL) Research Centre based at the London College of Communication (LCC).

8. *Objects & Process*: A dual aspect work made from the three workshops conducted with fellow practitioners as part of my primary research, expressed as (1) a film and (2) a series of prints. In addition to primary research as input, I also explored the relationship between an object and a process, attempting to distinguish between blending (as process) and blend (as object). Key inputs, such as juxtaposition, collaging as method also continued into this project.
9. *Bedroom Symphonies*: An album containing eight stereo compositions made from hotel-room voice practice sessions during a number of tours and residencies as inputs. It served as a review of the main inputs throughout my practice, and I also began to develop the notion of a taxonomy of inputs, which is further explored in Chapter Five and Chapter Six. *Bedroom Symphonies* is the fourth and last of the key works examined in more detail below.
10. *ZeroDotOne*: A final symbolic work and drawing, denoting the end of the creative works. I came back to an idea by Sadie Plant (1997) introduced in *Sorbet Period*: where once there was zero, that is potential, now the absence has been filled and appears as Kandinsky's full stop: 'As a full stop, that same point became the boundary between one thing and another, yet simultaneously that which connects one thing to another' (Short, 2010, p. 190). Through this, it also points to blending by which we establish connections.

This outline of the creative projects I engaged with as part of my research underlines the diversity of my practice, which uses a wide array of tools, media, genres and even questions as inputs to create a diverse range of outputs, from mobile phone pieces to audio-visual concerts, poetry, music and drawing. Making sense of such diversity has not been an easy undertaking, and communicating it has been equally difficult. However, blending has enabled me, firstly, to structure my reflections about my own practice, and, secondly, to provide structure and terminology to how I communicate it.

I will discuss four of the projects outlined above: *In A Day's Work*, *Traces in/of/with Sound*, *Multilogue* and *Bedroom Symphonies*. I chose them partly because they allowed me to present different facets of how blending can help artists working in a multimodal fashion to reflect on and communicate their complex practice, but also because I regard them as key works in the development of the ideas presented in this thesis.

For each of the projects, I will provide an outline of the final output before discussing each work in more detail, primarily by using the concepts of input, output, blend line and blend field. The exact approach, however, changes from project to project, adapting to the nature of each work and my intentions. With *In A Day's Work*, I will provide an introduction to

how I will use blending to discuss my work. I will then use these principles to consider a complex series of performances with *Traces in/of/with Sound*, and discover how blending also led to a potential method for developing new works in *Multilogue*. I will conclude with an overview of the key inputs to my practice in *Bedroom Symphonies*. I have also created blend diagrams for each of the projects, encapsulating its key points in graphical format. These diagrams are based on the model of process I presented in Chapter Three 3.4.1.

4.3 Key work 1, Project 2: *In A Day's Work*⁵⁰

4.3.1 Introduction

In A Day's Work was the first work to emerge from my *Sorbet Period*, which was inspired by reading, talking and reflecting about the purpose of the research. It consists of two complementary site-specific mobile phone pieces each combining a silent photographic slideshow (made into a film), with location sound as psychogeographical 'sound walks with a twist', where an experience arises at the intersection between sight and sound, 'virtuality' and 'reality', guided by a set of instructions. Both versions are available to the public via YouTube, chosen as most mobiles provide integrated access features.



Figure 3. Stills from *In A Day's Work 1*

In A Day's Work 1 depicts images of businesses at the very grassroots end of the economy (see Figure 3), which are to be experienced in high-finance locations – suggestions supplied in the accompanying instructions include the London Stock Exchange, the RBS Bishopsgate foyer and Canary Wharf. Conversely, *In A Day's Work 2* depicts images of high finance (see Figure 4). These are to be experienced in a grassroots environment, for example, Brixton market or Deptford market, both in south London.

⁵⁰ The media files for *In A Day's Work* can be found on the accompanying DVD alongside instructions and further project documentation.



Figure 4. Stills from *In A Day's Work 2*

4.3.2 A survey of blend fields

Blend field 1: initial motivations

At the beginning of this research, I reflected on the importance of technology in my work and decided to consciously engage with a new creative tool in order to observe its impact. This blend line contributed to the choice to use a mobile phone, and an additional factor was ease of access and cost. At the same time, I was also reflecting on how to make sense of differing opinions (for example the role of music within sound art as a discipline) and whether potential dichotomies might be resolved. These questions also found expression in the desire to experience opposites as aspects of one work.

Blend field 2: past practice

In the overview of my past practice in Chapter Two, I pointed to the dominance of sound in my practice, which, although coming from a musical trajectory, also found expression in musical elements such as pulse and rhythm being mapped onto vision (see the description of my work *Room With A View* in Chapter Two). Photography was an additional key element. In *In A Day's Work*, sound and vision combine to explore 'the opposite'. Site-specificity also played a role

Blend field 3: sensorial experience

Several blend lines from blend field 1 and blend field 2 combine, focussing me on the actual experience of practice. The mobile phone did this by leading me to debates about where virtual and 'real' experiences are located in the digital world as well as considering the notion of opposition by juxtaposing sensorial experience, in this case, seeing and hearing. Considerations of experiencing process more generally, and sight and sound more specifically prompted an investigation into notions of sensorial experience. This included examining phenomenology as a direct influence on artists working with sound, such as R. Murray Schafer. Thus, process also engendered a wish to find out more about sensorial

experience as an aspect of making, which became an output and an emergent input to continuing work.

Blend field 4: walking in London

Walking is a great pleasure in my life, and walking around London at the time instilled a wish to capture London as it retreats into the past, changed through gentrification into a more unified existence. These early and vague stirrings soon gelled into a firmer idea: the project was to set up the 'old' through photography against the 'new' through sound, as an experience supported by walking.⁵¹

Blend field 5: practical considerations

Practical considerations also had an impact on the work. I have mentioned cost being a factor in choosing the mobile phone earlier, but this in turn necessitated using a graphic approach to visual aspects in response to the small size of an average mobile phone screen. Finding suitable locations in which to experience the work also featured, as this proved to be difficult. With respect to *In A Day's Work 1*, sounds readily available in financial districts did not necessarily suggest the world of money, or, if they did (as in the case of the stock exchange), they were not easily accessible. This resulted in me re-considering the creation of a soundtrack, which would, however, meant the work would have functioned rather like a film whereas I was interested in juxtaposing the 'virtual' (visuals on a mobile phone screen) with the 'real' (environmental sound). These aspects contained within this blend field can be regarded as inputs to practice, but also as a lens influencing further choices.



Figure 5. Images from a presentation of *In A Day's Work* at the Tin Tabernacle as part of eXperimental electronics

When the mobile phone pieces were finalised, uploaded to YouTube and included on my website, reaching audiences became an additional input. For a presentation at a sound art

⁵¹ See also Viv Corringham's article "Voicing Place" in *Reflection on Process in Sound* Vol. 3, pp. 2-9 (supplied on the appended DVD).

event at the Tin Tabernacle in London, I circulated business cards inviting the audience to the website, in addition to posters outlining the project.

4.3.3 Conclusion

Prompted by the concerns of this research, which surfaced as initial questions around technology and dichotomies, with *In A Day's Work* I combined a number of past inputs from different blend fields working in with sound and vision and photography with new inputs, including the mobile phone and a focus on sensorial experience. The work also alerted me to an input that had been present before, although I had not been particularly aware of it; I realised the attractions that conceptual juxtapositions (virtual/real, old/new, rich/poor) hold for me as they surfaced throughout these pieces. Some of these aspects continued as blend lines into the next project, for example, the mobile phone, creating two complementary pieces and juxtaposing sensorial experience, and some continued beyond, into later work: juxtaposition; movement.⁵²

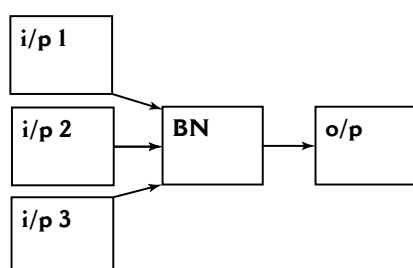


Figure 6. A basic generic blend diagram

A procedural blend*, in its basic form, might look, graphically, something like Figure 6 (above), where a number of inputs are combined into one output via a blend node.

However, *In A Day's Work* illustrates how process can result in a number of outcomes. In this case, two mobile phones pieces, a concern with a sensorial experience, and, of course, the findings discussed here. In this sense, an output can also be understood as a blend node in a continuing trajectory of practice. Furthermore, those inputs can be taken from wider blend fields, such as past practice. In this sense, we select elements from them just as we select elements from an input. We can, therefore, understand each as a part of a spectrum and we can choose which segment to illuminate at any given time.

When applying these ideas to *In A Day's Work*, the blend diagram becomes more complex (below). It expands from a simple graph in which x inputs are combined into one output, into a temporal flow chart that merges several inputs into one strand whilst injecting an extra one at another time, bringing about not one, but several outputs separated in time.

⁵² See also Dan Scott's interest in juxtapositions as emerged from my workshop with him, p. 179.

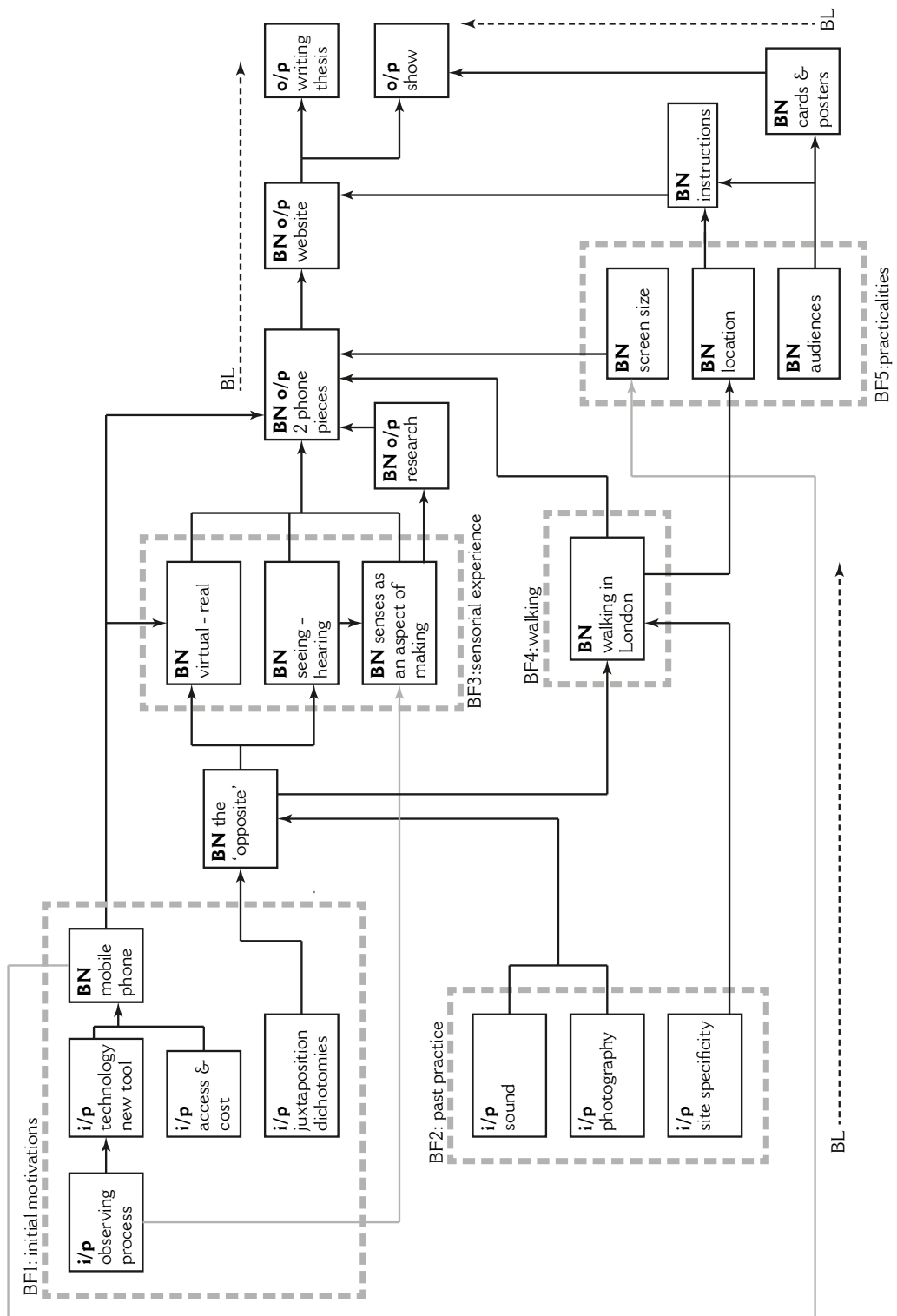


Figure 7. Blend diagram for *In A Day's Work*

4.4 Key work 2, Project 4: *Traces in/of/with Sound*

4.4.1 Introduction

As the fourth project in this trajectory of making, *Traces in/of/with Sound* was an audio-visual performance series exploring the relationship between image and music. It emerged from *over ride*, a second work for mobile phone, in which I try to interrupt audio-visual

coherence through movement on a double-decker bus in order to gain a visceral experience of sensorial experience.

Four performances and one installation took place between 2012 and 2013. The performances used live, improvised and processed voice (via laptop and Max/MSP) in combination with a film of my drawings, thereby juxtaposing one well-known practice with an unfamiliar one. Each version was documented through photography and a film, which combined the drawings shown with audio recorded at the performance.⁵³ I also collected audience responses as potential uncontrollable inputs. The final installation version was adapted from an earlier performance documentation.⁵⁴ All performances used different audio-visual configurations – from mono sound/one-channel video to eight-channel sound/two-channel video. This variety turned out to be a significant aspect of the project's development as it directed my attention towards audio-visual spatiality.

Traces in/of/with Sound, in particular, was a rather complex project that I have found difficult to communicate with clarity. Applying procedural blending has helped me to communicate by providing structure and temporal mental containers to aid the exploration of components and phases. In what follows, I will break down the discussion of the project into several stages as blend fields, which resolve themselves in blend nodes, that is the four individual performances and one installation, plus their respective preparation phases.

The blend fields here have a slightly different focus from those presented as part of *In A Day's Work*: Where, previously, I designated a set of interacting inputs as a blend field, here, I consider the inputs relevant to a specific period of making (a concert with respective development phase) as a blend field. This approach was prompted by the serial nature of this project and illustrates the flexibility of procedural blending in which notions such as inputs, blend lines or blend fields can be applied to different aspects of practice in order to examine pertinent features.

4.4.2 Blend field 1: Initial ideas

I was considering how to follow on from *over ride*, which, in its concerns with the relationship between sound, vision and movement continued into this project [input 1]. During this time, I attended *Seeing Sound*, a visual music symposium at Bath Spa University,

⁵³ I have appended a selection to the thesis on a data DVD alongside further documentation. For purposes of an overview I suggest viewing the installation version entitled *1.MAIN-Traces-GVArt-SM*, which I regard as a work in its own right.

⁵⁴ This performance took place at Aural Detritus Festival in Brighton. The documentation from this performance differs only slightly from the installation 'film'.

and there became aware of a documentary about Norman McLaren, one of the early exponents of visual music, and, with it, the stills shown below in Figure 8 (Barbeau, 2005).

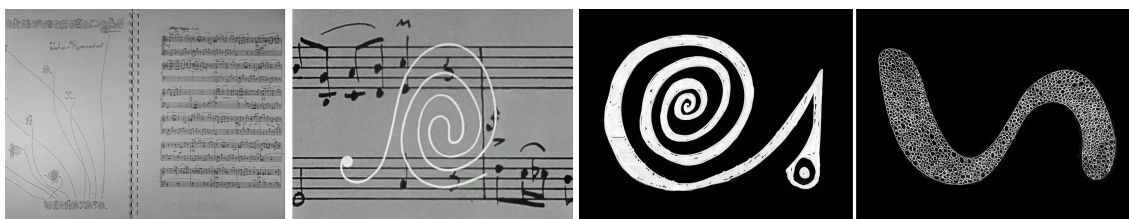


Figure 8. Two of Norman McLaren's drawings and two original stills from *Traces in/of/with Sound*

These images reminded me of some of my own drawings, some of which I had used for a one-off project two years previously,⁵⁵ where I had combined a film made from these images with live improvised voice [input 2, constituting a blend line]. I found the connection between image and music established by McLaren intriguing. He attempts, at times, to draw sounds with his own hand [input 3]. Furthermore, the American composer, Earle Brown, in the liner notes to *Folio and Four Systems* talks about the connection of still images made active and temporal through movement of the eye along them (Brown, 2006)⁵⁶ [input 4]. These experiences at the symposium can be understood as an early blend node, into which other thoughts and ideas inserted themselves as additional inputs.

I had explored technology as an influence and, earlier, I had chosen a new technology tool, the mobile phone, as an input to my work. Now, I was looking at whether perceptions of music would change with new practices. As part of this practice laboratory, I therefore wanted to explore how incorporating a new medium, that of drawing, might influence my conceptions of music [input 5].

Furthermore, because I was exploring process as a continuum, I wanted to make this explicit through a series of performances in which developments could express themselves over time. I intended to use improvisation to link a musical response to a given image at a given time (the performance). I now understand each performance as a blend node in which trajectories can resolve themselves [input 6].

Responding to Brown's (2006) observation that the eye brings movement to still images, I initially wanted data generated by eye-tracking technology⁵⁷ to link vision into sound. However, due to lack of access and a shift of interest to audio-visual spatiality (which I will

⁵⁵ *Sounds at the Muse*, Muse Gallery, London, curated by Martin A. Smith.

⁵⁶ Earlier in the 20th century, Paul Klee expressed this principle in many of his paintings as I also learnt at the symposium.

⁵⁷ Eye tracking is a technology that measures the eye's focal direction, and, through that, its movement. It is frequently used in psychology, product design or advertising, but remains a relatively expensive technology, although with on-going research into its wider applications, changes are occurring. Several games console companies are currently working towards the inclusion of eye tracking as part of their packages.

consider in more detail below), I did not pursue the idea further and this input was dropped for the time being [input 7 – dropped].

As another input to this piece, in his book *Lines: a brief history*, Tim Ingold (2007), draws attention to the archetypal origins of engagements with lines, which very much chimed with my interest in establishing a conversation between notion of ‘original’ humanity and technology, usually expressed in my live voice / processing work [input 8].

4.4.3 Blend field 2: preparation and performance 1, *Dismantled Cabaret*,]performance s p a c e [, London

Performance 1 was part of *Dismantled Cabaret* at]performance s p a c e [in Hackney, London. One of the aims of this project was to explore whether my music-making might be influenced by an engagement with drawing. To begin with, I decided to restrict myself to improvised concerts in order to follow an immediate on-the-spot relationship between the two. Furthermore, although I am interested in 20th-century fine art (see Chapter Two, p. 35) and I have some photography training, I have no background in drawing (although I doodle frequently). This lack of a ‘language’ seemed useful to me in so much as I felt this would allow me to engage more freely with the medium.

Leading up to the event, I revisited the original film of drawings used in the performance at *Sounds at the Muse*, London, made from scanned and digitally treated images showing white lines on a black background, combined into an initially static slideshow. I inserted black slides between images in order to refocus the audience’s attention from watching to listening, perhaps for similar reasons as Rolf Julius when he describes interjecting ‘pauses’ into the interplay between sound and vision so that each can be appreciated, see Chapter One (Khazam, 2005), although, in my case, music clearly forms a part of the work produced. I now added images and changed the white outlines to sepia ones. In this decision my life became a direct input to practice as, at the time, I was diagnosed with dyslexia and learnt that the eye finds white outlines on black particularly hard to follow.

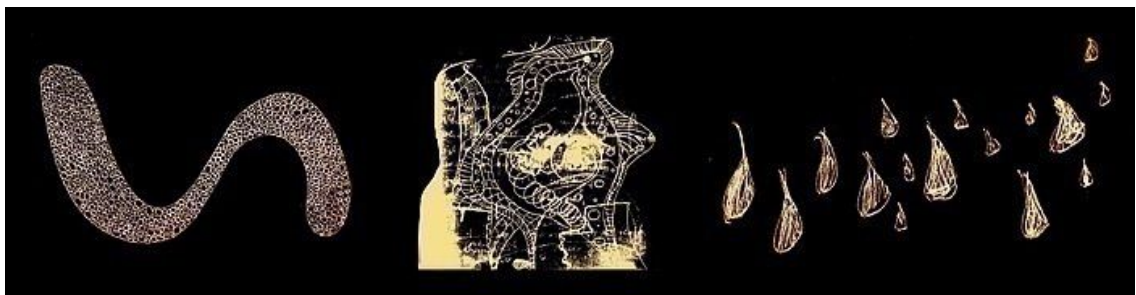


Figure 9. Film stills, with sepia tone

These aspects remained stable inputs to the project, although the elements used changed over time. For example, the film was added to and an aspect of movement incorporated at later stages, and each performance saw somewhat different technical parameters. In this case, the projection occurred across a whitewashed brick wall, creating a sense of cave paintings, which for me pointed back to one of the initial inputs from blend field 1, a concern with archetypes.

Furthermore, due to the venue's technical problems I performed in mono, which became a key input to the performance itself. As both a distinct outcome (performance) and blend node (one aspect of an ongoing series), the performance confirmed my interest in sonic spatiality and initiated a blend line which slowly moved me away from seeking to establish a relationship between sight and sound through eye tracking and instead refocusing me on audio-visual relationships as spatial experience.



Figure 10. Images from a performance of *Traces in/of/with Sound* at Dismantled Cabaret

4.4.4 Blend field 3: preparation and performance 2, City University as part of *City Lights: Transonic Transformations: Chips, Blossom and Hopscotch*

The second performance of the series took place at City University with an eight-channel sound system and a synchronised two-screen visual set-up. During the preparation for this event, I reflected on the previous mono performance and designed a new Max patch in response (see Figure 11) that allowed me to fragment the sounds created spatially. No changes to the film were made, but, when setting up for the performance, I decided to use both available projection screens, thus confirming technical factors as an input to practice. Visualising this development as a blend line illustrates how an element from performance 1, namely sonic space, became an input to performance 2, whilst another element, the film, was taken through in its original form. This, in turn, was influenced, in presentation, by another input available only on the day.

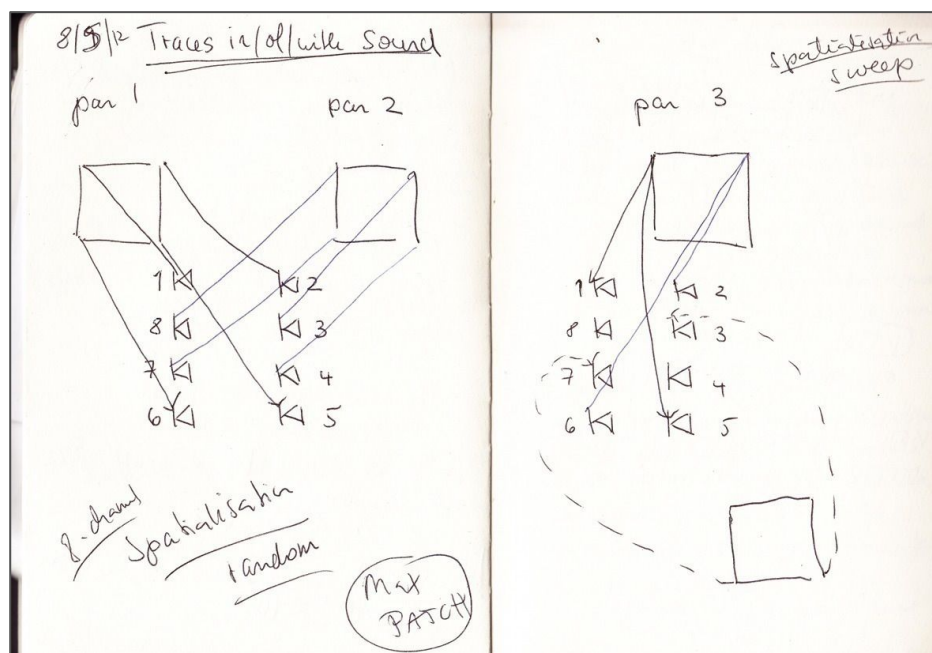


Figure 11. Planning sketch showing Max/MSP panning diagram

For the first time, a sense of divergent sonic and visual spatiality emerged at the intersections between eight-channel surround sound as ‘fragmented counterpoint’,⁵⁸ and a static image plane directly in front, where two synchronised projections showed the same image. I began to understand the consequences of feeling the interdependence of sound and vision in perceptual experience. As a spatial awareness arising from experience, it reflects a statement by Denis Smalley:

Firstly, I set out the experiential basis on which our understanding of space resides, since this is necessary if we are to be able to identify how acousmatic music relates to spatial experience in general. (Smalley, 2007, p. 35)

As I became aware of an audio-visual spatiality relating to screen-based works, I could find no directly relevant considerations of this notion in the literature,⁵⁹ showing that unexpected and new outcomes such as this can be an output of practice. Furthermore, as with my previous piece *over ride*, I found the input of movement was a key factor for establishing, or interrupting, congruent experience, illustrating the principles of a continuing blend line incorporating developing concerns such as motion.

⁵⁸ The ‘fragmented counterpoint’, plays with single sonic events, rather than the more traditional notions of electroacoustic diffusion, which began to develop with my installation *Parallel Textures* (see Chapter Two). It conceived of individual sonic instances hurtling through space, and is a centre point for those occasionally more connected lines.

⁵⁹ In November 2013, I summarised these and subsequent findings in a paper given at *Seeing Sound*, the symposium at Bath Spa University which had inspired the project two years earlier.



Figure 12. Auditorium at City University during soundcheck

4.4.5 Blend field 4: residency and performance 3 at SoundFjord, London

Performance 3 formed the concluding part of a one-week residency at London's sound gallery SoundFjord, during which I had access to a studio with data projector and four-channel sound system. I developed a new 20-minute long film for projection on one screen and explored its connections with four-channel sound.⁶⁰



Figure 13. Images from the SoundFjord residency, the talk and the performance

The main conceptual blend line during this time considered as inputs (1) visual patterns throughout the world, (2) aboriginal links between images and songs as maps, (3) the human voice and notions of expressivity and (4) Kandinsky's connections between drawing and voice⁶¹ as well as the relationship between blackness (used extensively throughout the film) and silence.

First, I prepared a new film, which was based on the initial principles, but, now, also included simple movements. This was partially prompted by audience feedback I received at City University as an additional input. The emerging sequences, the result of digitally zooming into scanned drawings, reminded me both of tribal or cave art and images of the universe, and appealed in their connotations with archetype and technology. The final film presents an initial blend node, a visual blend line of thinking and making.

⁶⁰ The development of this piece was documented on my research blog on <http://irisgarrelfs.com/traces-inofwith-sound-blog>

⁶¹ On the residency blog, I wrote: 'Drawing, for him, begins with a point, which is invisible, incorporeal and therefore silent (which must be, I figure, a silence that is not linked to death but to the body before birth...). Interesting for me is that Kandinsky then connects drawing to the voice, through speech (Kandinsky 1979).'

In my sonic experimentations, which I still considered as a response to image, I initially looked for ways to map concepts such as trace from image to sound. I soon switched back to principles of perceptual experience and experimented, for example, with reverb as a connector that added depth of space to sound. However, the final performance with one-screen video and four-channels of sound, sound and image still felt very divergent at times. During the residency period and concert, I inadvertently began to develop strategies that support audio-visual spatiality, which, in addition to the concert, became an output of this residency.

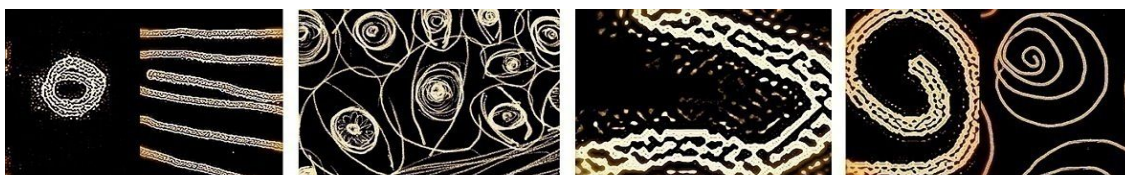


Figure 14. Film stills showing images developed during the SoundFjord residency

4.4.6 Blend field 5: preparation and performance 4, Aural Detritus Festival, Phoenix Brighton

The fourth and final performance of this series took place as part of the Aural Detritus Festival at the Phoenix, Brighton, with a stereo sound system and two overlapping projections (see Figure 15 below). I consider this the most successful performance in terms of experiential audio-visual coherence.

In the preparation phase, I extended the film to just over 30 minutes. As the sound system was to be stereo, I decided to use it in combination with two projections. Unlike the performance at City University, which used two screens fed from one DVD player, I used overlapping projections from two players covering walls and ceiling in order to achieve an unframed three-dimensional effect (see Figure 15 below). Two DVD players ensured that the films could be displayed unsynchronised, morphing in and out of each other. The approach was partially informed by audience feedback, which had suggested performing in a planetarium to maximise immersiveness. This suggestion entered the work as a new input and was inserted into an existing audio-visual blend line.

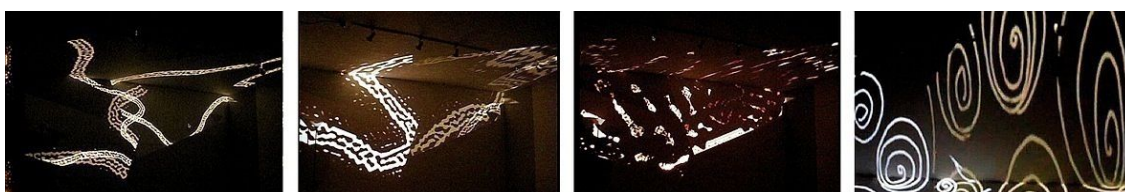


Figure 15. Images depicting overlapping performance projections at Aural Detritus

As a result, the visuals blended more successfully with a relatively small sound field, which, in turn, contributed to the formulation of a strategy for minimising or maximising spatial congruency in audio-visual experience, relating to screen-based works, which I have summarised in the conclusion to this discussion of *Traces in/of/with Sound*.

One further addition to procedural blending emerged as an output from this version, and blending began to enter my work. I began to consider the work to date in terms of one system, rather than just the sequential steps it consisted of, in terms of a *blend globe* (see Figure 16 below). Similar in appearance to an old model of the atom, it explores juxtapositions or *polar pairs*, some of which are experiential, some conceptual, all distributed around the globe's circumference, the piece arising out of their interactions. However, in this thesis, I do not develop this notion further.

In this instance, I work with the following pairs:

- sound – vision
- big (loud, bright) – small (dark, quiet)
- concrete (representation images, recognisable singing) – abstract (zoomed in images, abstracted sound)
- static – movement
- structure – ambiguity
- prepared images – sonic improvisation

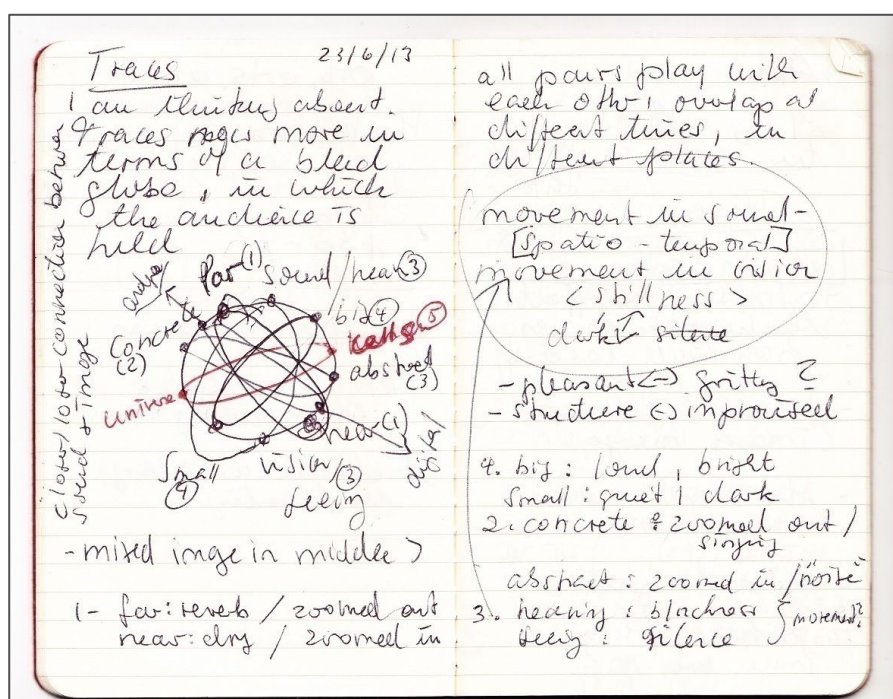


Figure 16. Sketch developing the notion of a blend globe after the performance at Aural Detritus

4.4.7 Blend field 6: installation as part of *Noise and Whispers*, GV Art, London

The final version was an installation as part of *Noise and Whispers*, at GV Art in London.⁶² It took the form of a looped audio-visual piece that was projected from one source with headphones for listening (Figure 17).



Figure 17. Images from the GV Art opening courtesy of photographer Frances Nutt

Initially, I had intended to select the most effective blocks across the series. However, I decided to combine the audio recording from the performance at the Phoenix in Brighton with the visuals shown at the event, introduced by two explanatory stills that encapsulated my interest in movement and juxtaposition (Figure 18). However, in reviewing all materials, each formed an input to the final version, as was the experience of watching and listening. When setting up the exhibition at GV Art, considerations of how it might be experienced in the place also functioned as an input.

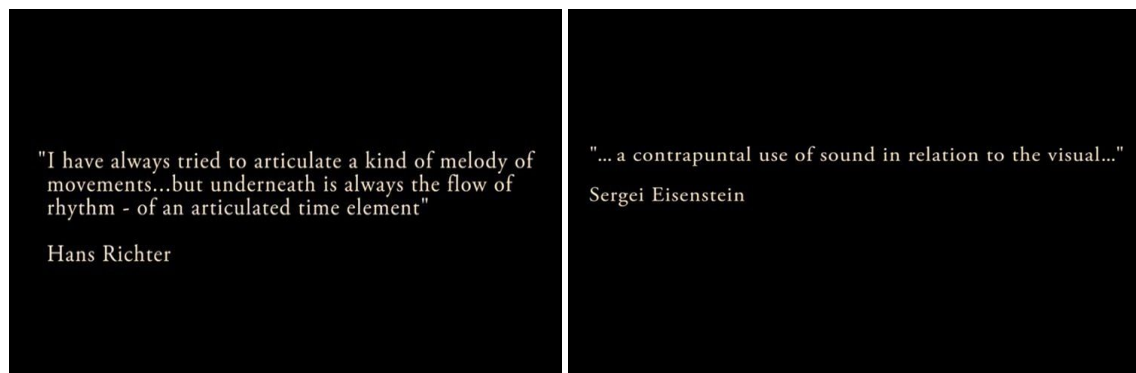


Figure 18. Additional film stills

4.4.8 Conclusion

Traces in/or/with Sound brought together a great number of inputs and also yielded several outputs. As part of this project, the temporal aspects of practice were made explicit. Over time, inputs were added (for example, using multiple screens), fell away (for

⁶² As mentioned earlier, one inspiration to *Traces in/of/with Sound*, was an earlier performance at *Sounds at the Muse*, curated by Martin Smith. In the summer of 2013, I received a call for another show he was curating, *Noise and Whispers* at GV Art. This seemed to close the circle and I applied submitting a fixed version, which was accepted.

example, eye tracking), changed significance (consideration of archetypes); outputs emerged (audio-visual spatiality), were taken forward or dropped (selecting recordings); reciprocal relationships became visible (available technologies); some blend lines from earlier pieces resurfaced in a different guise (embodied movement as audio-visual movement). Each performance presented a distinct output and can be understood in terms of a blend node in which inputs, some encapsulating entire blend lines, temporally resolve themselves.

In practice, inputs can be brought in from everything we encounter, regardless of whether they are adjudged as positive or negative. For example, having to perform with a mono system refocused my attention on the significance of sonic spatiality in my work, which then widened to audio-visual spatiality in screen-based works. Once established as an output of practice, this new understanding became an input to process, as considerations of movement in audio-visual relationships had been earlier. However, such discoveries are not only the result of conscious choices, but also of unconscious undercurrents where interests manifest themselves in the selections made.⁶³

In the final stages of working on *Traces in/or/with Sound*, I had encountered conceptual blending and although it did not form a direct input to the performances or installation, it contributed to the recognition of its potential usefulness and yielded the notion of a blend globe. Additionally, in reflecting on the project I realised how blending allows me to switch focal points and my observational resolution of focus without having to switch strategies or lose sight of the overall direction or of a work's key components. By applying blending I can discuss complexity, I can explore a single detail or a cumulative trajectory and I can change or insert such information at any point.

Furthermore, in *Traces in/or/with Sound* I asked if, or how, my notions of music would be affected by engaging with a relatively new medium in my work, drawing. This was prompted by identifying fine art as an input to sound art practice – expressed as drawing – and wanting to re-engage with music as another such input.⁶⁴ However, during the project's two-year lifespan, in which I encountered different spaces and situations, each with its own audio-visual configurations, it became clear that I could not answer this question. I had regarded the two inputs as essentially separate entities. However, I now discovered a new sense of joint audio-visual spatiality. My attention started to turn towards this idea early on, although it was a nebulous feeling to begin with. Throughout

⁶³ The topic of undercurrents resurfaces in my next project *Spoken Songs*, a booklet of texts works, which can be found on the accompanying data DVD.

⁶⁴ I have talked about their roles in the development of sound art as a discipline in Chapter One.

the development of this project, a blend line of audio-visual spatiality emerged and became more concrete.

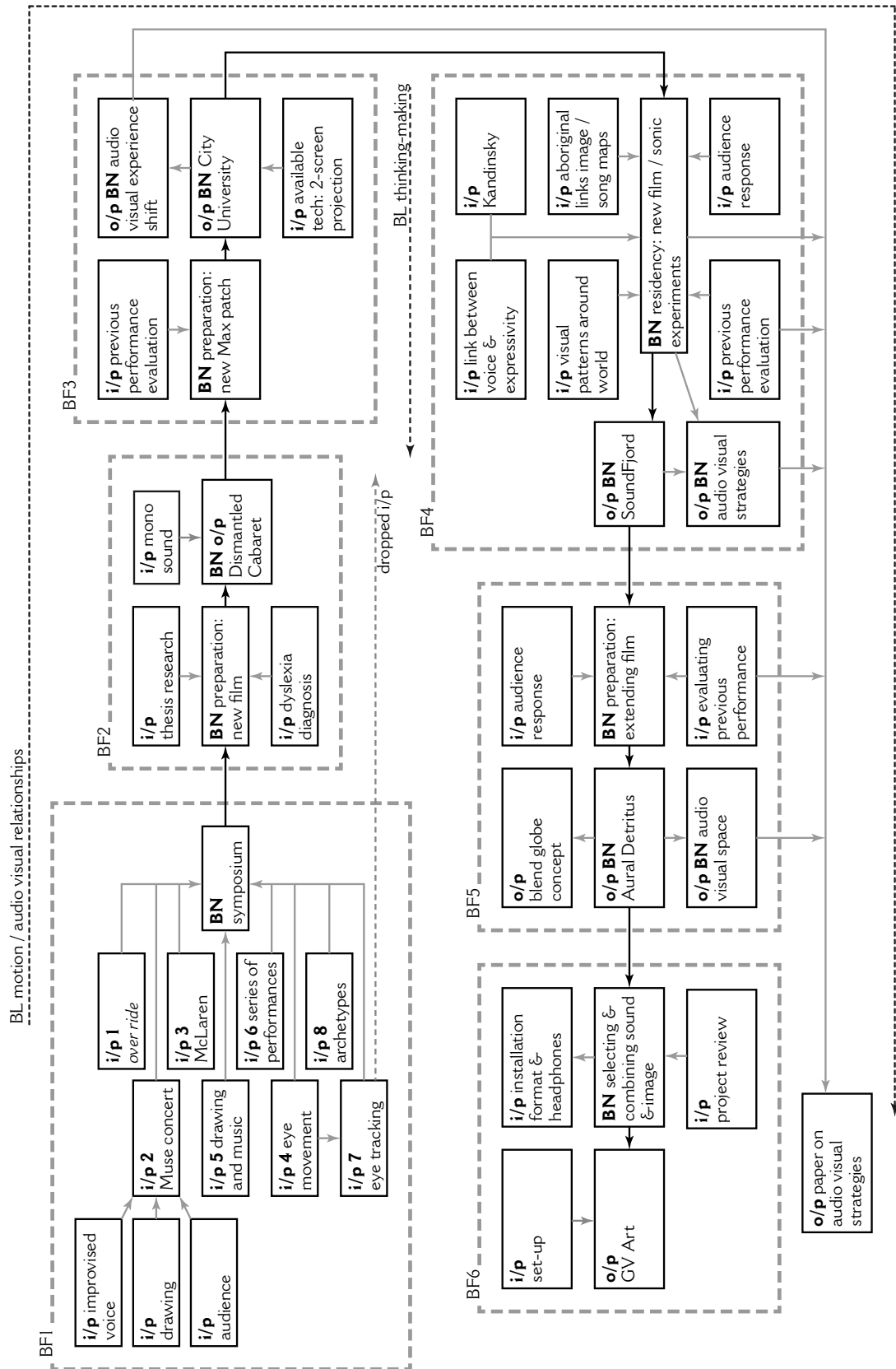


Figure 19. A blend diagram showing the development of *Traces in/of/with Sound*

From this journey, I have extracted the following early-stage observations, including strategies for minimising or maximising spatial congruency in audio-visual experience relating to screen-based works:⁶⁵

- The more separate visual space and sonic space are, in practical terms, the less they will be experienced jointly. In the case of *Traces in/of/with Sound*, eight channels of very fragmented surrounding sound, and two very bordered screens of rather static and distinct images to the front imparted the least congruent experience.
- A higher number of audio channels and fragmented sound correlates to a tendency for a fragmented experience, especially when related to framed images. However, this may not apply to ambisonic systems, as the use of reverb seems to support a united experience.
- The experience of congruity is aided by slowness of movement in both sound and vision. Perhaps this gives the brain enough time to relate image and sound. This appears to be in contrast with most one-screen/stereo works, where fast movements seem to support what Chion describes as audio-visual synchresis (1994, p. 63).
- Removing images from their frame as in the performance in Brighton, where I projected across walls and ceiling to encourage a spatial visual experience, allows for a more congruent experience of audio-visual spatiality.

4.5 Key work 3, Project 6: *Multilogue*⁶⁶

4.5.1 Introduction

In between performing *Traces in/of/with Sound*, the undercurrents of *Spoken Songs*, in which I had explored the notion of mapping by considering poems in terms of songs, and conducting interviews with fellow practitioners, I began to develop *Multilogue*, a multi-channel installation in which I used primary research in the form of interview extracts as a direct input. It is also the first project in which I directly engage with conceptual blending as an aspect of the work.

The project was inspired by the richness of the interviews I conducted. However, no immediate way to proceed, either formally or conceptually, suggested itself. I considered a number of approaches, from sound poetry to radio art, but neither stimulated my

⁶⁵ They are set out in more detail in a paper given at *Seeing Sound* at Bath Spa University in 2013.

⁶⁶ *Multilogue* is represented on the accompanying data DVD by eight stereo sections, standing for eight of the interviews. An additional stereo compression indicating a possible interaction between them is also included. A PDF file gives further information.

imagination sufficiently and I experimented with principles of blending as a developmental tool to overcome this hurdle.

At the very beginning of working on *Multilogue*, two distinct, if intersecting, key blend fields emerged: one in which I developed the installation and one in which I explored blending as a developmental tool. I will discuss these two fields, broken down into individual blend lines.

4.5.2 Blend field 1: the installation

Blend line 1: voices and meaning as input

When initially evaluating interviews, some statements stood out, for a variety of reasons, and I began to collect significant phrases. Several questions presented themselves as to the materiality of the piece: should I extract interview content and present the statements in my own voice, perhaps even a digital one, or should I use the original recordings? Should I process the material as sound only, until the content was unrecognisable or – unlike previous pieces – explicitly work with meaning? Inspired by Viv Corringham's *Shadow-walks*⁶⁷ as a further input I decided to use the recordings as material, adding my own responses by means of selection and composition.

I had not worked in this way with voices before, normally I prefer abstracted expression, and this decision raised a number of questions. For example, Brandon LaBelle writes: 'The voice comes to us as an expressive signal announcing the presence of a body and an individual...' (LaBelle, 2010, p. 149). However, in *Multilogue*, I was proposing a two-fold separation of the individual from her voice: Firstly, the voice is removed from the physical presence of the interviewee through the process of recording, and, secondly, the voice is then stripped of its recorded interview context. Who is it, then, that is speaking? A chorus of disembodied voices or myself speaking through a selection of phrases? Where, then, lies the meaning of what is said?⁶⁸ These questions appeared as inputs within this blend line.

'Look at a song's lyric on the page: whose "voice" is there? Who's talking?' asks Simon Frith, thinking, in the first instance, of the author of the lyrics (Frith, 1998, p.183). However, when sung, we identify the same text with the singer and his personal interpretation. In rethinking the interview process as improvisation, its content as lyric,

⁶⁷ *Shadow-walk* is an ongoing project by Viv Corringham in which she accompanies participants on favoured walks, later repeated by her alone. Both walks are recorded and later combined into a final piece.

⁶⁸ In addition to such conceptual questions an ethical issue presents itself: I re-contextualise artists' expressions and recombine them into a new work. Although many artists have used such approaches previously, I decided to request each artist's express permission to use their recordings in this way.

and, consequently, hearing the spoken voice, with its semantic melodies, also as singing, we can reconnect the themes through a strategy proposed by Norie Neumark where authenticity emerges through performance in which the voice calls ‘the other into an intimate relationship’ (Neumark, 2010, p. 96), making itself known. With these considerations, a further blend line emerges as input to this piece, taking up a thread from my previous work *Spoken Songs*, in which I had begun to engage with words in terms of songs.

Additionally, in performance, Roland Barthes’ material vocal ‘grain’ (Barthes, 1977) conveys a personal subtext beyond the initial meaning of words, beyond representation; ‘the performative voice is quintessentially paradoxical in Mladen Dolar’s sense and uncanny in Freud’s sense of *unheimlich* or unhomely’ (Neumark 2010, p. 97).⁶⁹ We hear, but also not hear the body through its voice. How much more so in the case of the recorded voices?⁷⁰

The title *Multilogue* contains two further inputs in the derivation of its name, a contraction of the words ‘multi’ and ‘dialogue’.

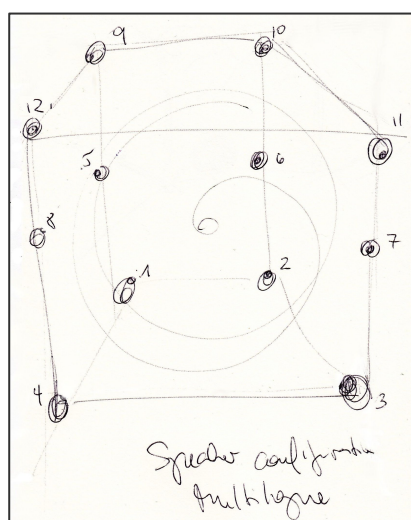


Figure 20. *Multilogue*, potential spatial speaker configuration sketch

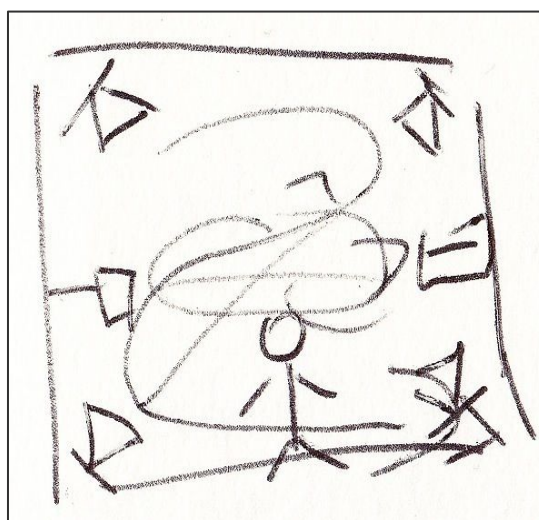


Figure 21. *Multilogue*, sketch showing installation side view imagining sonic movement

Blend line 2: the format

When thinking about the format for this piece, I briefly considered a stereo composition but felt that the voices demanded more space, and quickly settled on an installation where

⁶⁹ As a native German speaker, I can attest that the German term *unheimlich* carries a sense of alienation, of fear arising from the unfamiliar.

⁷⁰ Norie Neumark observes, ‘although the digital has further and specifically disturbed the authenticity of its voices, the digital relationship with authenticity is itself particularly complex and paradoxical’ (Neumark, 2010, p. 95).

loudspeakers would be situated around the room, at different elevations. In this speaker set-up, another work undertaken at the time appeared as an input: *Remembering Worlds*, a nine-channel installation for the BeOpen Sound Portal.⁷¹ Each instance of the installation would depend on the specifications of the exhibition space and I would reshape the composition to address its properties, and that of available speakers (minimum of eight). I envisaged the final installation as performance, recorded into space and arising in conjunction with it. Here, interviewees remain a ghostly presence, a commenting invisible chorus, in an all-but empty room. This room presents itself as a newly created body inhabited by the listener, with voices pulsing through audible trajectories of invisible veins. To support this immersive listening experience, the room would have to be as dark as possible. The installation also presents an embodied blend, a unified space created by a coming together of singular voices.

Blend line 3: composition

When listening to the original interview recordings I collected phrases that caught my attention; some related to experiences of making, whilst others encapsulated specific listening experiences. In *Multilogue*, the original utterances were manipulated by selection, by omission, and in using small extracts from longer recordings; I am reminded of Burroughs' and Gysin's cut-up technique. However, rather than using only a few, or even just a single word I included extracts containing meaning. Composing this manifold conversation was a lengthy progression of trial and error, manipulating and collaging sound as well as meaning, which rekindled earlier considerations of poetry, song and lyric (in *Spoken Songs*), rather than producing purely abstract sonic soundings. This period of making also became an input to how I thought about the format. I realised that I had to revisit this composition for each exhibition space firstly, to make sure that meaning would not get lost in the babble of voices, and, secondly, to guarantee the right experiential balances of tone and volume.

4.5.3 Blend field 2: blending as method

Introduction

When beginning to think about *Multilogue*, I wondered how I might meet the challenge of using verbal meaning as an input to composing with voices. I began by compiling lists of associative ideas and realised these actually were lists of potential inputs. As I researched

⁷¹ A stereo compression of the nine-channel sound installation *Remembering Worlds* is supplied on the accompanying data DVD alongside further documentation.

and considered these inputs in more detail, I developed and expanded on the concepts of blend line and blend field which gave me the beginnings of a method that could contribute to the development of new works. The inputs also proved instrumental in the development of procedural blending, and discussions of process such as those detailed in this chapter. I later also identified a potential use of these principles for educational settings and collaborations. For example, the method set out below can help students to produce work; collaborations are aided by using blending to help participants view each other's backgrounds as blend fields, to identify useful inputs and to find connections between them (see also p. 98).

Output summary: the beginnings of a method

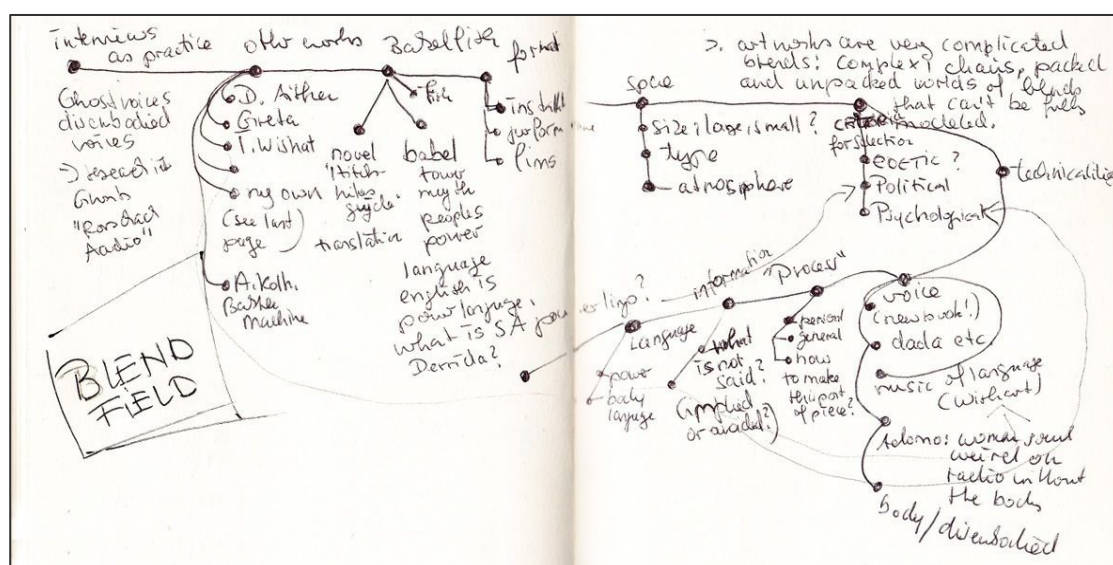


Figure 22. Sketch developing ideas for *Multilogue*, conceived as a blend field

As a first step, adapted graphic tools such as mind and/or concept maps may be used to record individual topics and factors such as a commission brief as inputs, to which new ones are added as needed. In the case of *Multilogue*, I began exploring other works containing interviews, voice and language, plus some other more vaguely connected ideas such as Douglas Adams' *Babel fish*.⁷² In fact, any association may add a new idea to this list of potential inputs, and the 'flip-side' approach, as used by Janek Schaefer (see p. 132), in which the opposite of an initial idea is explored, can also be used to generate new inputs. Mappings, as explored in *Spoken Songs*, may illuminate familiar inputs by looking at one (words) in terms of another (song), thereby opening new perspectives and understandings. As an additional feature, one might introduce surprising, and, apparently, completely unrelated ideas to the system, with the aim of exploring potential connections.⁷³

⁷² The Babel fish is a biological translation device from *The Hitchhiker's Guide to the Galaxy*, a comical science-fiction radio broadcast (1978) and, subsequently, a novel by Douglas Adams.

⁷³ Blending theory suggests that potential frame clashes can result in rich blends (Fauconnier & Turner, 2003).

These headline topics were then broken down into their individual components. Possible inputs were dissected into a cascade of elements, which reveal more and more detail until some finally connect and inspire.

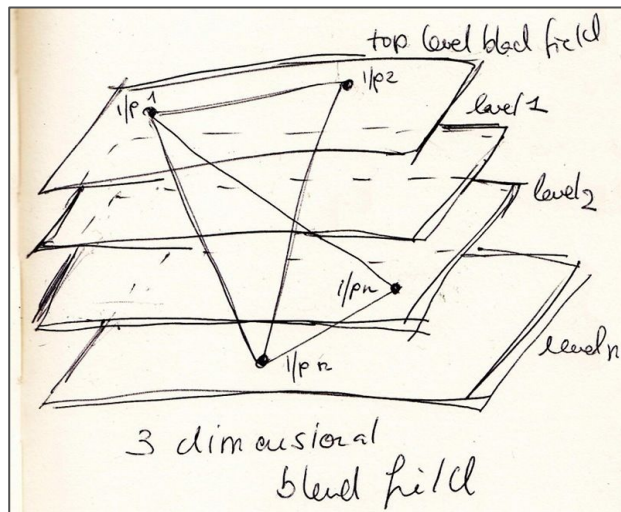


Figure 23. Sketch depicting the idea of a three-dimensional blend field diagram

Each input, as it is explored, yields a blend line. Zooming out, the wider context of a blend field is revealed. In following this process, we may establish several levels of fields, a potential three-dimensional field from top-level to level n (see Figure 23).⁷⁴ From each aspect, perhaps distributed across different field levels, individual components can be connected and taken forward, into the next step of the process, or the final artwork. This principle contributed to the realisation that blending is scaleable; I can use it to discuss a complete system as a blend field, or specific sections of it, as in the case of this discussion of *Multilogue* where the development of the installation represents one blend field and the development of the method another.

Blending-as-method: a simplified example

Once these ideas were formulated, I prepared a condensed version that I introduced to my BA students at the London College of Communication. From input 1, an indefinite amount (n) of associations are generated, each of which may yield an equally unspecified amount of sub associations. The blending process connects between a finite selection, leading to an output (Figure 24, p. 95).

⁷⁴ The three-dimensional blend field bears similarity to a blend globe. However, temporal aspects are still present.

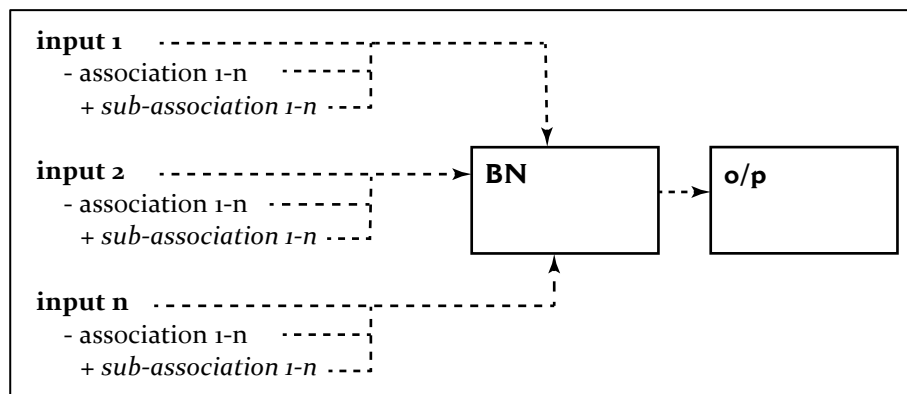


Figure 24. A diagram illustrating how blending might be used as a method

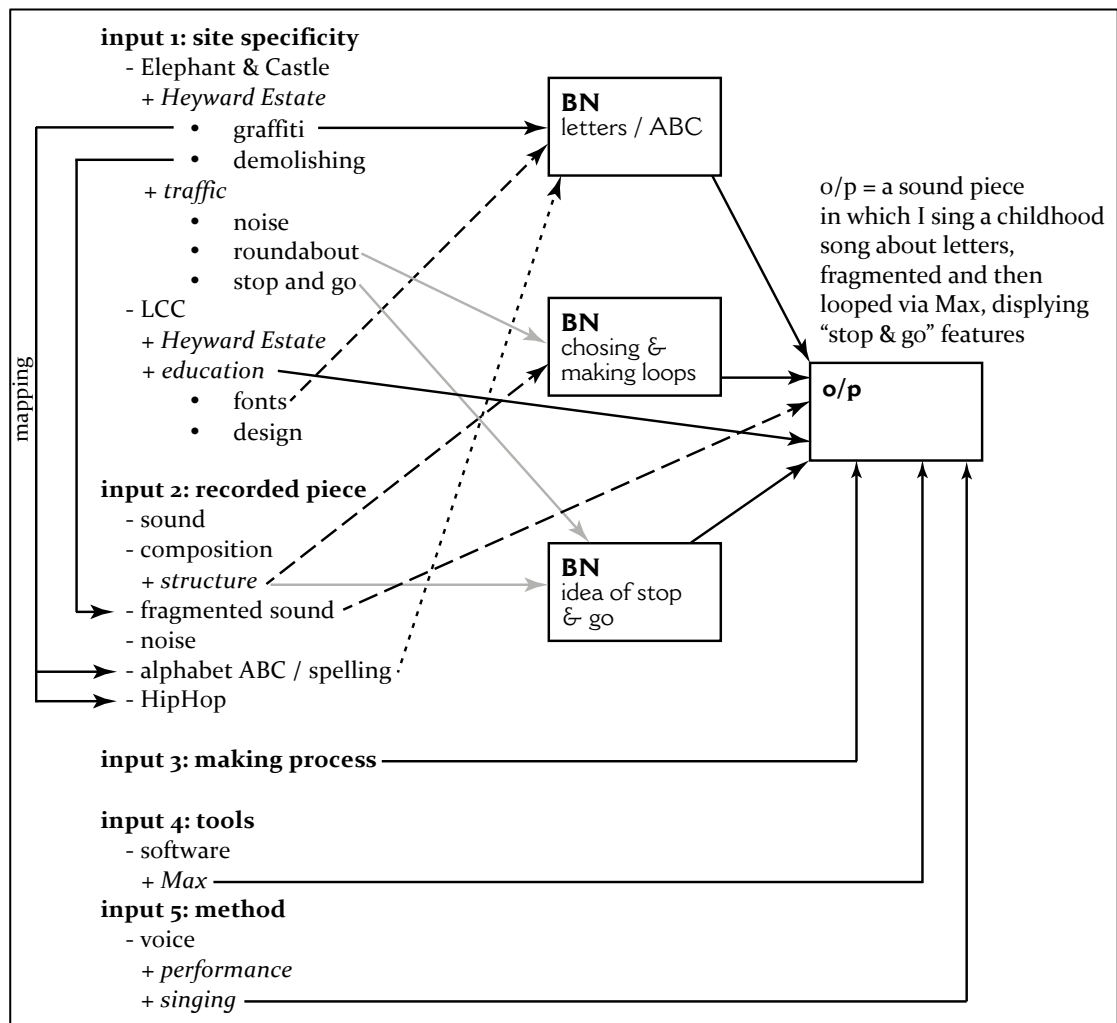


Figure 25. An example of blending as method

I then proceeded to clarify this diagram by applying it to one example, a hypothetical, recorded, site-specific sound piece (see Figure 25 above). Input 1 related to the site-specific aspects. Input 2 represented the specification that a recorded piece would be produced. I added one input for the hypothetical making process, one for tools and another one for methods. I then generated several associations and sub-associations, some of them through a mapping process, for example, by applying the idea of demolition onto

sound, which generated an associative input of fragmented sound. For the blend, only some of the generated ideas were selected. This resulted in a hypothetical piece in which I would sing (selected from method) a childhood song (selected from an association in input 1, education), designed to teach children the ABC (merged from input 1, ABC and sound, spelling), fragmented by a software process (tools), arranged with some loops (derived from input 1 – site – roundabout).

4.5.4 Conclusion

In *Multilogue*, I moved away from focussing on the relationship between sound and vision and their link to movement towards blending as an input to practice. This shift expresses itself in how I view the material used, namely as inputs that want connecting, and how the forging of such connections may be aided by establishing blending as a developmental method. There are three outputs: an installation, a method for developing work (demonstrating the flexibility of blending as a tool for artists), and amendments to blending expressed as *blend line* and *blend field*, encapsulating a re-evaluation of the role of the frame in process. In blending theory, prior blends can become established as broader contexts, as frames. However, in researching such contexts we frequently fragment these frames into constituent components, some of which may be folded back into the developing piece as an input. I have termed this trajectory of blends a blend line in order to facilitate a more methodical engagement with their individual components. Taken together they make up a blend field.

Throughout this project, the developmental aspects of process came into focus again, albeit from a different perspective than in *Traces in/of/with Sound*. In *Traces in/of/with Sound* (see blend diagram in Figure 19), each performance presented a discrete output as well as a blend node in which, as part of a continuing blend line, differing elements from essentially the same inputs were (re)mixed in conjunction with new inputs. Here, I zoom into activities and show two blend fields emerging from the initial inputs, each yielding different outputs (see Figure 26, p. 97).

Additionally, in *Multilogue*, scholarly research becomes a direct input to creative work, yielding both creative and scholarly outputs. This erodes the traditional divide between theory and practice confirming blending as a strategy for artists to unify practice and theory as an expression of process.

Lastly, the principles of procedural blending can be used as a method for creating sound art pieces, which may be useful in educational settings and to facilitate collaborations. In making work, we may explore a range of inputs and consciously look for connections between them. Supplying potential steps to the creation of work and methods for generating ideas may support students in the development of their ideas, especially with more complex projects. The same principles may also be used in collaboration. In interdisciplinary partnerships, for example, we may understand each discipline as a blend field from which to select inputs. Making such aspects explicit methodically may facilitate connections between even very diverse subjects.

4.6 Key work 4, Project 9: *Bedroom Symphonies*

4.6.1 Introduction

Bedroom Symphonies, the last key piece of this research, is an album containing eight stereo compositions made from hotel-room voice practice sessions during a number of tours and residencies between 2006 and 2009. Through it, I review the key inputs to my practice. In the trajectory of my practice laboratory, it follows *Multilogue* (an installation made from interviews) and *Objects & Process* (a film and a series of prints based on workshop documentation through which I explored relationships between an object and a process).

The initial process is described in the accompanying booklet as follows:

So, imagine me sitting on a bed, laptop on the night table with my trusted cheap head mic plugged straight into it and you won't be too far from reality. As the mic isn't exactly the best on the market and it's also done sans soundcard, there is a certain raw feel to the sound – and I have tended to whack up the effects in places. I really like the way you can hear the materiality of the situation in the recording! The result is a rather curious, private piece, a performance entirely without an audience. (Garrelfs, 2014, p. 3)

The pieces were composed from this source material in 2014. I observed myself enjoying internal references to Tracey Emin's Turner Prize-shortlisted *My Bed* (1998)⁷⁵ and the infamous notion of a bedroom producer. I also gently questioned conceptions of liveness referring back to an input from *over ride*. The album is accompanied by a booklet containing a selection of photographs from the journeys and a critical review of my work by Brandon LaBelle. His response to my practice provided an external perspective, which, in turn, may feature as a direct input to subsequent projects.⁷⁶

⁷⁵ A connection made via equally unmade if anonymous hotel beds.

⁷⁶ I am specifically thinking here about his comments on sound poetry in relation to the 'electronic body' (LaBelle, 2014, p. 36), in which I find parallels in my work *Multilogue*.

Viewed as a blend field, *Bedroom Symphonies* can be broken down into two simple blend lines, with two respective outputs. Blend line 1 takes input 1 (a series of practice recordings) to a selection stage, a composing stage through to the CD. Blend line 2 takes a series of photographs through comparable stages, and adds LaBelle's essay about my work to the final brochure. Both blend lines are combined in the final online release (although the two parts are hosted on different platforms), whilst the physical release incorporates a selection of tiny photographic prints. The review of inputs to my practice makes up an additional blend line.

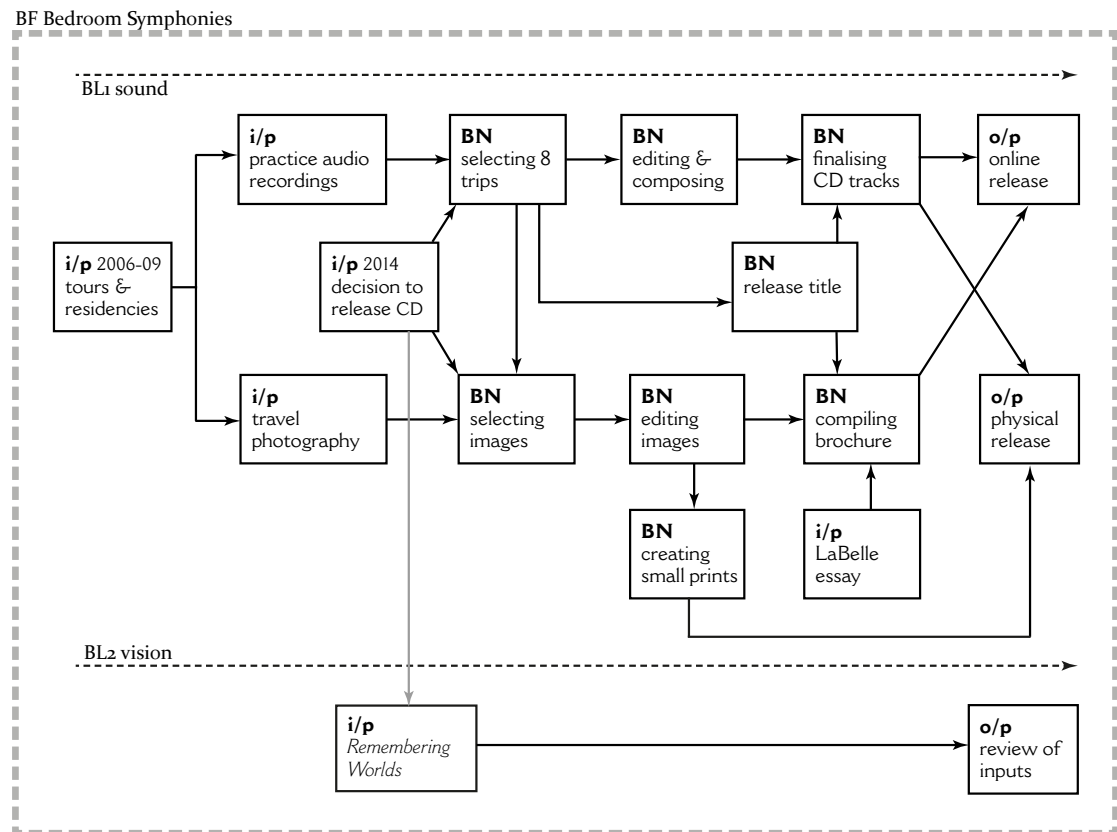


Figure 27. Blend diagram for *Bedroom Symphonies*

4.6.2 Inputs to my practice: a summary

As part of developing the collaborative installation *Remembering Worlds* I had begun to consider the possibility that some inputs may present constants, either in the work of individual artists or in that of a group of artists.⁷⁷ I identified the inputs of technology, site, research, experimentation, collaboration, personal interests and compositional experience. With this consideration of *Bedroom Symphonies*, I revisit some of the key modes and inputs to my own practice introduced in Chapter Two, each of which

⁷⁷ Arguably, working with sound on some level may present just such generic input which I will consider in the next chapter.

encapsulates a blend line of development. In doing so I intend to present another way in which blending can assist artists to explore their practice, not by examining development and change, but by exploring how, within this change and flux, central concerns can also be found and communicated, applying the same principles of blending. In doing so, both change and stability can be discussed as aspects of one practice.

Input Improvisation: Improvisation is a persistent method, developed early in my life as a response to situations, spaces, environments. Often this expresses itself through voice, in improvised concerts or as a first level of creative exploration from which I take elements forward into more complex compositions. I am reminded of earlier journeys, a child travelling in the back of my mother's car and singing improvised soundtracks. I also remember feeling free and unrestrained on these occasions, connecting to notions of freedom as set out in Chapter One. Improvisation now extends outside music making and becomes an attitude, a method for engaging with research and other situations such as in the workshops I conducted with fellow practitioners (see Appendix, starting on p. 170).

Input Collage: Throughout this research the method of collage re-appeared. In Chapter One, I introduced it as a visual art method mapped onto sound, which, in Chapter Two, was described as one I also use (see p. 35). In Chapter Three, I wondered if dada pioneer Max Ernst, sketching out his approach to collage, perhaps foresaw the notion of conceptual blending (see p. 57), or indeed the notion of a 'bricoleur researcher' who gathers 'data at a number of different levels' (Choudhury & Slaby, 2012, p. 34). I now realised that through collage, whether in composition or research I look for connections between the materials, including physical or conceptual considerations. It is perhaps for this method that blending theory seemed to make so much sense to me. In *Bedroom Symphonies*, the materials connect on several levels, both collectively and individually. Firstly, they are all pieces made in certain ways, on journeys. Secondly, each piece exhibits its own aural connectivity established through the composition process.

Input processed voice/performance: Throughout this research, I continued to give improvised voice performances using extended vocal techniques and improvisation as a response to place. Within this, I also recognise a desire to mould complex sonic collages. My interest in working with extended voice, therefore, also lies in its ability to extend the sonic pallet, the quality of sounds. I consider it as an instrument, rather than a conveyor of meaning.⁷⁸

⁷⁸ I sought to engage with words and meaning in some of the projects presented earlier. Whilst I have not discussed these performance as individual works (although they are listed alongside exhibitions in the Appendix), they also underwent change. A simplification took place, a collaborative performance with Viv Corringham, for example, used no processing at all.

Input music/composition: In some respects, the above inputs relate to the input of music, but are also partially contained within it. For me, music incorporates the pleasure of listening to connections, those between frequencies, textures, internal spaces, movements, sonic events, developing patterns that sometimes make up a world of their own, and, sometimes, reach out tentacles to establish connections with other inputs such as images.

Input photography: *Bedroom Symphonies* is accompanied by a booklet with photographs from the journeys. I have always taken a great many pictures on journeys, usually circulated as photo diaries on Flickr.com, or, as in the case of *Room With A View* and *Twine*, condensed into audio-visual pieces. Overall, images in my work either arise from sound, or they exist in support of or alongside sound. Even my drawings in *Traces in/of/with Sound*, made separately from sonic experiences, were improvised, not planned, and enter what I consider my practice only when put together with sound. Additionally, working as a photographer in the past, I was also inspired by music, documenting performances and related activities.

Input site-specificity: Each piece in *Bedroom Symphonies* is specific to one country, but collectively also specific to a type of location, namely a room one sleeps in. However, my approach to site-specificity does not mean work is created for or within a particular locale, nor does the work represent a place, but rather, it is a response to it (hence often also called site-responsive art). Digested through practice, such a response, whether an improvisation or a fixed-media work, includes people in its understanding of place, people who, through their ideas or presence, participate in creating it. However, this response is not an investigation of the geographical, historic or sociological aspects of site. Rather, it is a poetic evocation of presence on the one hand and presence within a space or situation on the other. It is this notion that binds most of my work together.⁷⁹ Site-specificity also finds expression in works using environmental recordings.



Figure 28. Photographs from Celje (Slovenia), Washington (USA), and travelling to Morelia (Mexico)

⁷⁹ Perhaps *Spoken Songs* might be an exception. However, most of the texts capture specific settings and an ephemeral experience of place.

I recognise how these inputs revolve around each other, improvisation and voice, site-responsiveness and collage all link back to earlier developments as discussed in Chapter Two, although they may appear to different degrees and in different configurations at different times. Whilst they represent stable inputs to my practice, they are also blend lines because they change content over time. Furthermore, in each work, in each blend node, I might use different elements from it, sometimes focusing on one input, sometimes on another depending on choices that are influenced by the context as blend lens.

4.7 Summary

In this chapter, I explore the making of the new creative pieces that emerged as part of my practice lab. I use the term 'emerge' here advisedly: the aim was, in part, to observe and follow threads where they led, rather than prescribing a complete set of works from the outset. The practice lab, therefore, came alive as a journey where each project revealed different interconnected facets as inputs to process, encapsulating general research concerns just as much as periods of non-activity, reading, talking, listening, making, reflecting and writing, as a lineage of making. At times, music seemed to come to the forefront (*Traces in/of/with Sound, Bedroom Symphonies*), but rather than being a separate aspect of practice, impossible to reconcile with other modes of sound art practice (see the discussion in Chapter One) it appeared as one mode amongst others, all shifting in importance from piece to piece.

As I searched for possible principles of process, I first engaged with sensorial experience, which I identified as fundamental to making. Later, my practice allowed me to recognise and then develop conceptual blending as a tool for artists to explore and communicate practice as set out in Chapter Three. In this chapter, I apply the principles of procedural blending to discuss four key projects, focusing on the notions of input (each mode of practice), blend line (a trajectory of blends), blend field (an interconnected field of blends) and output (each outcome of practice). These concepts allowed me to illuminate practice at different 'resolutions', that is, I was able use them in the examination of details as well as wider structures without having to switch strategy or terminology. These concepts appear as temporal mental containers, rather than fixed categories. Moreover, they can be purposefully applied to explore different facets of practice.

Blending has allowed me to consider my practice as a joined-up activity, which, despite its very varied outputs, displays some underlying inputs. In the final piece of this examination, *Bedroom Symphonies*, I identify a number of such recurring inputs to my practice, for example the methods of collage, the notion of site-responsiveness. At the

same time, with each work, these inputs shift in importance and proportions. Some (such as the use of text) appear only briefly, some (the relationship between sight and sound, site-specificity) persist over time. It also became very clear that ideas and their execution did not necessarily occur consecutively, that reciprocal connections between practice and primary research existed, just as there were interdependencies between the pieces.⁸⁰ Throughout this journey, I experienced myself as an active agent *and* a receptive observer listening for emerging themes. I was active – providing inputs, then receptive – listening to what these inputs revealed when they were blended as part of process. This sometimes yielded surprising results such as the notion of audio-visual spatiality in *Traces/in/of/with Sound* or the beginnings of a method for supporting the development of new works as in the case of *Multilogue*. Making stimulated thinking, and what emerged conceptually fed back into practice, a recursive feedback system through which I balanced continuation and change.

When examining my practice, I grouped some of its aspects into the following, higher-order generic inputs:

1. Methods, tools and associated practicalities;
2. Research concerns, commission briefs and other such external factors (audience feedback and critical writings might also feature);
3. The extension of inputs through research and collaboration;
4. The use of media such as music, field recording or visual art (extending to genre-specific expectations);
5. Other inputs of interest to sound artists in Chapter One, for instance notions of freedom and modes of listening.
6. The artist as human: early influences and personal inclinations resulting in specific practices and ways of workings as described in Chapter Two.

Some, if not all, of these inputs are interconnected. Research might generate the use of tools and tools might prompt an investigation into ideas or artists associated with it. Personality, childhood experiences and other such – often almost invisible – inputs may solidify into permanent methods of practice. However, in naming these inputs as of a more generic nature, how generic are they? Generic to my practice only or are they applicable to the wider sound art community?

⁸⁰ Some events, both in my professional and private lives, are not explicitly incorporated here – for example, ongoing live voice performances or discovering I am dyslexic – in order to focus on the direct trajectory of making.

In the following two chapters, I will now apply the inputs listed above to the practice of other artists to interrogate the principle further. The aim of this undertaking is, firstly, to verify observations made in my own practice by relating them to the work of others, and secondly, to collate aspects of process specific to sound art. I will also consider how inputs may be integrated as part of process.

Chapter Five

An incipient taxonomy of inputs, part one: sight, sound, tools

5.1 Introduction

In this research, I explore process in sound art practice with the aim of foregrounding the artist's perspective within discourse. I introduce and develop blending as a means to facilitate this aim, by providing strategy and structure to how artists can explore and communicate their practice.

In the last chapter, I apply principles of blending to the discussion of my own practice, considering how blending can be used to explore practice from different perspectives and at different levels of detail. In principle, process emerges as a journey in which elements from inputs are blended as part of a temporal blend line, which together make up a blend field yielding one or several outputs.

I also identify a number of stable inputs to my practice (sight, sound, tools, methods, research, collaboration, notions of freedom, listening) and begin to wonder if, or how, they might be relevant to other artists within the field. My intention now is to apply these inputs to my other primary research materials, the interviews, the online magazine and the workshops. In doing so, blending reveals another useful facet. Through the notion of input, understood as a flexible and temporal container, artists' expressions of the modes they might work with can be set next to each other, regardless of the category each mode is assigned to, or whether understandings of content or meaning diverge. In Chapter One, I present sound art as an incredibly complex discipline. This complexity is a result of its multiple histories, in which artists work with a variety of modes, which can be understood, or worked with, in different ways, music being one example. Once explored through the lens of blending, difficulties of divergent understandings need not be a problem. On the contrary, divergent meanings can be embraced as different facets of process in which artists choose different elements from potential inputs. This means that not all options have to be used by each individual.

In applying a series of inputs to the practice of other artists, I began to develop a taxonomy of inputs to sound art practice. Even here, as in the previous chapter, the notion of an input is essentially a fluid one, depending on context. Each input can be 'zoomed' into or out of. For example, one might debate the input of 'tools' more generally, or focus on one 'technology' specifically.

This incipient taxonomy emerged when considering my primary research and is rooted in how artists reflect on their practice. However, whilst substantial, each section is not a comprehensive exploration of each input or indeed the research material, but rather presents a selection in line with the scope of this thesis. For reasons of volume, this material is split across two chapters. In this chapter, I will explore the relationship between the three inputs identified in Chapter One, as contributors to the developments of sound art as a field: fine art, music and technology, under the banners of sight, sound, tools. Chapter Six explores the themes of how inputs might be extended, notions of freedom, and the artist as a human being. It will also include a section on how inputs might be integrated.

Whilst Chapter Five and Chapter Six focus on inputs, the other aspects of procedural blending used in Chapter Four, such as blend lines, blend fields or lenses, have not been discarded. For reasons of space, however, I was unable to give them equal exposure, and I have drawn on them only occasionally, where I could do so without unduly extending the discussion.

As a brief reminder, the materials contained in Chapter Five and Chapter Six were collected through three modules: 19 interviews with fellow practitioners, three issues of an online magazine entitled *Reflections on Process in Sound*, and three one-on-one creative workshops.⁸¹ They are identified within the text in brackets following respective quotations or sections; where I refer to later clarifications the term ‘personal communication’ is used. At times, I have conveyed artists’ responses in indirect speech, primarily for purposes of clarity and flow, but also for reasons of compression. Lastly, where, in the following chapter, I talk about artists, I take this to mean the artists that took part in this research, unless otherwise indicated.

5.2 The inputs of sight and sound

I will begin this consideration of inputs to sound art practice by coming back to a relationship explored in Chapter One, that between sight and sound. In Chapter One, I presented fine art and music as trajectories, as historical blend lines that contributed to the development of sound art as a practice, and explained how some fine arts methods, such as collage, or notions of materiality were mapped onto sound.

In his book, *Background noise: perspectives on sound art*, Brandon LaBelle points to the ‘often underrepresented crossover between the visual arts and the sonic arts’ (2007, pp.

⁸¹ I have appended a selection of the original interviews recordings and all issues of *Reflections on Process in Sound* on the accompanying DVD. Summaries of the workshops can be found in the Appendix.

150-151). In a recent call for contributions to a forthcoming special issue of *Organised Sound*, sound art's close connection to the visual arts discourse, rather than music, is identified as a limiting one (Voegelin & Gardner, 2014, online). These two statements encompass some of the views regarding how visual art and sound may relate to each other.

In the following three sections, I will present how the artists that took part in this research have expressed the relationship between sight and sound. I will begin with the connections between fine art and sound, then move on to music and sound art, and finally explore how sight and sound might be linked in practice.

5.2.1 Visual art and sound

In Chapter One, I outline how some aspects of sound art practice have been historically inspired by visual art. This is still the case for many sound artists today, many of whom explore notions of sonic materiality.

Sound artist and photographer Tansy Spinks, for example, draws on parallels with photography to question in what way she might point towards materialities of sound as part of her work (*Reflections on Process in Sound*, Vol. 2). Whilst audio-visual performer Blanca Regina experiences this aspect very directly. She talks about building up sound in layers like using paint (2013, personal interview). For Robert Curgenvén, who works with field recordings, pipe organs, feedback systems or turntables among others, this sonic materiality is a particular focus of practice:

... the other day I was trying to see music as painting, but also with oils, how you can kind of smudge them and push them around and they're quite thick and viscous and like, that all of the sounds that I like are all quite physical, how you can literally feel some of the sounds rubbing against each other if you get the volumes just right. So, using the speakers that I've got everything is incredibly tactile. (2013, personal interview)

Sound is a tactile experience arising from mapping elements from the input of painting onto sound, and technology is used to affect both the sonic and human body through amplification. Despite a difference in practice and background, understandings of sonic materiality between these artists are similar.

In his work, Mike Blow draws on the tactile nature of sculpture. As objects can be touched physically, so sound can be touched in and by the imagination. By mapping the element of touch, sound becomes three-dimensional matter in the mind, and, as such, can be inhabited (2012, personal interview). This inhabitable spatiality as embodied, or

'psychospacial' experience (Kahn, 2001, p. 276), has enticed artists away from visual art to sound art as David Toop explains:

One of the things that has always excited me about music and still does, is the immersiveness of it. The fact that it's kind of a whole-body engagement. And that's very different to say writing, which is obviously a pretty much equal part of my work, career. I think it's also true for visual art, which can have a real physicality to it, but the work I was doing didn't. I was doing a lot of drawing, very often fine-detailed drawing. So there's a certain physicality in that, there's a certain craft, but it's nothing like the sense of being enveloped in sound. (2011, personal interview)

Sonic materiality is identified as a physical experience: we do not merely inhabit it in our imagination, but with our very bodies.

The connection between the visual arts and sound is experienced in many different ways as artists chose different elements from them. For some artists, visual art forms part of their developmental trajectory. Keith Rowe, introduced in Chapter One, is one example; David Toop, Max Eastley and Viv Corringham are others. Corringham has moved from music into fine art and into improvisation, and increasingly takes an interest in how visual artists think, reflect and talk about their work. The notion of place – or non-place, as developed by land artist Robert Smithson⁸² – finds special resonance in her practice (2013, personal interview). As visual art has provided elements to the development of sound art as a field, it can still contribute to the development of individual practice. At the same time, the relevance of inputs can shift throughout an artist's career, weaving itself in and out of practice as an on-going blend field. In his book, *Sinister resonance: the mediumship of the listener* (Toop, 2010), for example, Toop brings his perspective, developed as part of a long-lasting engagement with sound, to bear on examining inaudible objects such as paintings and writing through this lens.

The input of art within sound art practice is also reflected in the way artists describe themselves; some prefer the term fine artist. For them, sound becomes a material that they use for specific artistic reasons.⁸³ The view that sound art is located within, rather than adjacent to, fine art was encapsulated in the recent exhibition *Sound Art. Sound as a Medium of Art* by Germany's ZKM (ZKM, 2012).⁸⁴ Aura Satz, who works across installations, films and performances, is a point in case, feeling she can 'read', or map her fine art background onto sound and sound art practices, resulting in new understandings. For her, it is the idea that objects are imbued with presence that leaves a trace as a guarantor of authenticity, inspired by the Byzantine iconoclasm (2013, personal

⁸² Robert Smithson was one of the early land artists. Land art works with a landscape, using materials derived from it.

⁸³ Aura Satz, for example, feels sound supports an experience of ambiguity; see section 5.3.1 below.

⁸⁴ Interestingly, the 2014 exhibition *Art or Sound* at Fondazione Prada in Venice, Italy, considered the crossover between sound and art since the 16th century.

interview); I will come back to the relationship between sound and notions of presence later in this chapter. Other artists, such as Jo Thomas, who focus on composition, have separated their sound and visual arts practice, although it is experienced as a continuum, rather than a firm separation. She attributes this separation to cultural views which provide altogether different categories for these practices, making artists 'either go in one direction or the other' (2012, personal interview).

Jane Schaefer, an artist active across site-specific installations, sonic sculptures, performance and DJing connects his approach to sound to an education in architecture. Architecture gave him a way to escape the notions of 'right or wrong' he had encountered in music and allowed the development of independent ideas whilst fostering an ability to articulate and contextualise them as an additional output (2013, personal interview).

Whilst mapping various fine arts backgrounds, methods or concepts onto sound can provide new perspectives, each tradition also comes with inherent limitations as Theo Burt explains. Nevertheless, in trying to transcend them, we can discover different elements through which to connect these inputs. In Burt's case this entails looking for a technological means to unify the production and thereby expressions of sound and vision (2013, personal interview).

For many of the artists who took part in this research, fine art was a relevant input, most importantly in the way that sound is understood in terms of a tactile material such as oil paint or sculpture, or a spatial structure that can be mentally or physically inhabited. We might find strategies for sound in engaging with fine art, or feel that categorisations such as fine artist or sound artist are simply the result of cultural preferences and delineations of what is an acceptable outcome of each field. The same can perhaps be said of music, as another input to sound art practice. I will explore this in the next section.

5.2.2 Music and sound art

Like art, music is an input to some artists' practice, as seen in Chapter One. However, as with visual art as an input, and as a subsection of the audible world altogether, music provides an input to practice to varying degrees. The supporting programme of the major exhibition *Sound Art. Sound as a Medium of Art* at ZKM (Zentrum für Kunst und Medientechnologie) included musical performance (ZKM, 2012). However, Markus Popp of German electronic group Oval confesses to hardly using the term music at all, preferring 'audio' (Popp in Bell, 2014, online).

It seems that exposure to music, as indeed to any other primary background or input, is not easily unlearned, and some kind of “‘musical’ sensibility’ (Lucier, 2003, online)⁸⁵ or habitual method of production and appreciation, is carried through as a significant element. This, however, need not be experienced as a limitation. Aleks Kolkowski whose practice spans improvised violin, electronics and the exploration of historical sound technologies, states:

Thinking about it, what is important to me, you know, I’m a violinist, and I think all comes down to this idea of, you know, it all has to be very tactile with me, it’s about touch, and strings and producing tones. (2013, personal interview)

Kolkowski argues that his background in music is transferred – via the horned violin – into his work with obsolete technologies, by making the ‘materials of recording’ such as wax cylinders significant as ‘physical objects’ (2013, personal interview). Unlike Satz, Kolkowski understands himself ‘as a musician rather than a sound artist’ (2013, personal interview). Whilst Satz is also concerned with musical instruments and other sound-making devices, her focus is the ergonomic aspects – how the instruments work with the body, carrying with them ‘their own performability’ (2013, personal interview). In short, artists take different elements from inputs and come to different conclusions about what to do with them. Such decisions can be understood as outputs of practice and also as inputs to a continuing blend line of making.

As there were connections between touch and sound art within the input of visual art, so there are within that of music. This demonstrates how elements can appear across inputs, allowing us to connect the two through blending. Kolkowski’s statement reminds me of Mike Blow linking the tactile aspects of sculpture to sound, which he realises may have been influenced by a background in music. Like Lucier, he retains a memory of ‘musical aesthetics’, in his case a love of hearing pitches next to each other (2012, personal interview).

In the case of Jo Thomas, music ‘requires detail’, providing pleasure and satisfaction to her and an audience. Without such intricate, minute changes in pitch and rhythm, sound loses its association with music (2012, personal interview). And so, whilst all sounds might be ‘available for musical purposes’ (Cage, 1961, pp. 3-4), that is they might form a possible input to music, they cannot automatically be equated to music by default. An identification or choice is necessary, which is mostly determined by how we hear sounds relating to each other, rather than their individual qualities. In procedural blending terms, we select these elements from all those available in the input of music. For example, Jacob

⁸⁵ See also Chapter Two, p. 44

Kirkegaard understands sound as objective, music as a subjective subset (2013, personal interview). Echoing Cage, everything can be music if it is experienced as such. This is a conditioned, community specific understanding of music comparable to the one set out in Chapter One (see p 28), where it also was related to identity (Zbikowski, 2002). Rather than opposing this conditioned hearing, we can use it to draw people into the orbit of sound art although conceptual, sound art should ‘please the ears’ and be accessible ‘just through listening’ (2013, personal interview).⁸⁶ Kirkegaard points to some of Stockhausen’s output, which he sees as lacking in aural interest and could just as well have remained as idea without needing to be heard. This reminds me of Seth Kim-Cohen’s assertion (set out in Chapter One, p. 17) that sound art should move away from a phenomenological experience to a purely conceptual evaluation. For Kirkegaard, however, such views demonstrate an underestimation of sound as a phenomenon (2013, personal interview).

For some, music relates to structure, to how the relationship between sounds is organised as in the case of Thomas or Blow earlier, reflecting Edgar Varèse’s definition of composition as organised sound (Varèse, 1936-1962, p. 20). Theo Burt, on the other hand, has experimented with relinquishing control over structural detail (if not the general aspects) by using algorithms.⁸⁷ As a strategy developed in his audio-visual work he has imported this element back into his music making, for example in the release *Summer Mix* with the Automatics Group, where mathematical processes were applied to existing music (2013, personal interview).⁸⁸ This echoes ‘chance as an operational method’ as developed throughout the 20th century (LaBelle, 2007, p. 49). Chance, or randomness, becomes an additional input connected to the input of music as part of personal blend lines, intersecting with historical ones.

For some artists, music is inextricably linked with emotion. In Chapter One, I mentioned Annea Lockwood’s approach to ‘audio narrative’ established through structure and emotional content (Lockwood, 2003, online). For musician and composer Trevor Wishart, who works with extended vocal techniques and technology, music is exciting precisely because of its emotional dimension, which ‘subtly evolves’ as a piece unfolds (2011, personal interview). Theo Burt, on the other hand, is alienated by the direct use of established musical symbols to produce predictable emotional responses in listeners and

⁸⁶ Janek Schaefer mirrors this intent by professing to create work that is both ‘nice and interesting, with a bit of grit in it’ (2013, personal interview). Viv Corringham points out another distinction: whilst, in music making, one might pick a key that suits the voice, to sound ‘nice’, improvisation is concerned with ‘forgetting comfort areas and extending your tools as far as you can’ to follow other creative impulses (2013, personal interview).

⁸⁷ Other sound artists and composers using algorithms in their work include Karlheinz Essl and Nick Collins.

⁸⁸ Released on *Entr’acte* in 2012, <http://www.entracete.co.uk/project/the-automatics-group-e130>

prefers to disrupt such vocabulary in order 'to ambiguate or to generate new and unpredictable situations' (2014, personal communication).

In terms of formats, if we compare a musical performance and a sound art installation, for instance, each provides different kinds of experiences, with different engagements, different attention spans as Wishart points out (2011, personal interview). In his interview with artist Louise K. Wilson in the first edition of *Reflections on Process in Sound*, Alvin Lucier says:

Well, in a concert situation I want the audience to sit still. In an installation they can walk around as if they're in an art gallery. I don't really care as long as they don't disturb the equipment. (2012, *Reflections on Process in Sound* Vol.1)

Differing formats can bring with them a shift in how we interact with the work and how it is experienced. Where performance might be perceived primarily in terms of time, an installation predominately addresses perception of space. However, as I demonstrate in Chapter One, the difference is not absolute, but rather a matter of degree. For example, Wishart draws a connection between music and temporal development; he focuses on qualitative changes of the sound material itself as a blend line of listening. In the transformations he applies to sounds as part of his compositional process, Wishart is less interested in the merged overlap of his sonic materials than in the movement of transformation itself. In electroacoustic music, movement extends itself into the space/time continuum of a diffused performance, The absence of performers means that sounds can be made to 'whizz around the room', and can even appear to move from a large physical space to a small one. Within this activity of signals, Wishart retains a more 'traditional idea of musical structure'; he selects elements from a traditionally defined input of music, including aspects of counterpoint (2011, personal interview). Spatial activity is included in this sonic structure that extends from time into space, mirroring an installation's concern with spatial experience, even if, as an audience, we are expected to assume a fixed position and not wander about freely.

In the production of work, some artists feel a need to position themselves in relation to specific contexts. For vocal improviser, Viv Corringham, who also creates installations and soundwalks, a musical performance entails an expectation of entertainment. However, whilst her ongoing performance series *Shadow-walk* is still conceived of as music, each incarnation contains ethical and community-based considerations, leading to material being included that would not be used in a purely musical composition. Although the input of music is strongly represented in her practice, it extends itself to sound art as part of a continuum that is navigated in and through practice.

Annea Lockwood, an artist originally from New Zealand, now living in the United States, who focuses on environmental sound believes that even creating a piece from field recordings implies the flow of a compositional technique. 'Yeah, it's a compositional process, absolutely' (2011, personal interview). This makes music an input to her practice from which she chooses to employ elements relating to the construction of work. When establishing such aural structures, most artists let the materials speak for themselves, even if they do not relinquish control as much as Theo Burt advocates. 'It is a very organic process...' explains Jennifer Morris, '...the sources control the work completely' (Morris in Chapman, 2005, online). In Trevor Wishart's view, the composer receptively and physically experiences sound, rather than imposing their will on it.

What transpires from this discussion is that many artists working with sound art clearly use elements from the input of music, although in what way, at what time and to what extent this is expressed in practice differs. Each artist selects elements to connect with elements from other inputs as part of a personal blend field. By using blending as a framework, we can set such different, subjective understandings next to each other, inside a container called input, without having to arrive at an agreement as to what, in this case, music *is* precisely.

Especially where music forms a part of an artist's developmental trajectory, as in the case of Lucier, traces of its language can remain an aspect of practice. In other words, elements from the inputs of music find expression in sound art practice. Furthermore, the boundary between music and sound art can be porous, and concerns of one domain, for example space, can also present an input to the other.

In the previous two sections, I have explored how fine art and music relate to sound art respectively. However, many artists choose elements from both inputs as part of their practice. In the following section, I will consider how artists participating in this research express this relationship.

5.2.3 Sound and vision as linked inputs

In the last two sections, I have explored how the artists in this research relate to the inputs of fine art – visual art more specifically – and music. Some of them spoke about how, for them, sound and sight are not altogether separate and influence each other, so that, even when working explicitly with sound alone, visual elements are considered. In this section, I will explore how artists experience and work with this relationship.

As mentioned above, for some artists, establishing a link between sound and vision is, or has been, part of their developmental trajectory or blend line. Max Eastley initially pursued visual art and music as separate practices. At some stage music predominated, but abandoning 'painting and drawing and thinking in terms of colour and things like that' (2010, personal interview) seemed inconceivable. Bringing the two strands together led, via graphic scores, music and kinetic sculptures, to his current practice. This journey included an awareness of both looking and hearing as perceptual phenomena:

... the interesting thing about the human eye is that the peripheral vision is much better at picking up movement than the vision of the front, 'cause actually the human eye is incredibly inefficient. It takes a huge amount of brain power because the image comes into the brain upside down and has to be put right way up. So I was very interested in movement, how do you perceive movement, and this is the periphery of vision. I think it's something to do with surviving out in nature that you notice a movement. But I thought peripheral vision seems to be, you know it's a crazy idea, but it seems to be close to the ear. (2010, personal interview)

Thus, the movement of vision connects to a sonic flux in perceptual experience.⁸⁹

However, a continuum seems to exist where, at the far end, some artists experience unshakeable, synesthetic links between the senses (Kandinsky is a well-known historic case), for others such as Jo Thomas, they remain different, if closely linked, modes.

When considering audio-visual relationships, vision is often cited as the dominant sense – for example, in Chion's concept of spatial magnetisation sound is attracted by the image to form one perceptual event, rather than the other way around. (1994, p. 70). Max Eastley presents a different view:

I heard of someone, a filmmaker, who came to give a workshop and said, "Everybody says that vision is dominant. Okay, right, so vision is dominant. Where is the channel where people just watch pictures? And where are the channels that they listen to? That's called radio." (2010, personal interview)

As artists work with relationships, they may do so from different angles, and, as a result evaluate them in different ways. In Chion's case, this means exploring screen-based works, in Eastley's, quoted above, focusing on technology by which sound or vision are delivered. A gallery or an online photo album can, after all, be regarded as channels through which pictures are transmitted. Functioning as a blend lens, each perspective or context influences the selection of different elements.

For Annea Lockwood, visual components can potentially distract from sound. She aims for a careful balance between presence (sound) and representation (image). In installation, visible technical inputs such as speakers and cables contribute to how the work is

⁸⁹ I have explored this aspect as part of my pieces *In A Day's Work* and *over ride*.

understood, which, for Alvin Lucier, means you have to be ‘careful about what you choose and where you put things’ (2012, *Reflections on Process in Sound* Vol.1). In his performances, Francisco Lopez aims to exclude visible inputs altogether by blind-folding audiences to achieve a state of ‘blind or profound listening’, mirroring Schaeffer’s notion of reduced listening (Landy, 2007, p. 247). Whilst these artists clearly note the relationship between sound and vision, each develops different strategies as a result, from balancing sight and sound within one work to an attempt to exclude vision as far as possible – although in my experience visual activity does not stop with eliminating light, the visual system can produce its own effects. Furthermore, for Eastley, the relationship between sight and sound is not an altogether linear one. For him, vision changes across the eye and in peripheral vision comes close to the ear – quite literally (2010, personal interview).

Aside from experiential factors, creating associations between sight and sound can also be established conceptually, I have already mentioned mapping as a key approach.⁹⁰ Theo Burt initially explored a (digital) strategy ‘based around an instantaneous synchronisation between sound and light’ (2013, personal interview) reminiscent of the relationships established with Chladni plates that were explored by artists such as Mike Blow, although, here, sound brings into being its visual manifestation, rather than both being the result of underlying data as it does in Burt’s work. In a further development Burt linked sound to geometry as ‘spatial metaphor’, and, by effectively writing geometry in sound, adding an element of time to the equation (2013, personal interview), through movement and change. This theme is also explored by Wishart, albeit with completely different results.

Despite different outputs, both Burt’s and Wishart’s work require digital technology in conjunction with conceptual or metaphorical deliberations to establish how vision is mapped onto sound. In the work of the collective D-Fuse, however, audio-visual relationships are not the result of one-directional mappings; they emerge as an ‘open-ended conversation between image and sound’ as performative blend lines, where sometimes sound, sometimes vision takes the lead, as Matthias Kispert explains (2012, *Reflections on Process in Sound* Vol.1). Artists chose to establish relationships in different ways, making for a wide and varied practice.

Furthermore, seeing and hearing can be connected through methods such as improvisation, or underlying expressive concepts such as dramatic ‘atmosphere’, rather than singular mappings. In the audio-visual laptop-based performances of Blanca Regina, who comes from a background of theatre, the system sets in motion a recursive, human

⁹⁰ At the time of the interview Trevor Wishart was attempting to express starlight with sound, by mapping the visual electro-magnetic spectrum onto audible wavelengths. Are star explosions, for example, understood as a far away occurrence, linking starlight to quietness, or as a tremendous events, linking starlight to loudness?

engagement with tool and audience as an act of imaginative, real-time blending: ‘you start cooking’ (Regina 2013, personal interview) as she describes this activity. A different trajectory (as blend line), with different concepts (as inputs), injects a different flavour to sound art practice, as evident in the work of Mick Grierson, an experimental artist specialising in real-time interactive audio-visual art. Although Grierson is also interested in manipulating sonic and visual material live, for him, physical experience underpins a link between sight and sound emphasized by large screen sizes or loud volume. Recognising that the practices, processes and approaches from the outer edges of cinematic tradition resonated with his personal experiences (via experimental music and noise), he created a ‘film into music focus’ as he calls it (2013, personal interview).

In practice, connections between the inputs of sound and vision can be established in many ways, so that, even when the same elements are worked with, results may vary. Such differences can be the result of different backgrounds, the different routes by which artists come to their practice, and the different concepts, methods, or indeed any other modes, that are brought to the table as additional inputs. In what follows, I will turn to another key input to sound art practice, that of listening, introduced in Chapter One (see p. 31).

5.3 Listening as input

This thesis is concerned with sound artists’ perspectives. Working with sound, it is not surprising that the modes of hearing and listening are important to practitioners. The notion that sound art is a discipline which frees from ingrained ways of listening, whilst music reinforces them was put forward by Douglas Kahn in Chapter One, and in this section I will explore how participating artists experience and think about the input of listening, and its relationship with making.

For Roland Barthes, there existed two kinds of music: the one experienced by the maker and one by the audience (Barthes, 1977, p. 149). However, as listening perspectives they can intersect when we, as the maker, try to listen to the work in progress through the ears of our potential, or present audience. Max Eastley uses this explicitly as a strategy of performative listening: ‘I put myself in the audience and say, “Eastley, you’re being really boring, you’re just confusing people” (2010, personal interview). Such an assessment derived from listening then becomes an input to the work in progress, influencing its direction. Eastley, therefore, like Kahn (see p. 31), emphasises the importance of listening free from ingrained concepts as, from his observations ‘habitual ways of listening got in the way a lot of the time’ (2010, personal interview).

As Salomé Voegelin advocates in *Listening to noise and silence: toward a philosophy of sound art*, the practice of listening allows us to remain rooted in the experience of sound, rather than focusing on its theoretical aspects (Voegelin, 2010, p. 199). However, when listening, doing away with concepts that relate the heard to its source and context is not necessarily easy. John Cage famously quoted Henry David Thoreau saying that whilst music is ongoing, listening is not (Thoreau in Torrey, 1982). The mind often makes itself felt within a sensorial experience, paralleling Barthes' view that whilst hearing is physical, listening is psychological (Barthes in LaBelle, 2007, p. 158). In this vein, Jacob Kirkegaard, too, understands music as a subjective activity in which education is reflected as culturally conditioned hearing.

Furthermore, in *Ear as instrument*, sound artist and writer Christopher Haworth observes that our biological equipment brings with it its own characteristics (Haworth, 2012), and Eastley also observed that when working with 'David Toop and Evan Parker I found that people could have different ears, different sets of psychoacoustic equipment to do things' (2010, personal interview).⁹¹ It appears that not just the mind, but the physical ear, too, contributes characteristics to the experience of listening, by which the body becomes an input to practice and a blend lens that can influence the choices we make when creating work.

Embodied listening can have a direct impact on practice, and, by extension, a change in how we listen may produce a change in practice. Working with a particle accelerator for her piece *Crystal Sounds of a Synchrotron*⁹² changed Jo Thomas' notions of 'what music can be' (2012, personal interview). Despite having been 'brought up with John Cage' and his extended notions of music, these concepts only really came alive for her then. Every instance of the light-to-sound mappings she listened to sounded utterly unique, whilst also including musical structures such as rhythms, verse or chorus. However, the material revealed its inherent patterns through a process of listening: the 'freedom of listening and finding structures where wanted, not where imposed' uncovered a 'natural music' (2012, personal interview).⁹³

⁹¹ In *Labyrinthitis*, a work made from sounds generated in the artist's auditory organs, Jacob Kirkegaard makes this the focus an input to the work itself.

⁹² Jo Thomas won a Golden Nica at the Prix Ars Electronica, Digital Music category, for *Crystal Sounds of a Synchrotron* in 2012. The 5.1 surround sound piece uses light waves transposed to sound as well as location recordings.

⁹³ Experience, as an input, creates understanding: 'Until you, as a person, experience something first hand you can't be told what to look at ' (2012, personal interview). This notion of literally changing your mind reflects Max Eastley's reports of changing his own brain as part of his creative activities (2010, personal interview). Mick Grierson also finds that direct experience aids learning (2013, personal interview).

The act of listening, especially to environmental sounds and as part of a *Deep Listening*⁹⁴ practice, has been a significant input to the work of Viv Corringham. It extended her aims outwards into the world, finding pleasure in the practice of walking and listening to the environment. It returned as input to her vocal practice in that she paid closer attention to sonic temporal unfoldings, and how ‘sounds fit together’ (2013, personal interview). As for Eastley, for Corringham listening is a very immediate input to music-making,⁹⁵ which becomes a way of engaging with the world. This wider sphere of relating, which extends from sound through listening to the world is, for Felicity Ford, encapsulated in the practice, or ‘methodology’ of field recording (Ford, 2013, p. 93).⁹⁶ However, field recordings as an embodiment of such listening engagements, should not, at least according to Curgenvin, present an end in themselves, whether as material or as a scenic representation (2013, personal interview). For Ford ‘practices of listening for the sake of listening seem of limited social use’; she argues that listening should uncover the meaning that sounds contains, ‘as a route into exploring topics beyond sound’ (2014, *Reflections on Process in Sound* Vol. 3).

Another facet of listening is explored by Blanca Regina. With a background in theatre, she understands listening as an act of information gathering beyond the purely sonic, it extends to how bodies are moving in space, and what this might convey about the situation or ‘mood’⁹⁷ (2013, personal interview). By listening and watching closely, the artist develops a conversation with herself, the nature of her own process and feelings about it. For Regina, ‘how you sound is how you feel’. Her view focuses listening from the whole of the audible environment to what is meaningful and pertinent to the situation, where collaborators and audience alike are an integral part of improvisation and performance (2013, personal interview). As a relationship, Regina includes the listener, inside and outside as an aspect of orientation, contained in a procedural blend field.

Yet another aspect can be observed in the practice of Mike Blow who, in exploring the relationship between objects and sound, re-examines notions of reduced listening as a schizophrenic experience. He often separates a sound from its source, and then re-attaches it to another object, another body, thereby playing with meanings and how they are created, rather than foregrounding sensorial experience. Listening becomes a wondering

⁹⁴ Deep Listening was developed by composer Pauline Oliveros and ‘explores the difference between the involuntary nature of hearing and the voluntary, selective nature – exclusive and inclusive – of listening’ (Deep Listening Institute, n/d).

⁹⁵ As the originator of Deep Listening, Oliveros explains that she intends to, ‘listen to my listening’ (Oliveros in LaBelle, 2007, p. 158). Interestingly, Aura Satz feels that some sound has the ability to aid ‘experiencing the perception of hearing’, drone music, for example (2013, personal interview).

⁹⁶ *The World Soundscape Project* initiated by R. Murray Schafer began to consider the sonic environment with its influence on human beings in the early 1970s.

⁹⁷ Mood in theatre refers to the prevailing emotional content such as happiness or sadness.

about the world from another angle, questioning how we understand, make sense of and relate to the world. We may question concepts through experiencing.

The visceral experience of listening, in particular, is an important one. 'Listening softens the edge of individuality by dispersing oneself into a larger field of experience' (Labelle 2007, p. 246), that is, it presents an act of relating; however, artists also develop a particular sensitivity to sounds through a continued focus on the audible, as Jo Thomas pointed out (2012, personal interview), thereby sharpening a sense of awareness. This may express itself in a need to sleep with earplugs to reduce environmental impact and to return to a state of individuality as in my case, although Thomas describes it more profoundly as a generally 'heightened' experience, 'like someone's put a big high pass filter on everything'⁹⁸ (2012, personal interview).

The views presented above demonstrate how listening as an input to practice can also take on different nuances, and how widely or narrowly we focus our ears depends on person and context. On the one hand, it is an activity influenced by the mind, in which the dispersion of concepts becomes desirable; on the other, it can also be an embodied act of relating. Artists may choose to explore entire environments through listening, connect with fellow performers and audiences, investigate objects or the relationships between notes – in short, elements taken from this input and respective outputs can differ. For instance, we may construct music, express an item's imaginary properties, or convey the nature of specific locations through its soundings.

Some of the listening and creation experiences are facilitated by technology, which allows us to hear sounds divorced from the source that produced them. In the next section, I will explore how artists experience and work with such disembodied sounds, as a notion of presence.

5.3.1 Notions of presence as input

As a part of practice, listening whether to environmental surroundings, objects within it, the relationships between sounds, our own soundings in performance or that of our collaborators in performance, requires our presence in the sense of observant participation. However, the advent of sound recording and reproduction technologies have meant that sounds can be experienced away from their original source or body, whether objects or indeed people. Many of the artists who took part in this research were

⁹⁸ Jo Thomas recognised that sensorial experience is not easily conveyed through words.

intrigued by the capacity of sound to evoke the presence of what is not there, an absent environment or body. This notion will be explored in this section as an input to practice.

For Blow, the reason for this phenomenon is that sounds are one element of an object's identity. Even when the object itself is removed, sound will recall it in our imagination. His work, *Shower*, from 2010, where he recreated the experience of being in a shower through water sounds explores this phenomenon (2012, personal interview).⁹⁹ The ability to evoke presence is cited by Aura Satz as the main reason for using sound. Sound can animate by 'giving voice back to something that is mute' (2013, personal interview). This approach is also of interest to Tansy Spinks who used it frequently in our workshop, in which I asked her to respond creatively to a series of objects.¹⁰⁰ In animating objects, sound acts as a bridge. Julie Freeman, an artist primarily working with sound in data and new media believes that sound links what is abstract to what is alive, or more specifically, to what is human. Her notion of presence connects sound directly to life, more than any other medium. Conversely, the absence of sound, silence, connects to death (2012, personal interview).¹⁰¹ Such focal points of presence can also be understood as a procedural connector (see Chapter Three, p. 55) linking hearing, or listening, with the imagination, with the mind; rather than facilitating a 'free' listening experience advocated by Eastley, it actively makes use of established links between sound and a mental concept of its source.

In Satz' estimation, sonic location or source can appear ambiguous or in a state of flux, creating a sense of doubt, or simply be unsettling. This intangibility of sound, its uncanniness in its collusion with the imagination has been explored by David Toop in his book *Sinister resonance: the mediumship of the listener* (2010). In an interview with the online art site *Rhizome* he explains this relationship as follows:

... sound has this characteristic of the uncanny, that sound is to some degree a ghost, and hence this expression in the mediumship of the listener. Sound is transitory, ambiguous in its location in space, and it's uncertain; it lends itself to representations of uncertainty. It lends itself to feelings of dread and fear and loss and these emotional states, these extreme psychic states. It lends itself to mysticism,

⁹⁹ Blow observed that sounds have to be positioned in a 'spatially correct' manner for the impression to be believable. For example the sound of the showerhead above, water hitting the floor below (2012, personal interview).

¹⁰⁰ A report of the workshops can be found in the Appendix.

¹⁰¹ In animating objects, sound closely interacts with vision to create a sense of action or narrative as Mike Blow explains. Change the sound, and you also change perception. He describes an experiment linking a double helix made from a copper sheet with upward and downward moving Shepard tones: when playing the upward moving sound, the shape of the helix appeared to be upwards, when the downward moving sound was played, the helix appeared to follow suit. When playing Chopin, the helix appeared to dance, and when linked to an extract from William Burroughs' *Red Night*, it appeared like a strand of DNA. Sound, Blow surmises, infers 'huge conceptual jumps from dancers to DNA to just an object that is moving.' He highlights the close interaction between the senses, between hearing and seeing in particular (2012, personal interview).

all these ineffable experiences. These sensations of immateriality. And so it's a very powerful tool for musicians... (Toop in Dayal, 2010, online)

Whereas Freeman believes that sound is connected to life, and silence to death, here sound hovers on the border between presence and absence, life and death. It can jolt us when it does not meet expectations (when established blends do not fall into place). Through such jarring experiences we might be brought back to listening without conceptual confinement. For Satz, the significance of disembodiment and fluidity, which prevent the listener from anchoring herself in the knowledge of the sound's body, is not merely about producing a particular experience or emotion; it is about the recognition that experiences and emotions pull the listener into the presence of sound¹⁰² and through it the present moment (2013, personal interview).¹⁰³ This presence promises authenticity stemming from truthful perceptual experience, as opposed to untrustworthy representation and tainted interpretative configurations, and is made active by sound (LaBelle, 2007, p. 96). In a technologically mediated form it allows perspectives to shift 'across the here and now, original and copy' (ibid, p. 96) just as it may stay on the boundary between absence and presence.

In the quotation cited above, David Toop mentions that musicians have made use of the immateriality of sound and its link with presence. This is particularly the case in improvisation, where the 'magic' of performance is forged through being present with sound and responding to and through it as Viv Corringham explains (2013, personal interview). Through listening, we can also follow a trail of presence from objects to places, as a mental blend line. Some artists aim to create the experience of one place within another through the use of field recordings that deliver 'the foreign into the home' (LaBelle, 2007 p. 214). In this activity, presence means representation of a determined location, rather than an ambivalent site – although in listening to sonic icons such as traffic we may not necessarily know exactly where the recording was made.

However, representation is not always the aim of environmental recordings. In her two river pieces (*A Sound Map of the Hudson River*, 1982 and *A Sound Map of the Danube*, 2005), Annea Lockwood did not intend to convey a particular experience to an audience, but rather sought to explore the nature and being of the river, primarily for herself (2011, personal interview). Mark Peter Wright even considers the presence of sound as sonic life force, which should be 'treated with respect and acknowledgement of its own agency',

¹⁰² This theme of presence in relation to fluid sensorial experience was also made use of in my pieces *In a Day's Work* and *over ride*, which play with the sensorial experience of presence through establishing a discrepancy between sight and sound.

¹⁰³ For Brandon LaBelle, 'Sound and listening are extremely related'. He became interested in using sound creatively because of its 'relational potential' and capability to teach 'how to also be extremely present' (2013, *Reflections on Process in Sound* Vol. 2).

rather than being indiscriminately captured and stored (2013, workshop). Here, sound has its own life, where it need not convey that of a body, or induce uncertainty. In listening, we uncover sound's own presence, and its own materiality, rather than that of its source.

For some artists, sound forms part of an object's identity that can be played with by attaching sounds to different objects or by imagining new voices for existing objects, for instance. Others find sound intriguing because it appears to be ambivalent, in between, its location being neither here or there. Sound can point towards a specific materiality, 'real' or imagined, or can it be experienced on its own terms, pointing towards its own materiality. Sonic presence means something different to different artists, eliciting different strategies and practices, such as field recordings, installations or acousmatic music.

In this section, I explore the relationship of listening to notions of presence. In the next section, I will consider how, through listening, we do not only establish potential relationships with bodies, objects or environments, but also with spaces as physical localities in which sound is present and mobile.

5.3.2 Sound and space as inputs

Listening, we have seen, is part of orienting ourselves in the world. It relates us to the specifics of space, and the specifics of space create conditions of listening (Toop, 2004). This interdependence has been, and continues to be, an important input to sound art practice, already introduced in Chapter One. As Janek Schaefer sees it: 'if you have no space, there is no sound at all' (2013, personal interview). Space is filled by vibrating particles made audible through the presence of air. Thus, Regina feels 'without air there is no sound' (2013, personal interview). The state of the air, its density, or humidity, for example, has an impact on how sound is able to spread, and is, in the form of atmosphere, a condition of location (Toop, 2004).

Annea Lockwood explores the particulars of space and sound as it spreads at the intersections of air and water:

I'd been intrigued by the different sorts of sound textures the river created. Some extremely localised, you know. How does water sound passing through these two rocks when the rocks are set at this angle and the main body of the current is over there, how does it sound here? I mean, really specific, site-specific literally. (2011, personal interview)

Not only is the experience of sound affected by the space it unfolds in,¹⁰⁴ the experience of space can also be affected by sound, just as objects are. Mike Blow, for example, describes an experiment in which he introduced the sound of water dripping, which was recorded with the addition of a large reverb, into an oyster shell, via speakers. He explains, ‘...your eyes are telling you this object is 10cms long, but your ears are telling you that it’s a kilometre long’ (2012, personal interview). In this way, we can use technology to alter or create experiences of space, if not actual conditions.

Aleks Kolkowski believes that each space, in addition to its physicality, also encompasses a social dimension as a procedural element, which has an effect on the work presented in it, or indeed for it. He describes how an interaction between physicality and function affected his installation *Babble Machine*¹⁰⁵ at the Science Museum:

So you have to have the doors open, otherwise, nobody is going to come in. So we had a kind of... blackout material... as a kind of a baffle to dampen the noise from the outside, but even then, people just saw this black curtain and a sign and didn’t want to come in, so then you had to open it so that they saw this lit room, then people would come in. So there was that thing about trying to get people inside. Because normally you get these audio-visual displays with the doors wide open and video and stuff like that, and sound blaring out quite loudly. But if you want to something that’s more localised and apart from the museum you have to have an enclosed space. So then it becomes quite difficult in terms of attracting “passing trade”, if you like. (2013, personal interview)

Observing how work is experienced in a specific space makes this observation available for consideration in subsequent work, as was the case with Kolkowski. A direct exposure to specific conditions of space becomes part of a method as an output or blend node, and then features as an input to the continuing developing blend line of practice.¹⁰⁶

The installation format, its relationship with architecture and space, is a key input to sound art practice. For Bernhard Leitner, sound appears as matter, as ‘building material’ from which to create space, but one that is different from music’s concert venues (Leitner in Schulz, 2003, p. 82) in as much as it is made from sound, rather than for sound. Thus, Leitner understands space to be at the centre of his practice, rather than sound itself.¹⁰⁷

Many sound artists, however, work across the formats of installation and performance, and space features as an input to both. I give examples in the earlier section on the

¹⁰⁴ Many artists are intrigued by how sound is affected by the medium it travels through, exploring under water recordings, for example.

¹⁰⁵ *Babble Machine* was an installation developed by Aleks Kolkowski at and for the Science Museum in London exploring the world of early radio.

¹⁰⁶ Observations of this nature are part of a collaborative method devised by *Sound & Motion Improvisation Research Group in Helsinki*, which I will come back to in Chapter Six, p. 141).

¹⁰⁷ Connected by conditions of space, even Bernhard Leitner traces his practice back to music (in combination with architecture and dance), citing the composer Mauricio Kagel who distributed musicians amongst the audience to induce a spatial experience (Leitner in Schulz, 2003, p. 81).

relationship between music and sound art. For improvisers, this may relate to the impact of the audience on focus and a venue's acoustic environment. For Schaefer, installation and performance primarily connect through the conditions of site as a 'tangible space' (2013, personal interview), the difference being the time span each occupies and how this affects the audience (as also described by Alvin Lucier earlier).

For Viv Corringham, space has a particular relevance as place. Neither performance nor installation, *Shadow-walks* traverses both modes along with physical localities, using sound as locators of memory and meaning as an extension of environmental sounds. Thus, space extends itself into practice not just by how it affects sound and vice versa, but in site-specific (or site-responsive) approaches that incorporate other concerns. For Tansy Spinks, this transforms the artist into a 'curator' of the associations that each site reveals in our conscious engagement with it (2013, *Reflection of Process In Sound*, Vol. 2).

On balance, for many sound artists, space is both something to work in and something to work with; it has physical properties and conceptual connotations that can be explored through listening. On the whole, artists work with such relationships in their own unique ways, applying different tools and methods as further inputs to practice, which is what I will explore in the following sections.

5.4 How artists work: inputs to making

When examining the inputs of sight and sound, listening, notions of presence and space, we saw that artists consider them from differing perspectives. This is partially expressed in how they work with each input, but artists' tools and methods also have an impact on concepts. This became clear when discussing how sound recording and reproduction technologies enabled sound to be understood as material, or from the perspective of presence (in Chapter One I considered the importance of technological developments in the germination of sound art as a field). In the last two sections of this chapter I will explore how artists themselves consider the tools and methods they work with, as significant inputs to process.

5.4.1 The inputs of tools and technology

In the introduction to his book *Haunted weather: music, silence and memory*, David Toop acknowledges that 'digital technology changes our relationship with the body' allowing new artistic expressions to emerge, for example by rendering sound both 'material and immaterial' (2004, p. 2). This relatively new tool makes the relationship between sound

and materiality, a notion that has appeared on several occasions throughout this thesis, more tangible, fostering the emergence new kinds of work.

Even when not explicitly active in the digital domain, or directly working with digital technologies, how artists work and what outputs they produce is partially determined by the media they work with, the technologies they use and how these are experienced and conceptualised. Theo Burt states that technologies cannot be discussed in isolation, they are integral to process. For him, technologies are not merely tools used to implement ideas, but distinct inputs that shape ideas and outcomes (2013, personal interview).¹⁰⁸

Trevor Wishart's development as an artist provides a good illustration, for it describes an emergent, dominant, blend line of technology, within a larger blend field, into which other inputs were inserted at various stages. In the interview conducted for this research, he reflects on his early engagement with technology, where he moved from writing traditional instrumental music to a studio-based situation, where 'sounds don't work in the traditionally understood way'. This prompted new ways of working (2011, personal interview). As a result, a 'process of exploration and discovery' ensued, during which, composition became more about experimentation than about the execution of a plan developed on the basis of music theory. As both an output and blend node in his ongoing blend line of making, his first major piece *Machine*¹⁰⁹ opened up exciting conceptual avenues questioning notions of representation and 'the real'. Rather than recreating (or merely inhabiting) a space, in this case a factory location, sound created an 'imaginary space in the mind', blurring the line between representation and imagination. The process of making *Machine* aroused an increasing interest in sound transformation as a way of organising sound, which was also inspired by reading about myths as transformation stories in the work of Claude Lévi-Strauss.¹¹⁰ Wishart realised he could use 'sound as symbolic markers'. However, he was unable to execute his ideas with analogue technology, prompting an interest in digital technology¹¹¹ which allowed him to work 'in detail on the inside of sounds' (2011, personal interview). This notion of sonic topology relates sound to material, as a three-dimensional object that possesses internal dimensions.

Burt began working with digital technology more recently, within an audio-visual setting. The 'technologies used to record and play back sound and the technologies used to record and play back video are quite separate technologies'. An original, joined experience is

¹⁰⁸ By extension they shape individual works and developmental arcs alike, as different stages of a blend line.

¹⁰⁹ *Machine* was finished in 1971 and released in 1973 and combines spoken word with an improvising, if guided, choir. Recorded machine sounds and electronic materials are also used.

¹¹⁰ I will come back to research and reading as a means to inspire practice later, see pp. 135-137.

¹¹¹ Another input came from the expansion of another tool, the voice, which has 'the ability to make any sound you want' for which reason he also became more interested in vocal techniques and the 'idea of the possibility of change' (2011, personal interview).

'hacked apart', as is the technology¹¹² (2013, personal interview). Burt's approach, however, seeks to re-connect sound and vision at a medial level through a unified technological approach. With one joint audio-visual software interface, a new medium is established and with it the possibilities of a new language. In his article for *Reflections on Process in Sound* Vol. 1, Matthias Kispert also acknowledges that separate traditions have developed different languages resulting from the 'different tools available for editing sound and video'. This, he feels, is due to the 'different nature of aural and visual perception' (2012, *Reflections on Process in Sound* Vol. 1). These views encapsulate artists' awareness of how different traditions have influenced the development of their respective languages, technologies and methods as part of their particular historical blend lines. Changing perspectives, through establishing new inputs such as tools, means that creative languages may change alongside.

Many artists employ commercial products in their creative exploits rather than generating bespoke tools, essentially making use of the same technological inputs. Whilst this can lead to recognisably similar outputs, Blanca Regina explains how a different focal point established by coming to sound art from a different tradition (theatre) potentially leads to different outcomes. In her case, it also leads to mismatched expectations and an entirely different reading of outputs. For example, her emphasis on establishing presence through a lo-fi language, she feels, is often misunderstood by her peers who expect a 'glossy' audio-visual presentation (2013, personal interview). In blending terms, a different background provides different elements to the blend. In Regina's case, expectations resulting from using the same tools as inputs are disrupted by adding elements from an additional input, and her outputs are frequently not recognised simply because the relevant information pertaining to a different input is unavailable to others. In making all inputs more explicit when talking about our work, we can improve our chances of being understood.

As new technologies can bring about new kinds of works through new ways of working, they can also lead to a re-investigation of the old, through a change of perspective. Aleks Kolkowski, for example, uses obsolete technologies, rather than emergent digital tools and prefers direct interaction with objects, exploring the sounds they might produce. Just as Wishart finds experimentation in the use of digital technology and working with sound as object, Kolkowski discovers sounds in the physical interaction with such objects. He describes his response to the growth of digital technology leading him in a different direction:

¹¹² For Burt, choices were made when deciding on a rate of sounds to be sampled within a given time period, or by assigning a certain amount of pixels to a given space. Respective creative traditions have developed different languages relating to these technological decisions.

Most of my colleagues were beginning to work with computers, laptops, Apple Macs and doing, making digital music. And I wanted to do something completely different, and in a way it became like a parody of what was happening around me. So I was making sounds that were, again, very, very influenced by electronic music, by post-war electronic music and that sound world, but at the same time using no electricity, using sounds... manipulating old 78s, finding old sound effects records from the 1920 and 30s, noise music basically, and using that in performance, and making sounds that sounded electronic but they weren't. (2013, personal interview)

Whilst partially motivated by a desire to be different, Kolkowski also acknowledges a shared sonic 'taste' and as an input that allows for similarity within difference. Like many of his laptop-playing counterparts, he preferred to remain in the background, the machines playing 'me rather than I was playing them'. Despite such commonalities, for Kolkowski, older technologies provide sensorial stimuli: 'the touch and even smell of these devices and stuff like that, you can't escape that' (2013, personal interview). A sense of opposition appeared as an input, which, as part of a blend line, contributed - in conjunction with other inputs such as the interest in touch and objects - to playing with a horned violin and to using vintage horns, as with *Babble Machine*.

As part of his research, Mick Grierson is more interested in how an artist 'interacts with devices in order to engage with sound as a thing' because for him 'each tool dictates the parameters entirely for the practice' (2013, personal interview). This implies that this interaction, how each tool allows artists to engage with it, determines how different, or similar, they sound. Trevor Wishart is of a different opinion, at least as far as digital technology is concerned: Mapping sounds onto the digital realm provides infinite options, and, therefore, difference is a result of how we chose to implement technology, not necessarily which one we work with or how an interface prompts us to work with it (2011, personal interview). Grierson explains that using technology includes unconscious aspects from our own ingrained attitudes, habits and motor skills through to design features.¹¹³ These, like creative traditions and their habitual languages as dominant inputs, can be experienced as restrictive. Thus, whilst technology is often seen as an enabler, tools also reveal limitations that can be lived with, transcended or even taken advantage of. Toop appreciates that, whilst permitting only limited physical interaction, the computer still allows for sonic immersion:

I still feel it, you know I can do a lot of writing and then I start working on a sound piece on the computer, which after all is not that physical any more, but it still has that effect on me that I get lost in this immense environment of sound, which is thrilling. (2011, personal interview)

¹¹³ Perhaps we can resolve this polar pair by including skill as a factor. Many artists will use off-the-peg software tools which determine sound more readily than newly programmed ones might – as in Wishart's case.

What emerges is that the tools and technologies we work with are intricately linked to how we can experience sound, the outcomes we produce, and how we think about them. Inserting different inputs, such as a theatrical perspective as in the case of Regina or a sense of opposition in the sense of Kolkowski, may well result in choosing different elements from given inputs and producing different works.

So far, I have considered how artists experience the input of technology and tools primarily in its implications on sonic outcomes. However, sound, through listening, can also be a tool in itself through which we scrutinise our world, which I have already touched on in the earlier section on approaches to listening. It is also explored by Anna Raimondo and Brandon LaBelle in their conversation in *Reflections on Process in Sound* Vol. 2 (2013). For Robin Rimbaud, the technology of a police scanner provided unique access to the individual and intimate world of others. In overhearing personal conversations, tones of voices, his work celebrated the 'banal' (2012, personal interview), rather than the overtly political which the device might suggest (although this in turn may well be read as a political statement in itself). Here, in addition to inherent abstract textures, by exploring private lives through sound, technology in turn uncovers concrete meanings to be further explored and exploited through technology. Lucia Farrinati even feels that listening is a device in itself, that, rather than focusing on technology, recreates a lost 'social and political space' to counteract 'individualization and fragmentation' arising from of certain uses of technology (2013, *Reflections on Process in Sound* Vol. 2). Here, through listening, we do not merely relate to the world, but we can have an effect on it too.

For Julie Freeman, who predominantly works with digital media, technology is 'instrumental in helping me make the work and it's really fundamental to how I think about creativity and what creativity is to me' (2012, personal interview). Creativity for her is a way to explore 'core values' such as curiosity, investigation, exploring and establishing connections, and allows her to set up a conversation between herself and her surroundings. Within the context of her work, and in contrast to Farrinati's view, not only sound, but also technology as a whole, is relational.

Artists, sometimes, work with technological tools to have an effect on sound, as in Wishart's compositions. Sometimes, sound becomes a tool in its own right through which we can relate and extend our ears into other's lives – sometimes quite literally, as in Rimbaud's case. As we work with tools and choose specific elements from that input, they influence what we produce and how we think about our efforts as part of a personal blend line of practice. Some technologies might prompt us to work with them in certain ways, or we might consider doing the exact opposite of what is expected. Whatever the case, tools

interact with our approaches and methods. I will explore these in the final section of this chapter.

5.4.2 Approaches and methods as inputs

As artists engage with their tools, their media, each artist finds a personal, often multifaceted way of working with them. For many sound artists this includes some aspect of experimentation or even improvisation. However, as pioneering improviser Derek Bailey pointed out, there is ‘an important part of improvisation that is not easily conveyed by its results’ (1980, p. 1). Improvisation is intrinsically linked to process and not necessarily comprehended outside it, making works created through improvisation difficult to talk about. For Bailey, there can be no sensible consideration of improvisation outside personal practice, and the fact that it is removed from the purely rational makes definitions elusive.

In improvisation, ‘the music is playing itself’ (Corringham, 2013, personal interview), a feeling not obtained from any other kind of music making, as Viv Corringham describes it (a notion perhaps comparable to Aleks Kolkowski’s idea of machines playing him, rather than the other way around). Improvisation revolves about sonic experience in the moment and, following what feels ‘the right thing to do’, action emerges from receptivity and listening (Corringham, 2013, personal interview). The rational mind, therefore, needs to be kept at bay for the process to unfold. However, improvisation can also become an inspiration for trying to achieve its opposite, as Alvin Lucier describes, when talking about his piece *Memory Space*:

The idea was that it was anti-improvisational. You do not improvise, you try to imitate exactly the sounds you hear so the group performances have a particular quality that free improvisations do not have. (2012, *Reflections on Process in Sound* Vol. 1)

Improvisation as a method in this sense can be understood as creating a specific sound, perhaps in the same way as the technologies I described earlier might. In this statement, however, the input of improvisation is inverted, comparable to Kolkowski’s description of wanting to avoid using laptops. In this sense, a flip-side approach appears as method and can be regarded as a means to generate new inputs.

In personal process, aspects of improvisation appear in many guises, or at different stages of making. Trevor Wishart, for example, uses structured improvisations to generate material. In the subsequent composition stage he uses a variety of software techniques, following where his experimentations lead as part of a studio-based recursive activity, or

blend line, of making and selecting (2011, personal interview). When working with code, he finds there is a difference between writing music and writing software. Working intensively with sound fatigues the ears, resulting in a loss of judgement, especially as there are no real objective criteria as to what sound is 'better'. Decisions can be hard to make. Computing on the other hand 'may be technically hard to do, but the decisions are easy. It either works or it doesn't work' (2011, personal interview). As a result, writing code is less demanding with respect to listening, and, therefore complements the writing of music. One takes over when the other has exhausted itself as complementary aspects of process. The two procedures work in tandem as entwined strands or blend lines, without losing their own identity.

Burt also describes a two-phase strategy to creating his audio-visual pieces; he first designs a software system through which he then makes works according to its parameters. Burt identifies similarities between designing such creative systems and a compositional approach. Both involve decision-making, choices about structure and sonic quality. The difference lies in the extent to which these are carried out. Whereas a composer will control a wide array of factors, Burt specifies only the 'wider structures, rather than the details, leaving room for surprises' (2013, personal interview). In contrast, an improvising musician like Corringham might be surprised by music arising from improvisation and giving room to human expressions.

Aura Satz puts forward another approach: that of working in 'lineages', where a material or conceptual element of one work is 'recycled into the next' (2013, personal interview). As one piece leads to the next, not as a result of planning but of making, it becomes part of a personal blend line of practice. Albeit not necessarily as explicitly as in Satz's case, each artist's trajectory encapsulates past practice to some extent. Furthermore, for Satz, making as experimentation needs to be anchored. It requires a 'hook' to give her conviction (2013, personal interview). This hook or angle is established through research, without the need for it to become explicit in the final piece (I talk about research as a method to extend available inputs in the following section). In our workshop, Mark Peter Wright described something similar. He needs a work to have a title before he can make it his own (2013). Jacob Kirkegaard expresses a similar concern. He asks, 'How can I move it on to something that is mine, something that justifies it?' (2013, personal interview). Here justification of a work relates to a personal connection, and the assumption that through this connection something new and worthwhile will manifest itself. This search for connection, which is a feature of blending, through hook, title or personal relevance becomes another input to the work, which, as lens, also enables a selection of and from materials to take place.

As I have shown earlier, for artists working with sound, engagement with the perceivable world is mostly established through listening. As with Felicity Ford, listening becomes method. Reflecting on such interactions forms a large part of Grierson's process and involves:

...understanding who you are, understanding that there is something out there that relates to you, seeing yourself in the outside world, being aware of your subjectivity, being objectified by your own actions and then re-ingesting it, understanding what it is and then spitting it out again. (2013, personal interview)

For Grierson, engagement with the world also involves engaging with ourselves with an open and perhaps even critical mind, which supports the exploration of self and in turn the world. This notion of reflexivity includes communication, returning us to sound as a relational medium. For Julie Freeman, this expresses itself in the multi-sensorial aspects creative work offers. For an artwork to be effective, it needs to stimulate the audience's feeling or thinking, and communicate itself back to the artist (2012, personal interview). Measuring the work against this aim, thus, also becomes a method as lens and input to ongoing process.

For some artists, the creative process as a whole and not just its presentation entails engagement with other human beings, rather than objects as tools, a preference expressed by Wright in our workshop (2013). Robin Rimbaud also recognises the importance of fellow humans and communication as an input to his work, which often arises in conversation with other people, rather than from exact plans developed by him in isolation (2012, personal interview). In this light, it is perhaps no coincidence that his early work, under the nom de guerre of Scanner, should have been constructed from overheard telephone conversations.

The idea of a two-way conversation, rather than purely receptive listening, appears as method in other ways. In Viv Corringham's series *Shadow-walks*, for example, whilst actual conversations form the basis of each composition on the one hand, the concept is then also mapped onto editing the material as a conversation between it and herself until all activity resolves into the finished piece (2013, personal interview).¹¹⁴ Similar principles may be expressed as questions about the work at hand, inner conversations about other aspects of the work, rather than merely editing. Diaries or journals are usually used to record them, and in issue two of *Reflections on Process in Sound*, Greek sound artist and my fellow PhD researcher Maria Papadomanolaki provides one annotated example as a journey intended to 'shed some light on the thinking-in-progress', comparing thinking to listening (2013,

¹¹⁴ Corringham initially listens to the meaning of what is said, then technical aspects move into the foreground and later still she hears all as sound, as an orchestra of voices and ambient sound.

Reflections on Process in Sound Vol. 2). In this, thinking and reflection, as action, also acquires as aspect of receptivity, a strategy I have also employed as part of my practice laboratory by responding to emergent inputs.

In undertaking such journeys, and regardless of whether material is collected in diaries as streams of thinking, or as recorded improvisations, these initial stages of process benefit from an inclusive approach. Max Eastley explains:

... I do have states where I'm kind of trancelike state and I'm not judging anything. Because in those states you don't judge anything, you just create things. And there was Schönberg gave that advice to some of his pupils that... don't reject anything.¹¹⁵ (2010, personal interview)

A receptive attitude, listening to what emerges, is an important aspect in generating material as inputs to a work. Janek Schaefer deals with the early stages of developing a new work by researching previous approaches to the details of a commission brief, which he then 'flips' over to explore the subject from its opposite angle (2013, personal interview). In this way, commission brief, research and research materials join a tactic of inversion as inputs, which, as part of a blend line, yield the beginnings of a new work. This is reminiscent of how Aleks Kolkowski arrived at working with obsolete technologies, as part of a journey that sought to move away from the digital towards the tangible. Perhaps such approaches can be understood as a kind of mapping, where instead of understanding one thing in terms of another, it is replaced by its opposite. For Schaefer, 'All ideas have been suffused by your history of previous knowledge' (2013, personal interview), and inverting approaches might yield new perspectives. Furthermore, both history and knowledge encapsulate personal and cultural blend lines, extending Satz's notion of a 'lineage', from the individual to a community. Through research, we can extend the inputs currently available to us as individuals, or populate existing inputs with new elements. I will explore this notion at the beginning of the next chapter.

As tools can have a direct bearing on our work, so can our methods, from improvisation to inverting inputs or juxtapositions, a strategy favoured by Dan Scott (2013, workshop). This means methods and approaches do not only include how we physically engage with tools or the steps we take to interact with the material at hand, but include also how we think about them, as aspects of our relationship with the world. Both making and thinking become inputs to our work. However, at times, it is not easy to discern where tool, method or material begins or ends, as they can be tightly interwoven. This is shown in the example

¹¹⁵ This however, may not always be appropriate. I have already talked about Mark Peter Wright's view that the environment should not be recorded without discernment and respect. A conscious selection, including rejection of material, may, therefore, be needed at times.

of using conversation as both method and material, which is shaped by further conversations. By reflecting on such concerns through the lens of blending, they become clearer and are more easily shared with others.

5.5 Summary

In this chapter, I set out a nascent taxonomy of sound art practice, focusing on three key areas: sight and sound; approaches to listening; and artists' working practices. I do so by setting artists' own expressions next to each other, as gathered through interviews, an online magazine and creative workshops. Before coming to any conclusions regarding this material, I will continue with this exploration in Chapter Six, by examining how inputs might be extended, notions of freedom, and the artist as a human being.

Chapter Six

An incipient taxonomy of inputs, part two: expansion of inputs, notions of freedom, the artist as human and integrating inputs

6.1 Introduction

In Chapter Five, I presented the first part of a nascent taxonomy of inputs to sound art practice, as it emerged from artists' own views on their practice. In Chapter Six, I will now continue with this survey.

I will begin with an exploration of how artists might extend the inputs available to them, through research and collaboration. This will be followed by a section that returns to a theme from Chapter One: the notion of freedom, extended into possible connections with novelty and uniqueness. In a third section, I consider the artist as a human being and examine how artists express this as an input to practice.

Lastly, I will provide a section on how inputs might be integrated. This is based on observations from the three workshops I conducted, but also contains the artists' own reflections. I found some of their views surprising, in that they were remarkably similar to the concept of blending, despite the fact that I had not introduced or even mentioned the theory to them.

6.2 Extending practice: the search for new inputs

At the end of the previous chapter, I consider the influence that tools and methods have on our work and how the introduction of new technologies in particular may have wide-ranging consequences. For instance, the advent of sound recordings and reproduction technologies enabled sound to be understood as a material, an understanding that extended and developed the practice of both music and fine arts at the beginning of the 20th century (see Chapter One).

Even when considering culturally less significant examples than the impact of technological inventions on a discipline as a whole, the introduction of new inputs can also influence individual practice. Most artists who took part in this research employed some level of research as a way to inform or extend available inputs, and through it particular works or even their practice, although the degree to which this took place differed.

Research may take the form of seeking encounters with artists or other inspiring people,

reading, periods of collaboration, or formal academic research, and I will explore these aspects in the next three sections.

6.2.1 Conducting research to expand inputs

I mentioned earlier how Janek Schaefer researches previous approaches to the parameters set out in a commission brief, and then inverts his findings to generate a different perspective. Even if not employed in this very specific manner, research is usually used to explore the context of a new work. At times, more general research might spark an idea for a project. In this section, I will explore how different artists consider the role of research in the practice.

As an artist and academic, for Mick Grierson, research provides a conceptual input that intersects with the visceral experiential aims of his audio-visual practice. Whilst inspiring and informing his creative work, the key objective of his research is to ‘extend what is known’ (2013, personal interview). In blending terms, he searches for outputs that provide inputs (or elements of inputs) to other researchers in the field. Focusing on methods and approaches in Accessibility Research, which studies how users interact with a range of devices, he explores the tools for practice and how such tools are used as aspects of making.

Even where artists do not talk about formal research in the academic sense, their reflections relate how new knowledge flows into their practice. Viv Corringham’s work shows how research can be incorporated into practice over time. In her article for *Reflections of Process in Sound* Vol. 3 (2014), she explains how *Shadow-walks* developed from her earlier *Vocal Strolls* and *Urban Song Paths*. The initial impetus was the desire to connect more profoundly with the areas she used to walk in. In the first instance, this meant repeating walks and researching the history of places, including their cultural function. She then also investigated Aboriginal songlines and Kaluli song paths through the writings of anthropologist Steven Feld (2014, *Reflections of Process in Sound* Vol. 3). *Shadow-walks* finally emerged as an amalgamation of direct experience and research as two intersecting blend lines where walking appears as a physical connector.

Aura Satz regards research as a cornerstone of her practice and new work arises in conjunction with practice (2013, personal interview). For her, research comprises of two interlaced strands, one in which she voraciously reads and takes notes, and another in which she engages with specific aspects in a more structured way. This approach can perhaps be linked to the stages of improvisation and editing, as in my work, for example.

Whilst the former allows her to 'glean inspiration', the latter supports the incorporation of selected elements from the inputs generated into work (2013, personal interview).

Jem Finer researches to learn, be inspired and to satisfy his curiosity. He describes reading widely, from books, fiction and factual, to various magazines and online materials, from which further research and the beginnings of a piece germinate:

A lot of what I do starts from being very taken with some idea or some subject which I've only just discovered and wanting to understand it more. And then getting to a point where I find myself thinking, yeah, I really would like to kind of make something which engages with whatever that might be. (2013, personal interview)

Finer then explores the chosen subject from diverse angles as a way of making 'sense of stuff', which includes developing new skills. However, for Finer, process and output cannot be equated. Whilst being informed by it, each work retains a discrete identity (2013, personal interview). In blending terms, the ongoing activity of blending results in distinct outputs.

Whereas Satz is often inspired by history, Kirkegaard is attracted to science. However, for Kirkegaard the function of research in the arts and sciences differs and the main focus of his research, unlike in Grierson's case, is to stimulate the imagination, rather than producing facts. On the contrary, for Kirkegaard, "not knowing" opens up a space 'for your own story', although it can also become the starting point for learning (2013, personal interview). Nevertheless, accumulation of knowledge is not of interest to Kirkegaard, but rather the stimulation that knowledge brings with it.¹¹⁶ Regina also describes how she actively seeks to inspire her imagination, through reading, for example. For Alvin Lucier, both fiction and biographies are of interest. He likes 'to escape into that fictional world', but he also enjoys learning about the people that might create such worlds (2012, *Reflections on Process in Sound* Vol. 1).

As we can see, for many artists, learning goes hand in hand with inspiration, although exactly how this manifests itself differs. However, too much research can also draw away from a more immediate response to a given situation, as became evident from Tansy Spinks' response to the workshop we conducted, in which I asked her to respond to objects without much time for consideration. It was particularly interesting to see that, whatever the polarity ascribed to reasoned consideration and unplanned experimentation (or perhaps even improvisation), for some artists these coexist within their practice. Kolkowski for example describes a relationship which establishes a conversation between research and making; between the mind, which gathers and then extracts stories and tools

¹¹⁶ In my *Sorbet Period* (See the data DVD) I come to similar conclusions.

from what is learned, and experimentation, which explores those new-found resources (2013, personal interview).

As we can see, the input of research can combine with that of experimentation to contribute to the development of new work. It expands horizons. Moreover, threads may even develop over longer periods of time as blend lines, as in the case of Corringham's *Shadow-walk*. Often, factual information, about history or technology, for example, is of interest. However, the lives, thoughts and works of other artists also inspire. In the following section, I will explore how artists talk about this possible input to their practice.

6.2.2 Other artists' work as input to practice

Whilst aiming to avoid the most obvious references, artists do look towards the past and other artists' work for inspiration, even if it is simply to avoid what has already been done. This search might include practical aspects, such as learning about techniques by talking to experts, as Janek Schaefer and Viv Corringham report. Jo Thomas frequently listens to other artists' music, visits galleries or attends talks.

Sometimes, inspirations can be very localised, but have long-lasting repercussions. Schaefer, for instance, refers to a meeting with Philip Jeck (2013, personal interview), which inspired his use of turntables in performance and the subsequent development of the *Tri-phonic Turntable* (1997), which features three tone arms that can be used for improvisation, as an instrument. Viv Corringham remembers how, quite early in her life, she encountered the young steel guitarist Mike Cooper at a concert organised by the London Musicians Collective (LMC).¹¹⁷ Through him, she encountered improvisation, in this instance seeing and hearing Cooper 'bouncing ping-pong balls from the guitar'. The concert resulted in an 'incredible fascination' with improvised performance, which continues to this day (2013, personal interview). Another example is Grierson's affirmation that he was inspired by Tod Machover, the head of the Opera of the Future group at MIT's Media Lab and the inventor of Hyperinstruments, a technology that expands musical performance through the use of computer systems.

Alvin Lucier talks about how the perspectives of a range of artists and works came together in one particular work, *Vespers* (1968), one of his important earlier pieces, which uses echo-locators in performance to establish space:

¹¹⁷ The LMC was founded in 1975 by experimental and improvising musicians including Steve Beresford and David Toop. It ceased to exist after the Arts Council England removed funding in 2008, but not before establishing London's radio art station Resonance FM.

Actually, I was inspired by the echo sections in Monteverdi's *Magnificat*. I heard a performance of that piece in Venice in 1960 and was enthralled by the spatial imitations of those little forms. That was the same summer I saw Cage, Tudor, Merce Cunningham and Carolyn Brown perform at the Fenice theatre.¹¹⁸ (2012, *Reflections on Process in Sound* Vol.1)

He considered this performance to be shocking and influential, contributing to a shift of perspective (Lucier in Fetterman, 1996, p. 48). Whereas, here, elements from several inputs blend to make the final work, Lockwood's *Delta Run* (1979-81)¹¹⁹ was inspired predominantly by elements from a single work: one of Pauline Oliveros' early pieces, in which the composer and 'a partner are moving extremely slowly over a period of time' (2011, personal interview). Thus, different elements of other artists' outputs may inspire and instigate the selection of specific elements in one's own work. Like Rimbaud, an avid appreciator of other people's work, Kolkowski also acknowledges, 'I get more inspired by other people, rather than objects' (2013, personal interview). This is also the case for Mark Peter Wright, who in our workshop professed to an anxiety around objects.

As artists realise the importance of access to the work of others, this can prompt a reciprocal approach. Finer describes:

I always find it fascinating looking at other artists' processes, you know, and if I'm afforded the opportunity I reveal my own through some kind of documentation, like a book for example. (2013, personal interview)

Just as he learns from others, Finer opens up the conversation by making his process available and generously transparent through documentation, as becomes apparent on websites relating to some of his projects, for example *Score for a Hole in the Ground*¹²⁰ with which he won the PRS Foundation New Music Award in 2005. Documentation appears as a separate output of a blend line that accompanies and extends the original project.

In the same way as Aura Satz identifies lineages in her own work, we can also discover an interconnected web of blend lines, blend fields across disciplines, genres or cultures in which artists inspire each other. As far as academia is concerned, acknowledging such influences is, of course, an imperative, but, outside it, not all artists make such connections explicit.

This section illustrates very clearly that, whilst practice is personal and subjective, it is not necessarily isolated, although some artists engage with peers more than others do. For

¹¹⁸ The Teatro La Fenice is an opera house in Venice.

¹¹⁹ *Delta Run*, which was created between 1979-81, uses utterances by sculptor Walter Winch, recorded just before his death in 1979.

¹²⁰ Available from <http://www.scoreforaholeintheground.org>.

some, close working relationships are desirable, and might even lead to collaborative productions. It is to this theme that I will turn next.

6.2.3 Collaborating to expand inputs

As some artists are inspired by their colleagues and their work, some take this approach to creative stimulation further by also working collaboratively. The workshops I conducted as part of this research in which I presented a selection of objects to artists with the view to eliciting creative responses showed that, by changing the approach through a collaborator's presence, new avenues become visible. However, as with the other inputs discussed so far, the elements that artists choose to work with change. In this section, I will provide an overview of how artists themselves talk about the input of collaboration.

Tim Wright, an artist with a background in electronica who now also explores algorithms and very abstract audio-visual materials, is inspired by close working relationships. For him, personal contact frequently provides an impetus for working collaboratively (2013, personal interview). Whatever the starting point, collaborations can have a significant effect as Max Eastley describes:

I found through working and talking with David [Toop] that your listening, hearing apparatus, if you like, can be changed, because it changed my way of listening, what I was doing. It had to. I couldn't pretend it wasn't. Because I wasn't playing a piece of music on the guitar, I was instigating certain things and they're vastly different. I mean sound running out of a container onto a piece of paper is not the same as playing a tune and singing on the guitar, it's very different. So I was changing the way I perceive things. (2010, personal interview)

Working with others can change our perception profoundly, rewire how we listen and make sense of what we hear. Aleks Kolkowski also values this potential, especially when collaborating with people from different backgrounds or disciplines:

I can get very inspired by working with people from other disciplines. It can be a painter, or a writer, or something, that can [...] shed completely new light on things and make you work in a completely different way. (2013, personal interview)

Through collaboration, the artist can acquire a new perspective, extend her skills or even gain access to completely new creative worlds as Aura Satz declares, citing her collaboration with Kolkowski as a route into working with sound (2013, personal interview). However, whilst collaborations can be liberating, they can also make the artist vulnerable, creating a need to 'establish a balance between giving and taking' to pre-empt problems (Satz, 2013, personal interview). Kolkowski again:

Being musicians, we're collaborating all the time. But collaborating with other disciplines has always been fraught with difficulties.¹²¹ (2013, personal interview)

For some artists working with sound, musicians in particular, collaboration is a mode of working. For example, Rimbaud professes to work predominantly collaboratively. For others, it is less so, possibly resulting in a difference in communication skills and negotiating give and take.

Viv Corringham also talks about collaboration in music-making specifically, where the most 'sublime moments' usually occur when playing with others, when all participants suddenly 'tune into something', creating an almost visceral experience (2013, personal interview). However, here the emphasis is on sharing an experience, rather than benefitting or directly learning from difference. Give and take becomes an on-the-spot balancing act between musical expressions, negotiated by listening.

Sharing experience is also important to Blanca Regina, who connects with the awareness of others through collaborative performance (2013, personal interview). With regard to establishing strategies for such performances, Matthias Kispert finds that collaboration is best facilitated through a distribution of roles (with a possible overlap), as in the case of D-Fuse (2012, *Reflections on Process in Sound* Vol. 1). Specifics of give-and-take are given a more stable position to establish a positive outcome. However, such clear strategies may not be possible in more explorative collaborations, for instance across disciplines. Hence, context, to a certain extent, colours our perspectives on collaborations and what elements we may choose to work with.

In music, as we have seen, collaboration is common, promoting negotiation skills. However, increasingly, creative partnerships across the arts and sciences are taking place. To Jacob Kirkegaard, working with scientists can be complementary and provide fascinating and stimulating insights.¹²² Whereas the scientist creates knowledge, the artist can illuminate a subject from a different angle, and indeed has 'the obligation' to do so. Furthermore, whilst the scientist raises questions in order to find answers, the artist creates a 'question that is not necessarily to be answered' (2013, Kirkegaard, personal interview). This, in Julie Freeman's experience, can cause tensions between collaborating artists and scientists (2012, personal interview). In collaborations, where the very different aims and viewpoints inherent in participant's respective disciplines need to be negotiated, it is important to establish at least a temporarily shared basis for a

¹²¹ I envisage that the methodology based on blending, which I began to develop in Chapter Four, may ultimately aid collaborations across disciplines, [see p. 98](#).

¹²² For example, learning about otoacoustic emissions (a sound that is generated within the inner ear) provided Jacob Kirkegaard with the impetus for his piece *Labyrinthitis*. In *Labyrinthitis* the audiences' ears are stimulated to emit their own sound. www.touchmusic.org.uk/catalogue/tone_35_jacob_kirkegaard_labyr.html

collaboration to be effective. I believe that this task can potentially be supported through blending-as-method, which I have begun to develop as part of my project *Multilogue* (Chapter Four, pp. 92-96). Blending-as-method allows us to view each discipline as an input that has elements to contribute to the final work – meaning that whilst all aspects are equally valid and can be explored, not all need to find correspondence in the final output.

For artists experienced in creative collaborations, strategies are already in place. When considering practicalities, working together usually begins with an exchange of views or ideas, which, for Kolkowski, involves ‘talking, discussion and working together on form and the structure, tossing ideas around’. This might result in editing initial material: ‘then it would change, depending on their reactions and comments and stuff like that’. Several cycles of discussions and hands-on work can be expected before a work is completed (2013, personal interview). Each cycle represents different stages of a blend line towards a completed work.

Such an iterative procedure can be made explicit in order to facilitate working together. In their article for *Reflections on Process in Sound* Vol. 1, James Andean and Marianne Decoster-Taivalkoski examine the collaborative methods of the *Sound & Motion Improvisation Research Group*, based in Helsinki. Developed through practice, the method consists of recursive cycles involving practical sessions, discussions of observations, formulation of new ideas and questions, leading to further practical sessions. They observe:

The reiteration of this cycle of ‘experiment/observation/discussion/new experiment’ leaves in each participant an imprint of a shared experience. (2012, *Reflections on Process in Sound* Vol.1)

This shared experience is integrated into, or blended with, each individual’s practice and becomes available as an intuitive language over time, perhaps similar to that which a musician develops, continually changing and adapting to new situations and influences as further inputs to this language. Andean and Decoster-Taivalkoski consider the implications of such a flux:

No attempt is made in the group to draw definitive conclusions. Instead, observations, rather than leading to conclusions, are used to directly construct new hypotheses. Thus, our questions don’t lead to answers; they do, however, help us to develop as a group. (2012, *Reflections on Process in Sound* Vol.1)

As the group becomes fluent in their joint language that emerges from bringing several personal practices as inputs together, and as their continuing work leaves room for further inputs to be incorporated, this blend field of activities leaves a mark on the work produced. In outline, this method is similar to Kolkowski’s collaborative process, but also

shares aspects with how Satz and Kirkegaard perceive their individual processes: Satz in terms of its recursive qualities, and Kirkegaard in terms of how artists formulate questions without expecting answers.

Whilst collaborations inspire, they can also create difficulties, especially when people from very diverse backgrounds or with very different personalities, are involved. As an input, collaborations provide opportunities to expand practice by learning from others, be that factual information, skills, methods or other approaches. In significant cases, collaborations might leave practice profoundly changed, leading to new kinds of works being produced.

In the following two sections, I will explore notions of freedom, and how this might intersect with some artists' desire to create something new.

6.3 Establishing connections between freedom and the new as inputs to practice

In Chapter One, I explored the possibility that sound artists such as Max Neuhaus or Hildegard Westerkamp were motivated by a desire for freedom, although perhaps in a less romantic fashion than this term might suggest, relating rather to an aspiration to escape the limitations of established creative disciplines. My primary research confirms this concept of freedom as a theme. In the following section, I will consider what freedom might mean to artists and how this concept might extend to and interlink with notions of the new.

6.3.1 Notions of freedom as input

In Chapter One, I introduced the idea that sound art might be perceived as a liberating discipline from established creative languages such as fine art or music. In Chapter Five, I also consider notions of freedom in relation to modes of listening. As artists talked about the role of 'freedom' in their work, different facets became visible.

Jo Thomas, for example, despite working largely with music, prefers the term artist to that of a composer, as she considers it to be freer and less associated with male-dominated '18th-century bourgeoisie'. The umbrella term of artist gives 'free reign' to pursue what feels right (2012, personal interview).

Viv Corringham describes the early attraction of improvising with LMC artists such as Lol Coxhill, a time that reminded her of 'the first day of art school', where she was told to

forget everything she had learned previously, giving her a tremendous freedom to express herself. Working with environmental sounds extended this view, allowing her to 'drop notions of being good at it' even further (2013, personal interview). Thus, as some inputs are gained, others are dropped. Here, freedom is a personal one, relating to the absence of the pressures of competition and comparisons with established artists.

Jane Schaefer also finds inspiration when not following dictates of quality, and he appreciates the lack of constrictions or rules and the freedom to follow ideas where they might lead. However, the ideal scenario is not the total freedom of anarchy but includes the recognition that 'limitation breeds creativity' (2013, personal interview).¹²³ Freedom, for Schaefer, means the ability to explore a set of given inputs established by the details of a commission brief, for example.

Aura Satz expressed another facet of freedom. She argues that freedom contains a temporal component that, as Schaefer also claims, allows her 'to be free to explore things as and when they come.' She recognises that inspiration does not arrive on demand and that one needs to be free enough from other tasks to be able to act when it strikes. Furthermore, as freedom brings risk and instability, formulae need to be kept to a minimum to explore new avenues:

Things aren't fixed in their place, they can be reassembled and find new meanings and connections. And that happens as much perceptually as much as in the materiality of the things. (2013, personal interview)

In flux, inputs can be connected and reconnected in different ways as we change our understandings of them or reassess their physical attributes. The familiar is refreshed.

Like Corringham, Blanca Regina is attracted by the freedom found in improvisation, the lack of prescriptive scores or systems. She believes that the voice, in this context, is particularly freeing, as no other materials are needed. It represents the liberation of air emanating from a body (2013, personal interview). Through this experience of expressive independence, freedom connects to the body, unlike the constraints imposed by the mind and the cultural patterns it holds. This understanding appears at odds with traditional Western views, which attribute confinement to the body as matter, and freedom to the mind in its immaterial aspects. Theo Burt, it could be said, associates freedom with neither human body nor mind, but with the machine relinquishing the need for artistic self-

¹²³ Just as with technological limitations or parameters, there are inputs imposed by briefs or situations, as Schaefer explains. The exact shape of a work, for example, may depend on what opportunities present themselves for publication – they might even 'give(s) birth to an idea' (2013, personal interview). In this way, external, constraining factors present possibilities and appear not only as input, but also as blend lenses that influence choices.

expression altogether, and replacing it with computer-aided mathematical rules as participants in creativity.

What freedom pertains to, it seems, varies between artists and their differing creative environs. Some find it in bodily presence, some in expressions of inner states; others strive for the exact opposite, by seeking creative liberation in mathematical algorithms. For the most part, freedom seems to be about the ability to explore inputs and a connection between them in whatever way they present themselves or in whichever way we can make them connect, and whenever this connection occurs to us. Furthermore, it seems we prefer to be unfettered by limitations arising from notions of being considered 'good' at something, or if our work is part of an excepted tradition. Some more practical restrictions, however, might stimulate creativity, motivating us to find ways around them.

How pertinent, then, that American composer James Tenney credits John Cage with eliminating the need for artists to liberate themselves from the achievements and vocabulary of one's predecessors (Tenney in Kahn, 2001, p. 225). And yet, we are seemingly still aspiring towards just that, even if understood as a personal experience, and not the 'modernist rhetoric of liberation' that Cage almost transcended (Kahn, 2001, p. 225).

6.3.2 The desire to make something new as input

The desire to avoid well trodden paths and established domains, carving out one's own unique niche – or at least finding a new perspective if not outright innovation is linked to the idea of freedom. Furthermore, the term creativity itself is usually related to novelty, be that on a personal or a cultural level.¹²⁴ Blending theory in its original form also postulates that creating connections between inputs leads to an 'emergent new' as discussed in Chapter Three.

In my interview with her, Aura Satz expressed a commitment to establishing such new connections, albeit from a perspective of unsettling expectations. By experiencing original and surprising relationships, fresh synaptic, neurological relationships are also formed (2013, personal interview). Jo Thomas, on the other hand, looks for 'achieving vision', which, to her, means creating work that audiences have not heard before. Nevertheless, she is aware of working within a specific genre, and using its language, which she seeks to extend by exploring different domains (2012, personal interview). In this way, new inputs

¹²⁴ Professor of cognitive science at the University of Sussex, Margaret A. Boden, divides creativity into psychological and historical creativity, P-creativity and H-creativity respectively (2004), meaning creativity relevant to either the individual or a wider community.

are being applied to familiar ones in order to create a new perspective, and, in doing so, function as blend lenses that influence selection.

However, tensions can exist between the new and the learnt, between elements of one input. Viv Corringham, for instance, notes that each artist has a repertoire and 'however hard you try', such styles or habits are not easily dropped. That said, she is not concerned with originality or the new, per se, but rather with variety to avoid the annoyance generated by too much repetition. Although she does not define it as an aim, Corringham recognises the uniqueness of her long-term project *Shadow-walks* as an 'odd combination of things', which have combined as a blend in and through her experiences.¹²⁵ Interestingly, she speculates that this knowledge might make her feel more secure with being 'standard' in other areas (2013, personal interview). Perhaps, continuing with this speculation and applying it to a concern explored in the previous section, the statement points to replacing notions of 'being good at something' with 'being unique'.

For Annea Lockwood, notions of the new do not necessarily connect to cultural novelty, but to personal freshness, a distinction explained as follows:

I always want to move in other directions, fresh directions. So I set rivers aside for a good 20 years, as I mentioned, and now I think perhaps having had the experience of working on the Danube and then very shortly afterwards, for me, being asked to do the Housatonic River,¹²⁶ and not being ready to do another river. (2011, personal interview)

This statement may point towards renewing one's perspective, but could perhaps also be read as a desire to avoid repeating oneself. However, Lockwood also considers rivers to have presence, and each merits its own, fresh expression rather than rehashing a formulaic sonic river map, based on previous work.

In *On not knowing: how artists think*, Rachel Jones acknowledges the 'intrinsic link between beginning anew and not knowing' (2013, p. 25). This can be understood as freedom from past knowledge, both experiential, embodied knowledge and mental knowledge. Only when we do not know can we move towards something new, and in this sense it can be understood as a strategy, as an input that supports finding something new. Striving towards something new also operates as a blend lens, motivating choices. Whilst not universal, many artists in this research did express some desire to work with or generate new kinds of inputs or outputs. Most of these, however, were about finding new aspects within given contexts, rather than instituting revolutions.

¹²⁵ It is set out in *Reflections on Process in Sound* Vol. 3.

¹²⁶ The Housatonic River is located in western Massachusetts and western Connecticut.

In the next section, I will turn towards the artist as a human being as an input to work.

6.4 The artist as human being: personal inputs

As we have seen throughout this chapter and the previous one, creating art works involves making choices, be they individual or negotiated as part of a collaboration. Sometimes, such choices might be the result of a commission brief, or a format. However, artists' personal circumstances, tastes or temperament also contribute. Jez Riley French even questions whether personal aspects, the 'full range of motivations' leading to art works, are increasingly overlooked in favour of a 'predictable rhetoric' (*Reflection on Process in Sound* Vol. 3, 2014). In section 6.5, I will examine more directly how artists talk about making choices and integrating their selections into work or practice. In the following section, I will consider how artists view the role of human experiences in their work, beginning with their formative years.¹²⁷

6.4.1 Childhood experiences as input to practice

Many of the artists who took part in this research regarded childhood experiences as influential in respect to their later creative work. Viv Corringham, for example, started singing very early, wanting 'all her dolls to sing'. As an only child, she remembers 'lining them up' and creating pieces of music for them, singing them in turn (2013, personal interview). We can still find some elements from this early input emerging in her work, for example in relating through singing.

Early experiences relating to technology in particular seemed important in a variety of ways, and many artists remarked on them. Perhaps the technology that is available to children already contains a kernel of art to come, although it may not necessarily be the latest high-tech equipment, as the case of Aleks Kolkowski demonstrates. He describes listening to his parents' gramophone, which, for his generation, had already become an unusual experience (2013, personal interview). He sees this as presaging his current concern with obsolete technologies. In the case of Mick Grierson, available technologies intersected with personal tastes and early interests. He had access to a synthesizer and preferred direct sound manipulations to traditional music, firmly establishing the potential of 'electronic sound making' early in his life (2013, personal interview). Whilst Theo Burt's work contains strong conceptual threads, he believes that his approach to aesthetics is purely a matter of his own taste, developed and influenced by anything he has felt strongly about in his life, from childhood experiences with 8-bit computers to

¹²⁷ Some of my own formative experiences are covered in Chapter Two.

socialising in electronic music scenes and fleeting obsessions with minimalist and conceptual art (2014, personal communication). Thus, a series of experiences stretching from childhood to adulthood inscribe themselves as inputs into practice and become part of a blend line of practice.

Robin Rimbaud, on the other hand, relates how several early inputs blended into his work as Scanner. Aged ten or eleven, he used a tape recorder to secretly record at home and, later, on buses or at school. He then cites frequent experiences of crossed telephone lines, which he also recorded, as a direct precursor to deploying a police scanner in his professional practice, which brought him initial fame and a *nom de guerre* (2012, personal interview). Jacob Kirkegaard remembers early experiences instilling a ‘wonder about sound’, listening to shortwave radio, noise or Middle Eastern stations ‘coming up and disappearing again’. In his imagination, the sound physically travelled, producing a concept of ‘sound as physical matter’ (2013, personal interview). It illustrates how technology used in childhood may not just influence what tools we use in later years, but also how we understand the phenomena around us, and how we conceptualise them.

The ‘soft’ skills we are exposed to can be of equal importance as inputs. This might refer to learning a traditional instrument as a child, resulting in a musical approach to the appreciation of sound as in the cases of Rimbaud or Kirkegaard. Another example is Blanca Regina’s attendance of after-school clubs in painting from the age of eight. Being the youngest child in the class, she was allowed to interpret all exercises the group was given freely, rather than fulfilling set criteria. This permission to give tasks a personal interpretation she cites as instilling a confidence and skill in doing so, along with a reluctance to follow structures (2013, personal interview).¹²⁸

Alvin Lucier also has a strong memory of a childhood experience outside the family home, which influenced him greatly:

When I was young, I went to a summer boys’ camp in New Hampshire. The owner was a remarkable man. Once a summer he would dismiss us from evening dinner one by one – 30 seconds apart – and tell us to go to our cabins by a route that we never had taken before and to pay close attention to the sounds. Can you imagine that? This was in the late 1930s and early 1940s. And it was wonderful because as you walked through the woods by a different path you’d hear beautiful birdcalls and other woodland sounds. I think that in retrospect that influenced me a lot. (2012, *Reflections on Process in Sound* Vol. 1)

Influential experiences can come from all around us, in Lucier’s case the adventure of listening in, and to, an inspiring environment contributed as an input to a life of sonic exploration. Although what we are exposed to in childhood has an impact on later practice,

¹²⁸ As a teenager Regina became involved with theatre, which also informs her practice to this day.

the results are not necessarily predictable – inputs do not work in isolation, but in conjunction with each other. I would, therefore, stress that making pronouncements about artists and their work based on simplified, biographical details can easily result in incorrect assumptions. Taking what we artists have to say ourselves about our process as a whole, I believe, is essential if we want to avoid such mistakes. With this in mind, in the next section I will proceed to even more sensitive areas, exploring personality traits and interests, the body and emotions as potential inputs to practice, as expressed by artists participating in this research.

6.4.2 The personal as inputs to practice: personality traits and interests, body and emotions as inputs

Creativity research has long been concerned with identifying distinctive personality traits, such as the ability to generate unique ideas. In more general terms, personality traits appear as part of this research, as an input to practice, often in a way that guides us to or through other available inputs. Thus, they can also be considered as a blend lens.

Artists such as Tansy Spinks, Aura Satz or Jem Finer, describe themselves as curious, a trait which seems to act as a stimulator or motivator. However, as with many other inputs, curiosity can be a mixed blessing. David Toop, for example, explains:

I'm interested in everything and that for me is a huge danger. It always threatens to unfocus me, always threatens to send me off at tangents. It's what people criticise in my books. (2011, personal interview)

Whilst curiosity might bring with it a danger of getting lost in too much information, it can also lead us to learn about a wide variety of subjects. These become new inputs, which can offer different and insightful perspectives. Toop's writing output is an example of this trajectory.

Robin Rimbaud identifies another trait as instrumental in his working life. He describes himself as 'hyperactive in both experiencing things and wanting things to happen' (2012, personal interview). This characteristic made him a prolific artist and networker early in his career. Aged 18, for example, Rimbaud published a cassette release accompanied by a book, featuring artists such as Lydia Lunch, Nurse with Wound, Derek Jarman and himself (2012, personal interview).

Many artists are avid collectors of records, CDs, instruments, paraphernalia relating to music making, or even sounds themselves, although Robert Curgenvin, for one, is careful to distinguish himself from a 'librarian' or a cataloguer of things (2013, personal

interview). Taking the notion of collecting further, for Kolkowski, it can become a compulsion (2013, personal interview). Whilst Thomas enjoys states of intense focus, she realises this tendency has to be watched. As with curiosity earlier, the appeal to keep hold of relevant objects, sometimes with the explicit intention for later use, has its problems when taken too far.

As personal preferences play a role in the making of work, for example, taking pleasure in walking for Viv Corringham, so do personal dislikes or feelings of opposition. This may mean rejecting classical music training or, in the case of Kolkowski, resisting suggestions to make pieces more widely acceptable through theatrical presentations (2013, personal interview). Personal preferences may also lead artists to pursue particular interests, for example, working with specific technologies such as obsolete ones in the case of Kolkowski, using mathematical algorithms to create work in the case of Burt, ascribing importance to the dynamic range of her pieces in the case of Thomas, or a fascination with overtones in the case of Curgenven. Some focal points may last for a long time, or even remain throughout an artist's life; others appear only briefly. Kolkowski illustrates how even a deep-seated interest may change over time as 'sometimes you lose sight of it; it becomes strange' (2013, personal interview). On occasion, the constant mixes with newly arising approaches, and sometimes interests or traits might even interfere with each other. For example, although Janek Schaefer enjoys simplicity, he feels that his 'brain just gets in the way' of being an outright minimalist (2013, personal interview).

Whatever direction practice takes, artists always bring themselves into their work, as Max Eastley recognises: 'I found out that you can't actually copy anything [a piece of visual art], you have to do it through yourself, so it's your version' (2010, personal interview). Fundamentally, it is the spark of personal excitement that keeps most artists tied to their work. David Toop emphasises this:

I still love what happens when you make sound, you know, just the tiniest sounds for example. Or the surge you feel when certain events happen within unfolding of sound. That to me is incredible and I couldn't do without that. (2011, personal interview)

Such feelings of excitement are embodied experiences, and Toop himself notes that sound's 'immersiveness', means 'that it's a whole-body engagement' (2011, personal interview). He is not alone in this view. For sound art pioneer Bernard Leitner, the whole body participates in listening as sound waves physically interact with it (Leitner in Schulz, 2003, p.83). In Chapter One, I show how Fluxus artists expanded notions of sonic materiality into recognisably bodily dimensions through amplification. Mick Grierson acknowledges the effectiveness of volume in bringing the whole body into the listening

process (2013, personal interview). Jo Thomas attempts to stimulate bodily sonic experiences by 'achieving incredible dynamics', a differential between loud and quiet, and sensual structures (2012, personal interview). Despite very different outputs, all these artists consider the effect of sound on the human body. At the same time, the human body also interacts with sound, sometimes, through the manipulation of digital interfaces, sometimes, by expelling air through the vocal cords, sometimes, by interacting with an instrument. Max Eastley explains:

Dynamics of touch are very important. The dynamics of when you play quietly and when you play loudly, you have to... They are connected, they have to be, otherwise you can't play. (2010, personal interview)

The ability to control such aspects is increased by relaxation, and Regina argues that the quality of sound is directly related to it (2013, personal interview). For Corringham, this relationship appears to be inverted. It is how she feels about the quality of an improvised performance that relates to how 'comfortable' she feels. Feeling comfortable in your own body enables enjoyment and courage to extend oneself during the performance, especially when using voice (2013, personal interview). The inputs of body and sound have a reciprocal effect on each other; sound vibrates the body, governed by level and frequency, and the body has the ability to both produce and act on sonic vibrations, which, in turn, are influenced by the state of the body. In the third issue of *Reflections on Process in Sound* (2014), Michelle Lewis-King describes her *Pulse Project*, in which such interactions are made an explicit focal point. She explores the relationship between sound and Chinese medicine by conducting performative consultations in which a participant's pulse is taken, and translated into sonic vibrations as a technologically mediated composition. By connecting very diverse inputs, which encapsulate hitherto distinct blend lines,¹²⁹ a unique practice is established using the notion of vibration as connector.

As our bodily condition connects with our emotions, emotions do not just influence the sounds that we produce directly, but also how we interact with other tools used to act on sound. For instance, in relation to field recordings, Maria Papadomanolaki, questions, whether 'the technology I used acts more like an intermediate safety layer so that I ensure my proximity/distance from it [the environment and its soundings]' (2013, *Reflections on Process in Sound* Vol. 2). To Corringham, on the other hand, computers do not denote safety at all, but rather evoke feelings of fear, so she avoids using them in performance. Mark Peter Wright feels this fear very keenly: 'I don't like building things and knowing technical objects, gear. I'm rubbish with it all. I think I'm kind of scared of them in that way' (2013, workshop). Thus, emotions do impact on artists' work, but the way in which

¹²⁹ I have temporarily extended the concepts of an input and a blend line here from sound art to Chinese medicine.

they do so is unpredictable. As deeply embedded blend lenses they may prompt us to use certain technologies, or have the opposite effect.

Finally, sometimes artists make use of their feelings and direct life experiences as an immediate input to work, as in the case of Janek Schaefer's *Love Song*, made with his, then recent, honeymoon in mind. However, to Schaefer it is not the artist, as a celebrated personality, who is important, but rather his ideas, put forward in ways that people can relate to (2013, personal interview). Schaefer attempts to bridge populist and elitist conceptions of creativity, perhaps even 'low' and 'high' art.

Clearly, then, the artist as a human being, her childhood experiences, personality traits, bodily conditions and emotions have an effect on practice. They interact with other inputs to practice as part of personal process, interwoven with trajectories of community.

Such inputs may appear as underlying assumptions that impact on practice as revealed in my research workshops, for example, as the limitations artists impose on themselves through self-identification, thinking: 'I can't do this', or 'This is how I work'. In extreme cases, they may appear as strategies to deal with health limitations as in the case of myalgic encephalomyelitis (ME) sufferer Chris Dooks.

Thus, inputs to practice can also affect the choices we make, in which case they act as blend lenses. In the final section of this chapter, I will explore how artists view this aspect of practice, choosing from inputs and integrating the selected elements in an act of blending.

6.5 Choosing from inputs and integrating elements

For the most part, the taxonomy of inputs to sound art practice presented in the previous two chapters explores how the artists participating in this research experience and think about the inputs to their practice, from sight and sound at the beginning of Chapter Five through to childhood experience and emotions in Chapter Six. In this section, I will now consider what artists say about selecting from these inputs and integrating their choices into practice. I was intrigued by the parallels to blending that emerged despite the fact that I had not mentioned any of its concepts to the participating artists. Some choices are made very deliberately, some however are less conscious and therefore align more closely with blending theory in its original form.

Tansy Spinks believes that the artist makes 'many subjective decisions behind the scenes as to what may or may not be interesting or relevant and editing these choices' (2013,

Reflections on Process in Sound Vol. 2). Such choices are influenced by the specifics of each project, but also by much less tangible factors such as taste and emotions, as explored earlier. In general, human emotions – especially when strong – and, by extension, the artist’s psychological make-up appear as both input and blend lens. We can take as examples two instances mentioned earlier: feelings of anxiety around technology in the case of Corringham, or around objects more generally in the case of Mark Peter Wright, both resulting in avoidance.

Sonic preferences also play a role in what aspects we might select, whether for purely personal or cultural reasons. However, personal preferences might be embedded within a wider classification system. Eastley gives the following example of this:

So you have all these shapes in your mind which you fit sounds to. And you say: “I don’t like that sound, I don’t like those sounds, I don’t listen to them. I don’t like that music, I don’t listen to it. It’s nothing. It’s not even there. It’s a noise.” So what was noise and what was something which was pleasant or unpleasant or completely neutral. (2010, personal interview)

A selection, in this case, is made according to cultural sensibilities and categories which stipulate what might, or might not, be permitted within each category, acting as lenses. As we classify the world and chose aspects from it, influenced by such conditioned likes and dislikes, the opposite can be the case too, for example, Kolkowski’s turning towards obsolete rather than digital technologies.. Whilst such assessments are mostly of a personal nature, they sometimes have wider cultural repercussions. In Chapter One, I give the example of how ‘noise’ came to be reclassified as ‘music’ within at least some sections of society.¹³⁰

Sometimes insights or change happens quickly, as Jo Thomas explains with respect to *Crystal Sounds of a Synchrotron* (2012, personal interview). However, the integration of elements can also work across a trajectory of pieces where one influences the other, as I have described in the work of Satz, or that of Corringham. This feature is mentioned in some form or other by most artists encountered, although it might involve completely different aspects and motivations. For Janek Schaefer, the integration of elements includes creating ‘large narratives’, which he ‘boils down’ to create the piece at hand. They take time to ‘percolate through’, sometimes even years, with elements persisting from one piece to the next. In each instance, ‘every time you re-engage with something, retell a story, it changes’ (2013, personal interview). In this process, as elements are integrated over time, they are also affected by this integration and undergo some modification.

¹³⁰ See also Footnote 124 on p. 144 and Margaret A. Boden’s classification system which recognises, P-creativity (relevant at the personal level), and H-creativity (relevant to a community) (Boden, 2004).

Mark Peter Wright also explains that his process, gathering materials that are distilled into a piece of work, takes time (2013, workshop). A view that is supported by Viv Corringham. Wanting to connect the inputs of singing and environmental sounds, she found no immediate route. She refers to how information and practices relating to her work 'kept bubbling away' for a long while before being gelled together by the activity of walking. In this instance, a physical activity acted as a bridge between herself and the environment, resulting in *Shadow-walks* (2013, personal interview). Just as walking provided a link in the process of principally combining singing with the environment, singing and editing are now principles by which the key elements of each *Shadow-walk* are blended into a coherent piece.¹³¹ The first step in this chain, this blend line, is the walk with others and their histories, the second another walk in the same location, during which Corringham interprets her previous companion's experience through singing. This interpretation can take place on different levels, from the emotional to conceptual concerns such as historical aspects, and requires Corringham to have 'digested' the information sufficiently so that the concerns can be linked through her 'creative channels' (2013, personal interview).

Interestingly, for the consideration of integration, Corringham explains that, through process, she has 'synthesised' everything down to something smaller, a description very similar to one blending aim, specifying that larger experiences are condensed into smaller, more human proportions for the purposes of understanding. In the case of *Shadow-walks*, condensation is a personal interpretation of another's subjectivity, and Corringham is very aware of this fact: '[I] select what appeals to me, I can't not do that' (2013, personal interview).¹³² Here subjective attraction re-appears as a lens influencing the selection from the available material, the elements from an input.

Additionally, there were indications that artists select for reasons of simplicity, or how easy it is to bring components together, as the case of Schaefer illustrates. This seems to mirror one goal of conceptual blending that pertains to the clarification of diffuse aspects (Fauconnier & Turner, 2003).

In some instances, integration requires that segments of work are temporarily set aside in order to arrive at a fresh perspective: This was the case in what I have called my *Sorbet Period* as mentioned in Chapter Four, and Annea Lockwood also reports that:

¹³¹ *Shadow-walks* brings together three key aspects: walking with others and their stories; listening to environmental sound; and Corringham's improvised singing. These are edited together into one fixed piece.

¹³² Practically speaking, condensing material includes a linear procedure in which she writes down what was said during the first walk, identifying key words that can then be used as 'triggers' for her own vocal responses (2013, personal interview).

Now I think that time gap between the Hudson and the Danube was a time that I needed in order to think a little further about how to tackle working with rivers. And I needed that time in order to come freshly back, or be refreshed when I came back to rivers, if I ever did. (2011, personal interview)

Here, past strands that have already found an output need to be further assimilated and integrated into the continuing and ongoing blend field before they can be taken further in any meaningful way. This continuing process may take place at varying levels of conscious involvement, on which other activities will also act as inputs. In fact, no input exists in isolation but intersects with others. Max Eastley, for example, attests earlier in this chapter (in section 6.2.3) to how collaborating with David Toop contributed to a change in how he listened.

For some artists, the tactile aspects of making inform integration: for Schaefer ‘all connections’ blend in the act of making that requires the engagement with objects (2013, personal interview). For Corringham, walking can fulfil that function. Such ‘distillation’ (Schaefer, 2013, personal interview) might not be conscious, and it certainly does not happen on demand. That said, consciously chosen physical activity may support unconscious activity by reducing the hold of the rational gatekeeper on the mind (Horizon, 2013) and providing a space for ideas to flow.

In essence, selecting inputs or elements from inputs is influenced by blend lenses. These can be other inputs, practicalities inherent to the tools we work with, for example, but they can also be subconscious activities, likes or dislikes, feelings of fear or other emotional factors. How choices come together as part of blend nodes, how they are integrated, cannot be forced, although physical activity may facilitate it; for example, in the case of Corringham, walking.

6.6 Conclusion

Chapter Five and Chapter Six focus on presenting a nascent taxonomy of inputs. In Chapter One, I had begun to identify fine art, technology and music as ingredients to sound art practice, and I expanded on this notion in Chapter Four when considering the key inputs to my own practice.

In Chapter Five and Chapter Six I applied these inputs to the practice of other artists, specifically to the primary research materials gathered through interviews, an online magazine and creative workshops. This resulted in a nascent taxonomy of inputs to sound art practice, which considered how participating artists themselves understand such themes as inputs to their practice. The chapters investigate inputs of sight and sound,

listening, tool, methods, research, collaboration, freedom, the artist as a human being. I also examine how artists make choices from the inputs available to them, and how choices might be integrated.

This initial survey of inputs to sound art practice is by no means complete; it came about as an outcome of my research and was, therefore, guided by the intention to foreground the artist's perspective. The taxonomy presented here brings a number of such perspectives and voices together, although I recognise how my own concerns and practice acted as a filter or blend lens influencing the choices underlying this taxonomy. By setting out my background in Chapter Two, I intended to make this transparent. Other artists may choose to explore different or additional inputs, for example, working with broadcast media, or choose to survey some of the aspects present here from a different vantage point such as focusing on field recordings as a distinct input.

Furthermore, despite the wealth of the material available to me, I was only able to present a small section, and I believe that each of the inputs covered merits a book in itself. That said, even from this incipient taxonomy a number of observations can be made relating to two areas: sound art as a practice, and blending as a model to express practice. They are summarised below.

As shown in Chapter One, the inputs of technology, visual art and music played a large part in the development and maturation of sound art during the 20th century, through the personal formation of specific practices at certain points in time and space, often in conjunction with technological developments, which prompted and also facilitated a re-evaluation of existing ones. To some extent, practice is still changing. As technologies mature, artists incorporate new technology, such as the laptop or mobile phone, or they return to older, possibly obsolete technologies. Perhaps this is the result of the desire to avoid static formulae and restrictions that appear when technologies become standardised. However, an essentially personal journey acquires a wider perspective when taken together with other such journeys. In considering inputs such as technology, artists' expressions of the modes they work with can be compared, regardless of the category each belongs to, or whether understandings of content or meaning of this category diverge or not. In fact, the concept of an input is wider than that of a mode, for example, it incorporates aspects such as emotions or personality traits.

Furthermore, when artists¹³³ draw from such inputs, they usually do so in their own way, prompted by both personal and professional trajectories, and those through cultural time,

¹³³ As a reminder, where I use the term artist, I take it to mean those that took part in this research.

by which such inputs also become blend lenses. Of particular importance to sound art practice, unsurprisingly, are approaches to listening, especially as a way of relating to the world. Within this input, some artists chose to stretch their ears further into the distance than do others; the spectrum ranges from exploring whole environments to gathering information about fellow performers.

In my view, the understanding of sound in terms of material has been and still is very significant. This notion finds expression in several of the inputs surveyed here. For example, many sound artists are influenced by concepts of fine art, such as mapping the viscosity of oil paint onto their sonic 'materials'. The understanding of sound as material also emerges where artists explore the ephemeral and evocative aspects of sound, stimulating an experience of presence.

Many artists acknowledge the impact seeing has on hearing, and vice versa, or the role music plays in their practice, even when not explicitly working with visuals or music. Whilst working methods and tools vary, some overlapping groups emerge, such as those using improvisation, computers or field recordings.¹³⁴ However, approaches differ. Artists also seek to extend both the quality and the quantity of available inputs, mainly through research and collaborations.¹³⁵ The artist as a human being also plays a role, from early childhood influences, such as the technologies exposed to, through personality traits, such as curiosity, to understanding the artists as an embodied and emotional being.

Whilst some inputs are of a passing nature, others contribute elements to practice over a longer term, including childhood experiences, personality traits, cultural conditions, working environments and tools, although which elements appear from each input may shift. Inputs, invariably, contain time-dependent and therefore generational elements, although it is, at least at this stage, unclear of what exact nature these are. Childhood experiences frequently inscribe themselves into long-lasting inputs, individually constant themes. Technologies prompt working practices and can even influence how we categorise our experiences.

With this in mind, sound art is positioned at the intersections of modes, of inputs, as an interaction between making and thinking, as a connective activity. For example, touch appeared as an element to Mike Blow's notion of sculpture just as much as Aleks Kolkowsk's interaction with sound-making devices. Voice may appear as an element of both the inputs of music and language. Such intersections can be compared to the generic

¹³⁴ With more research, exact findings on methods relating to each could be established.

¹³⁵ It is interesting, then, that blending may also yield a method to facilitate this, as shown in Chapter Four with *Multilogue*.

space in blending. Furthermore, no input can be considered in isolation; we cannot make assumptions about the work of others on the basis of isolated biographical details, for example.

Whilst equal in potential, not all ingredients appear as equals in actuality. They show variations in importance between artists, individual pieces and eras. However, most artists recognise that an artwork contains both its experience and its conceptualisation. Thus, many aim for a multilayered approach that extends meaning-making to an audience. Meaning is embedded in process, in making choices. For example, if sound implies freedom, and I value this highly, I will be drawn to it. If music denotes restriction, I might not find it as engaging. Procedural blending, therefore, the process of creating works of sound art, can also be understood as a process by which we personally and culturally embody and work out meaning.

An aspect of this process is expressed by some artists as digestion, synthesising, which bears a striking resemblance to the notion of blending, despite no knowledge of the theory's existence. However, I acknowledge that conceptual blending itself may well incorporate shared cultural views. I do not, therefore, claim these comments as evidence for the 'truth' of blending, but rather as a confirmation of the model's relevance to an exploration of process in sound art practice.

Overall, integration and process can take time, and I have identified three main types of temporal arcs (1) cultural arcs – for example, sound art history; (2) individual developments of practice; (3) arcs of developing specific works or perhaps even a series of works. The process contained within such arcs are periods in which meanings are created. Using blending, artists can express personal process and increase the likelihood that they are understood. For example, my piece *Room With A View* was not created within the context of film, but sound. Likewise, Viv Corringham's series *Shadow-walks* was conceived within a musical context, not as a documentary. Trying to understand her project through the lens of documentary, therefore, misses its crucial, musical aspects. Likewise, an examination from a musical point of view alone misses its ethical and community art aspects. All these inputs are required.

Blending equalises all possible inputs in terms of options and values; it does not, however, do so in terms of degree. Each artist takes elements forward in their own way and may use each input to a different extent. Some inputs may not be present at all. The decisions, which, consciously or unconsciously, become visible in our choices are, in turn, affected by blend lenses, which I separate into two intersecting and interacting sets: (1) personal or internalised lenses such as childhood experiences, and (2) external lenses, such as

commission briefs, genre expectations or the logic of an unfolding narrative. These are themes, which, for reasons of scope, I was unable to explore further as part of this research. To complicate matters, although lenses shape choice, they can also be inputs to choice.

Conclusions

This thesis set out to investigate process in sound art practice, with the aim to foreground artists' perspectives within the discourse, which to date has not been fully engaged with. This investigation was driven by the complexities of a largely multimodal discipline, a practice with multiple histories, using diverse media, formats and practices as I set out in Chapter One.

The notion of multimodality (Forceville & Urios-Aparisi, 2009) allowed me to bring these diverse aspects and categories of practice into one context, leading me to conceptual blending as developed by cognitive scientists Gilles Fauconnier and Mark Turner (2003). In Chapter Three, I introduce conceptual blending as the theoretical framework, which allowed me to explore process as a means by which such modes, here reframed as inputs, are connected. In this research project, I develop this model by creating the notion of procedural blending. Furthermore, I present my primary research through a set of four modules engaging with process from different perspectives: (1) My 'practice laboratory', which allowed me to explore process at close quarters; (2) a series of interviews with fellow practitioners; (3) the publication of an online journal entitled *Reflections on Process in Sound*; (4) three collaborative one-to-one workshops with fellow practitioners. I have termed this approach *Modular Field Methodology*.

In Chapter Four I explore my own practice, through the lens of procedural blending, assessing how this model can be used by artists to express process, primarily using the concepts of inputs, blend line, blend field and output. I also explore a set of more constant inputs to my practice.

In Chapter Five and Chapter Six, I apply these inputs to the practice of others, developing an incipient taxonomy of inputs to sound art practice. This allowed me to place essentially subjective and personal expression of process beside each other.

In this Conclusion, I will firstly summarise the findings of this research. In particular, I will outline procedural blending and its implications. I will then present an evaluation of my methodology and put forward suggestions as to where this research may lead in future.

1. Procedural blending: a summary

This thesis attempts a reassessment of process as a central concern within sound art practice, presenting and developing conceptual blending as a framework. In Chapter Three, I gave an account of the original theory of conceptual blending as a model for

human cognition, which I had chosen because it elegantly describes how humans select elements from a range of inputs and blend them into something new. In this, I recognised my experiences of process.

However, process in sound art practice is not confined to more or less subconscious mental activities (even if understood as an embodied one). It demands deliberate interaction with the world, with objects and with other beings. Whereas blending theory is focused on subconscious activities, procedural blending combines the conscious and unconscious. Where blending theory is a theory of cognition, procedural blending applies this theory to the development of a model of sound art practice.

Whilst blending does allow for multiple blends, where the output of one blend can become the input to another (Fauconnier & Turner, 2003, p. 279), in practice sound art process presents a more complex, constantly shifting and potentially recursive field of engagement. A model of this practice, therefore, needs to reflect this interconnection of concepts, occurrences and time. In what follows, I will summarise my model of procedural blending in sound art practice as adapted and extended from conceptual blending.

In essence, procedural blending describes the journey of process, in which artists choose elements from a range of inputs, which are connected to create one or more outputs. Inputs represent everything that flows into practice, from concepts, tools and commission briefs to personal concerns, methods or physical interactions. Each input is made up of elements from which we make a selection. This means that all the available input is not, nor, indeed, needs to be, represented in individual practice. These choices are influenced by blend lenses, for example, internal lenses such as likes or dislikes, or external lenses such as commission briefs.

Selected aspects are then connected to each other, primarily through mapping, and resolve themselves in blend nodes. A chain of blends taking place in the development of work constitutes a blend line, and several of them may come together in the development of work. At any point, new inputs may be added, or we may perhaps reconsider previous ones. These steps may be repeated several times as part of an interconnected blend field, yielding any amount of outputs, be that a creative piece or theoretical writing.

These concepts are useful to me as a practitioner in a number of ways. Firstly, they are scaleable, meaning they can be applied to any aspect of practice, at any degree of magnification. Interrogating practice from a range of such perspectives then allows me to communicate both process and outcomes using one strategy, into which any other approach can be embedded as a further input. As an example, I may choose to explore

psychological concepts to question the input of childhood experiences further. However, when bringing all considerations together I can do so through blending.

Furthermore, blending allows me to set personal expressions of process next to each other and in Chapter Five and Chapter Six I present one way in which this could be done. Doing so was not just a way of presenting primary research materials, but also a method to enquire into them. Through the notion of inputs, blending led me to extract features of sound art practice from personal expressions of process. The model allowed me to contrast and compare artists' views relating to each input.¹³⁶

Blending equalises all possible inputs, in terms of option and value, not however in terms of degree, as each artist takes elements forward in a personal selection process that may use them to different degrees and even not at all. This I take to be an important aspect: not all possible inputs to sound art practice need to be represented in individual practice.

Furthermore, as sound art is made up of the terms 'sound' and 'art' one could follow Max Neuhaus¹³⁷ in assuming that sound and art provide the discipline with stable inputs. However, whilst working with sound at some level, artists' conceptions and actual practices can vary. Blending allows us to recognise and debate similarity in diversity and vice versa.¹³⁸ It is valuable for the discussion of such diversity, viewing everything arising from multi-modal practice as equally valid inputs from which elements are chosen and combined into outputs, be they pieces of art or writing.¹³⁹ In fact, inputs are not to be understood as cast-iron classifications, but rather as flexible containers for the purpose of relating and discussing. As relational and context-dependent constructs, they allow us to connect subjective perspectives across cultural times and locations (In Chapter One I relayed how sound art takes on different flavours in different locations, such as Germany and the UK).

What role do inputs have then, if everything is always changing, taking different priorities – in what sense is it a constant? In blending, an input is understood as a mental container, which holds all possible elements that might relate to it. In practice, we choose different elements from it, by which change is affected. In this sense, it contains both constancy and change. As a very simplistic example, if I want to discuss music as an input to sound art practice, ordinarily I would want to be explicit about what I mean by music. For instance,

¹³⁶ Whilst Chapters Five and Six focussed on inputs, similar discussions of process in future could also make increased use of the notions of blend line, blend field or lens, which, for reasons of scope, I was unable explore to the same degree within these two chapters.

¹³⁷ See Chapter One, p. 16.

¹³⁸ For an example, see the discussion on sonic physicality in Chapter One, p. 25.

¹³⁹ As a metaphor it is easily understood by practitioners used to condense any number of sonic inputs into one output via a mixing desk.

do I understand music as plainchant regarding anything polyphonic as the devil's work and excluding it from the discussion? Or am I talking about a Cagean understanding of music that allows for all sounds to be such? In understanding each of these views as one element from the input of music, I can set them side by side despite the fact that their actual practice may differ.

Lastly, I regard it as important to note that inputs do not operate in isolation; they work in conjunction with each other. Therefore, no isolated aspect can be used to explain our practice fully, whether on the basis of the technology we use or specific biographical details.

2. A taxonomy of inputs: a review

In the last section, I stated that, in multimodal sound art, we have a wealth of inputs at our disposal from which artists chose elements. They might also choose not to work with all of them. In Chapter Five and Chapter Six, I explore a range of artists' voices relating to a set of inputs. Below, I provide a brief overview.

- Sight and sound, including those of visual art, music, audio-visual practices – most artists agree that even working explicitly only with sound contains a visual element. The input space of fine art provides elements for many artists, be it in the use of methods such as collage, the appreciation of sound as a layerable material or sculpture, or even in transferring historical notions onto the medium.
- Approaches to listening, resolving into sound and presence and sound and space – reveal sound as something that brings us into relationship with the world, its beings and spaces perhaps, for this reason, improvisation and site-specificity, installation are key practices.
- Tools, technology and methodology – show a wide range of tools, although most artists use digital means at some stage of their production cycle. Whilst some return to older, obsolete technologies for inspiration (Aleks Kolkowski), new technologies such as the mobile phone are also used (Jem Finer). Such tendencies may be maintained for specific projects only or for longer periods.
- Extending inputs – several strategies are used to expand the available input spaces. For example, through formal research, but also through prolific reading or the exposure to other artists' work, in particular collaborations.
- Not knowing, freedom and the new – many artists mention some aspect of freedom, albeit from different perspectives.

- The artists as a human being, for example, early childhood experiences, personality, the body and emotions – unsurprisingly, many artists cited early childhood experiences as influences, although with unpredictable outcomes. Personality and emotions also input into work.

With respect to sound art, sound necessarily remained a constant input, although it may appear to different degrees and is perhaps not always even obvious in the final artwork (see for example my work *Room With A View* as described in Chapter Two).

Where artists use the same inputs, they do so to differing degrees, which may also change over time and across pieces. Artists may also bring diverse understandings to each topic. The notion of inputs, however, allows us to acknowledge this situation. Where artists work across disciplines, there are grey areas at the far edges where sound art fades out and another fades in, making it hard to establish precise delineations.

Listening as an activity, rather than sound in the sense of an object, may be central to practice. Prior to this research I would not have regarded listening as a major input to my practice (other than in that it allows me to experience work), my understanding underwent reassessment. Sound art to me now appears as a listening practice in which practitioners relate to their surroundings. It is a receptive attitude that turns away from actively imposing your world on others. Additionally, underlying many of the ways in which artists currently work and consider their practice can be related to understanding sound in terms of materiality, a view made possible by technology, which allows sound to be heard disconnected from the sources that created it.

3. Modular Field Methodology: a summary

This research explores process in sound art practice. Modular Field Methodology worked on the premise that, little being known about process. I needed to investigate process as broadly and deeply as possible within the scope of this research. As a result, the research looks at a field of activities, rather than one aspect. At the same time, this research also had a specific aim, of producing a language through which to explore and communicate practice. In the first place, the methodology needed to be adaptable in order to combine these intentions and ambitions with increasing knowledge (I did not, for example, know about blending when beginning this research). Modular Field Methodology therefore works on the principle of modules that can be added to or dropped in response to continuous evaluation.

Furthermore, the research needed to access something quite personal, not necessarily conscious, whilst also looking at a good cross-section of sound artists. In my case, I started with the notion that, my own practice being broad, I could observe its development closely, as a kind of *in vivo* laboratory. It needed, however, solid calibration through the practice of other artists, which I explored from several perspectives through interviews, collaborative workshops, and an online magazine. Each of these modules draws on existing methodologies, from oral history to action research.

However, Modular Field Methodology does not intend to proscribe a fixed set of modules, but suggests flexibility where each component adjusts to the research at hand, examining different facets of process as needed. It is a way of thinking about methodology that allows the researcher to benefit from tried and tested procedures whilst remaining responsive to ongoing research: modules can be added or dropped along the way. It has much in common with blending in as much as each module presents an input to data-gathering, all of which are blended into new knowledge. It enables the researcher to uncover personal process within a wider field of practices, where each component allows participating practitioners, including the researcher, to express their experiences in appropriate ways. As a result, the research has yielded a wealth of information about process.¹⁴⁰

Modular Field Methodology provided so much detailed material that it has been difficult to analyse fully within the scope of this thesis. Only a few examples could be included, obscuring patterns of age, gender or class for example. I would therefore suggest that this methodology might be more useful in exploratory settings where such detailed and subjective information is required, as it was in this research.

4. Evaluation

Overall, the primary research methodology of this thesis, set out in the preceding section, served the purpose well, although it generated a wealth of material that has not been altogether easy to integrate into one coherent picture. On the one hand, I explored methods and the development of methods as process, expressions about and deductions from process. I explored my practice, that of others, and how we, as sound artists think about our work. I developed blending and began a taxonomy of inputs present in sound art practice. As a result, there is a great deal more that could, and should, be said about practice that I did not have the space to include in the scope of this thesis. For this reason,

¹⁴⁰ MFM is already being adopted by others. Siobhan O'Neill, for example, has made it part of her recent PhD application at Royal Holloway, University of London.

most materials are provided on the accompanying DVD or in the Appendix so that other researchers may make use of them, testing my conclusions and developing others.

Despite generating a varied set of articles around process, producing an online magazine as part of my methodology has not been an easy aspect to manage. This was partially because it required participants to invest a considerable amount of time, without payment, and partially because, as a public endeavour, it required high standards on my part, none of which was easy to reconcile. Whilst stimulating debate, it proved, perhaps, somewhat less valuable in generating new insights, although it did confirm findings and contributed to the overall notion of procedural blending presented here.

Analysing essentially personal narratives that are expressed at certain times and locations can become difficult. With blending, I suggest a way in which they can be brought into relation to each other; through the notion of inputs they can be debated as aspects of a wider context. Blending provides a terminology that can be used to bring process to the forefront and express and talk about it from practitioner's perspectives.

Lastly, I acknowledge that this thesis has barely scratched the surface of process in sound art practice. It can be considered from other angles, through the lens of different perspectives, with a more detailed and extended taxonomy of input spaces, and I hope that my approach will allow many others to do so. Modular Field Methodology also would benefit from a direct focus by which it may be refined further. With this in mind, I will now suggest some areas where this research lends itself for expansion.

5. Where to go from here

By applying blending theory to sound art practice, this thesis opened up some new areas for exploration. I will now outline some of the avenues that present themselves for further research within sound art and beyond.

- Firstly, sound art process would benefit from further study through the lens of blending. I anticipate that an expanded and more detailed taxonomy of inputs in particular would reveal more about sound art as a practice. This could include diverse aspects such as audiences or field recordings.
- Extending the survey of sound art practice to other aspects of procedural blending such as a blend lens, blend line or blend field would reveal fascinating insights into process through which the model itself would also be extended and refined.

- The concepts of internal and external lenses merits further research. Lenses generated by childhood experiences could, perhaps, be explored from a psychological perspective; commission briefs were cited by many artists as an important selection factor influencing choices, but for reasons of scope, I was unable to explore details at this stage. The same applies to other components, such as format or media used (extended to expectations that genres bring with them) or indeed how artists consider their own reflections as an aspect that influence their choices, alongside feedback from peers, audiences or curators.
- Procedural blending would benefit from an intersection with other theories, for instance, theories of perception. Another immediate area may be to explore procedural blending in conjunction with psychoanalytical approaches to investigate the role of childhood experiences and personality traits with creativity.¹⁴¹ This could, for instance, focus on exactly how elements are chosen from inputs.
- I anticipate that the method I began to develop as part of my project *Multilogue* may be applicable to other fields, within and beyond the arts. With further refinements, it could facilitate the production of work and debates across different sectors, perhaps art-science crossover projects, to move beyond the current difficulties set out by Julie Freeman in Chapter Six, where she highlights tensions arising from different focal points and expectations (see p. 140). Furthermore, this nascent model might also be extended to teach it explicitly as a method for developing work in educational settings, as suggested in Chapter Four.
- The Dutch linguist Charles Forceville points out that conceptual blending presents opportunities for the analysis of multimodal works (2004). This has, for example, been implemented in an article by A. R. Fatihi published in *South Asian Cultural Studies* (2012) in which he examines Bollywood songs through blending. However, the idea has not received wider application to date. There are difficulties to the approach, not least that it requires the critic to take into account more aspects of process than are currently available.
- The implications of a process-based approach to the area of project documentation would benefit from further exploration. The *Journal for Artistic Research* (JAR)¹⁴² might hold some clues as to how to achieve such a task. Using the principles of procedural blending to capture data of ongoing process may assist documentation in future.

¹⁴¹ It might also be valuable to invest in a more detailed study relating the technologies available to children with creative expressions in later life. This could perhaps include a real-time aspect following children as they grow up.

¹⁴² www.jar-online.net

- An additional area for investigation may lie in the exploration of how procedural blending may (or may not) be folded back into the original model of conceptual blending.
- Furthermore, conceptual blending in its original form is already being applied to computational approaches to intelligence (Pereira, 2007); thus, this procedural model of blending may provide an additional perspective.
- Modular Field Methodology would benefit from refinement, in particular, with respect to data analysis.
- An examination of connections between freedom, novelty and improvement may also provide rich insights. This could, for example, set side by side, notions of evolution (as a continuous development of improvement) and redemption (as a promise of freedom).
- Although this research did not explicitly explore this aspect, my own practice suggests that periods of inaction may benefit renewal. However, in financial recessions, these are increasingly rare opportunities, particularly, in times when artists and researchers are required to produce new knowledge or unique works of art regularly. This raises the question of whether the lack of such inactive periods has a detrimental impact on quality.
- My own practice has developed throughout this research and I see this continuing. I have become more interested in responding to objects and scores in performance, as a way of bringing together sound and vision. Furthermore, sonic expressions relating to text have come to interest me, and I intend to explore this input further, especially in its intersection with site-specificity. Additionally, the response to *Reflections on Process in Sound* has been surprisingly positive and widespread and I will continue extending this aspect of my curatorial practice.
- A final suggestion is a specific examination of how screen-based, audio-visual spatiality arises and of the creative strategies to achieve or disrupt it.

6. Final remarks

This thesis is an attempt to reassess process as a central concern within sound art practice, starting from the notion of multimodality but expanding to consider inputs such as emotions or other personal aspects. In this thesis, I intended to foreground the artist's own voice. In sound art, the audible does not only relate to other bodies, it refers also to other media, senses, space. It '...is never a private affair...' as Brandon LaBelle observes (2007, p. x). In this context, it is essential to be able to consider process from both these

perspectives, the personal and the communal. Perhaps it is precisely because of its relational aspects that process is increasingly valued within the field of sound art.

Blending presented itself as a method as it equalises all possible inputs, and with it possible dichotomies such as theory/practice. In this light, this thesis can also be understood as an output of blending expressing a process of engagement arising from, with and through interactions with books, other artists and my own practice. In this, we can understand research also as the generation of new inputs, which are blended with existing knowledge into something new, be that a new theory or a new piece of art.

Procedural blending allows us explore and communicate our process, and to discuss sound art practice by setting personal, idiosyncratic approaches side by side to explore them as part of a wider context. In doing so, it also becomes a way to talk about sound art. However, it would be easy to just replace this application of blending theory for other currently prevailing notions of 'this is the way it is'. This is not my aim. My aim is using the concepts of procedural blending to explore sound art practice, strengthening the artist's voice with discourse. Procedural blending is a model, a blend in itself, which aims to condense and simplify a vastly complex set of circumstances and activities into an understandable approximation. There is a danger of equating this approximation with actual process, which I do not believe to be the case; process remains a largely unexplained pool of fascination to me. However, I believe that this thesis has made a good case for continuing to explore process in practice, and has devised a tool through which to do so.

Developing and testing this tool formed part of my original contributions to knowledge. Based on conceptual blending it allows artists to both explore and express their practice, thereby focusing on the primacy of the creative experience. My amended model of process, entitled procedural blending, helps make essentially subjective creative experiences explicit, and to bring them together, allowing us to place even dissimilar categories in conjunction with each other as inputs to process. This new framework also enabled me, the researcher, to consider both theory and practice as inputs to process, and, equally, both theory and practice as an outcome of process.

As part of this research, I have collected and made available a substantial collection of expressions from a range of contemporary practitioners through interviews, an online magazine and workshops, allowing other researchers to test my conclusions and develop others. These primary research materials enabled me to develop the beginnings of a taxonomy of inputs to sound art practice, contributing to discourse by exploring

practitioner's perspectives. They were the result of developing a new mixed and modular methodology, termed Modular Field Methodology.

As part of this research, I also created a body of creative works. While working on these, I began to develop a new method for producing new works, based on procedural blending. I believe that procedural blending can be used for educational purposes or in interdisciplinary research settings. Lastly, and in addition to the main concern of this thesis, I developed a number of strategies relating to audio-visual spatiality in screen-based works.

Appendix

A.1 Workshop summaries

A.1.1 Workshop 1: Tansy Spinks

Workshop 1 was conducted with Tansy Spinks, a sound artist focusing on site-specific performance, which frequently incorporates the violin. A more recent member to the sound art community, her main professional background is photography. Her works can be found in the Fine Art Museum in Houston, Texas and the National Museum of Media in Bradford, for example. For the workshop, she brought along her electronic violin and a loop pedal.

The objects I presented her with were:

1. Two essential oils: (1) a blend containing frankincense; (2) Olbas oil;
2. A wet, mossy stone;
3. Spelt biscuits;
4. A small hand-turned wooden vase;
5. A choice of two postcards: (1) the iconic Hokusai image *The Great Wave off Kanagawa*; (2) a photograph depicting people immersed in a hot spring by Mette Tronvoll, entitled *Isortoq Unartoq #6* (1999).



Figure 29. Tansy Spinks in workshop 1, including Hokusai's *The Great Wave off Kanagawa*

Tansy Spinks responded to the objects in a very immediate way to begin with, then incorporated what was presented to her in more considered manner, by extracting commonalities and differences for example. Each response was somewhat different although the main approaches can be summarised as follows:

- Using the object to make sound, 'giving it a voice'.
- Making sound to describe one of the object's properties.
- Describing the object verbally.
- Using words contained on a label.

- Moving in space to change volume.
- Using sound to evoke a setting and atmosphere.

Some sounds created were more incidental;¹⁴³ others could be described as more musical. Furthermore, being presented with sensorial inputs such as smell, taste and touch, prompted different ways of interaction with the violin than her normal responses, which, as a ‘naturally curious person’, she found engaging. Nevertheless, in her opinion, the violin is a well-defined instrument with a long history and for this reason does not lend itself to experimentation.

The workshop produced a suggestion that some responses linger in the mind and are reproduced at a later date. For example, Spinks noted that her response to the turned wood vase was different from others during the workshop. She described the object like she might a museum piece. When discussing this, she remembered having worked on Rob Mullender’s piece *Said Object*,¹⁴⁴ where participants were asked to describe a turned wooden object.

In a mobile phone message left after the workshop, Spinks points out: ‘It was really interesting for me to realise what I am capable of without too much thought.’ This statement points to the effect of a working method that she was presented with, that of improvisation. She noted that with more time to research or think about an object her response would have been different, less immediate, but perhaps, deeper. This indicates that something considered ‘deep’ might be regarded as preferable, and would be selected given the option. However, whilst the time available to reflect on an object has a bearing on her response, it might not always be a beneficial one. She enjoyed ‘having things thrown’ at her as it avoids being confined to habitual responses, but after the workshop, she also wondered if responses were ‘informed by habit and muscle memory’. Nevertheless, without time to research, the imagination takes over which was experienced as liberating. This is something Spinks would like to retain in future practice it gives freshness and might result in rethinking her associative work.

In response to the oils, Spinks began by smelling the objects, than switching to a conceptual appreciation of the properties, regarding them as opposites. Firstly, she isolated congestedness as something to respond to by making ‘congested’ sounds, which she described as ‘dense’, ‘moving around’, and ‘a bit of a morass of sound’. The second concept was ‘clear head’, which she expressed with ‘bell-like harmonics’, ‘very clear notes without any sort of ‘complication’. She further described her play as ‘floating one over the

¹⁴³ Incidental sound refers to sound, normally in television or radio, that is not primarily musical.

¹⁴⁴ *Said Object* was created by Rob Mullender in 2010 as part of his PhD.

other' with her looping pedal although they could have followed each other in a sequential manner. However, what is heard is reacted to. She wondered how to 'translate a smell into sound', speculating that another route might have been to respond to the frankincense component by making exotic sound but felt that to be too complicated. This seems to indicate that there is a selection for simplicity or ease of execution taking place.

When presented with the packet of spelt biscuits, Spinks initially examined the package as 'research', but then chose to interact with the object itself as this seemed to be provide more interesting stimuli than any other 'research' that could be done there and then. Spinks began by breaking the biscuit in half in front of the microphone, later eating the pieces to produce noise. Spinks reported enjoying puns, from which the production of text emerged, prompted by the notion of spelt. This constituted an unusual way of working for her. An interaction between Spinks and myself ensued that played with words and developed in an associative manner. For example, spelling lead to 'spelled wrong' in my case as an association between spelling and dyslexia.¹⁴⁵

Spinks responded to the rock by smelling it, and then applying the object to the violin to excite sound and 'sonifying' the actual object itself. Giving objects a voice is a strong motif throughout Spinks' work and it emerged in the workshop. As the rock was an unusual object to use it caused her to do something she had never done before. This also applies to the consideration of the violin as an object, rather than a specific instrument, expressed by hitting and knocking it. She then incorporated round objects present in the room into her sound making, for example, manipulating wheels on a trolley and playing with a roll of masking tape, the sound of which 'seduced' her. Spinks also felt that that the beginning of this response seemed to be influenced by the prior piece, continuing a 'lingering mood'.

Spinks began her interaction with the vase by describing it 'like a museum object'. At first she had no explanation for why this occurred, but in the discussion at the end of the workshop she remembered having worked on Rob Mullender's piece *Said Object*, in which participants described a turned wooden object. She also observed that 'It has all sorts of nice noises attached to it', including inciting sounds with a pencil outside and inside, blowing it like a flute, creating popping noises with her finger. She also moved around the room to manipulate the sound levels and applying the vase as a slide/bottleneck, but discarded the idea, as it was too similar to how playing with the rock had sounded.

¹⁴⁵ Spinks spoke about trying to avoid associations with Trevor Wishart's *Glossolalia*, whilst at the same time taking inspiration from Samuel Beckett's spoken-word practice, in particular *Krapp's Last Tape* and the word 'spool' appearing in it, a word of similar versatility to 'spelt'. This approach, in her opinion, avoided falling into the trap of over simplification and merely repeating someone else's idea.

Wright responded to the objects primarily by considering each verbally, its sensorial aspects, personal reverberations, conceptual connotations and wider associations, frequently occurring in this order. He also used some of the objects to make sounds, if they lent themselves to that purpose. He was not making sounds about an object. In summary, the approaches were:

- describing materiality and sensorial aspects of objects verbally;
- following conceptual and associative relationships verbally;
- making sounds with some objects;

On hearing that a response to objects was involved, Wright commented on his ambivalent relationships to them, arising from personal experience: ‘They can get in your way a lot of the time. I’m always knocking things over.’ This extends to how he works: ‘I don’t like building things and knowing technical objects, gear. I’m rubbish with it all. I think I’m kind of scared of them in that way’.¹⁴⁷ However, as the objects were of a personal, everyday nature, it made an engagement with them easier, and he frequently remarked on their playfulness. He also remarked that such everyday objects support improvisation, as that is what happens in day-to-day life when handling them. When asked how he found the experience at the end of the workshop, Wright explained that he loves looking at objects with a ‘memory attached’ to them, it allows the viewer ‘project on to them’. He also found it beneficial to ‘just do something with someone or other people and muck about’. He would do this ‘mucking about’ on his own, but usually not with others. Field recordings, for example, are usually a solo activity, as the presence of people increases chances of noise.

Throughout the workshop, Wright reflected on his process, which he finds a difficult and ‘slippery’ topic to talk about. As a first step, he would engage with a place or situation by listening, without the presence of recording equipment. Subsequent research might involve recording interviews or other sound material. At some point, the initial material becomes distilled into a piece of work, although he questions how conscious the choices involved are. He considers reflections after the fact as possible, whilst awareness of the process as it happens is unlikely to be achievable. At some stage, something simply emerges that will capture his imagination. A vital guiding factor during his process is some kind of title: ‘If I know a title for what I’m doing, I’m very happy. Even if I don’t know

¹⁴⁷ It is intriguing, then, that one of his latest projects involves handling stones.

anything about it, I usually have a phrase or a title of some sort'.¹⁴⁸ This might change during the making of the work, but 'for some reason a title seems to get me believing in what I can do and gives me the confidence' and calming him down. A title or a phrase is inspiring, as 'words are amazing, they are like flint, they can just spark stuff.' From beginning to a final work, his process takes considerable time, and is 'never really over'.

The first object was a yellow squeeze ball, contained in a plastic net, which Wright found 'lovely' to handle. When formulating what he wanted to do with it, after an invitation, he settled on the notion of throwing the ball, considering different surfaces and choosing a hard surface to counterbalance the softness of the ball. This set up comparisons inside his mind: 'Like a dog chasing a little ball, isn't it?' noting the playfulness of the object and how his fear of objects was disarmed by it. Further memories were stimulated, for example, a comparison with tangerines wrapped in mesh. He also commented that enjoyed the sounds created.

The second object was a small plastic container with strawberries. Wright remarked on the smell and wanting to eat them. Again, he felt reluctant and needed an invitation to do so before proceeding. After these initial encounters, I felt that Wright's process might, perhaps, be more 'internal' than that of a musician, for example, and I set up a scenario where I commissioned him to create a work about a 'squeazy ball and three strawberries', asking him how he would go about exploring this theme. Wright's first response was that he would begin by looking for a narrative connecting strawberries and a squeazy ball. This could involve personal memories or the process of growing strawberries. From there he would look for emerging 'weird themes or cross-overs', or indeed any other factor that might lend itself to structuring the material. He does not feel that improvisation is a method he has access to, but instead he would look towards 'some kind of external theme to do with these objects and then bring them back together.' These themes, or 'guides' might be 'totally ephemeral' but would establish a connection. From this, a play-acted interview situation arose, in which I played the role of a strawberry grower, interviewed by Mark. Questions began with practical queries about daily activities and moved to emotional content. They involved imagining and enacting an imagined scenario on both parts. When looking for a title, Mark initially looked for commonalities, feeling, however, that he is not 'good' with coming up with something immediately and so we dropped the search for a title. We finished, on my suggestion, sharing the remaining strawberries and recording eating noises.¹⁴⁹

¹⁴⁸ This seems to correspond with Aura Satz who needs an 'anchor' or 'hook' for her work to be able to believe in it (see p.130).

¹⁴⁹ Like Spinks, Wright noted how he disliked the sounds of eating as his mother chided him when a child.

When presented with the next item, a smooth stone with two holes, Wright handled it, not wanting to release it. He noted how the stone was the complete opposite of the previous objects and explored its tactile properties, its smoothness prompting thoughts of it being either very old or manufactured. He tried to extract sounds by blowing over the holes, stimulated by a memory of Asian stone flutes. This was followed by continually rubbing his hand over the item, reflecting on his current work where he hits stones together, as an 'acoustic bridge' between places.¹⁵⁰ Having just one stone, however, 'how do you sound it?' Wright also remarked how part of his process involves taking the sound of one place into another, a gallery for example. He is fascinated by such connections and how one places 'leaks' into another. Mark finds conceptual association inspirational: 'Time is layered in this rock, potentially millions of years' worth of time encapsulated in one thing.' This draws comparisons with blending theory, the stone as a material anchor for a concept of time, which embeds itself within it. A process of inspiration that unpacks, blends and transposes them into new ones. In this way, a stone 'can straddle time and say so much'.

Wright engaged with the next objects, two essential oils, by exploring what they reminded him of and what their uses are, for example relaxation in the case of lavender. In searching for further responses, he explores where they might be purchased and the impact of the size of objects, describing the collection as 'intimate little things' as well as 'eclectic and odd... Everything is personal and has something slightly homely about them.' Being part of everyday life, they reduce his anxiety of objects; however, in the case of the oils, they did not stimulate his interest and we moved to the next object.

Wright felt much more engaged with the wooden plate, sounding its surface and continuing to do so throughout our conversation. He is attracted by the subtlety of the sounds that are created and also the potential effort that is made visible with crafted wood. Whilst realising he finds objects difficult to engage with he also enjoyed playing with the plate. 'Give the kid a ball and a plate and he's happy.' Perhaps it is the meaning, rather than the actuality of objects that present difficulties. We also discuss the ethics of recording. Wright has grown to dislike 'recording hours and hours of stuff' and constantly 'taking sound'. He describes sound as a life force that ought to be 'treated with respect and acknowledgement of its own agency', not indiscriminately captured and stored. Whilst at the beginning of his career he recorded everything out of excitement and the worry he might miss something, he now only records selected elements. His work has changed its focus to 'letting go of sound', the chase of it, and embracing other media whilst still being

¹⁵⁰ The piece is entitled *Here & There*, and can be found on his website at <http://mpwright.wordpress.com/filmphotography/here-there>. The stone in that piece are a by-product of steel making. In the workshop he describes using them as 'sounding devices', and as connectors between places.

concerned with issues of listening. 'Sound isn't just noise. It's all the stuff in-between as well.'

Moving on to the earplugs, Wright commented on their texture and squishy sound, which he continued to make throughout the discussion. Whilst recognising their benefit, not being able to hear brings up fear in Wright. Many people dislike earplugs because there is 'something unnatural about having your ears closed that people shy away from'. A discussion ensued about the relationship between listening and a mental engagement with what is heard. Earplugs being commonly used at night, Wright also considered sound in dreams, how real life sounds might embed themselves into a dream scenario. We also discussed types of earplugs.

As with Spinks I offered Wright the same choice of postcards. However, he chose the people in the hot spring, as 'they are real', linking to his interest in 'real, connecting things', an understanding of 'real' that relates to the richness of life rather than clean truth. In the image he noticed a community of people, their relationships, fascinating and serene facial expressions, a sense of life, all of which he found 'deep' and of a 'ritualised' nature. We analysed the image, described the people depicted in it, and imagined stories. However, postcards are not ideal for making sounds with, so this remained a verbal exercise.

A.1.3 Workshop 3: Dan Scott

Dan Scott is a sound artist exploring time, memory, modes of listening and the uncanniness of everyday sound expressed in installation and performance. He is also a musician interested in songwriting and finds it hard to consolidate the two modes. In our workshop, therefore, we also explored what connections or differences there might be.

The objects I presented him with were:

1. A wedge-shaped wooden door stopper;
2. A quantity of roasted almonds;
3. A plastic flower;
4. Two roll-on essential oils;
5. A small stone vase;
6. A choice of two postcards: (1) the iconic Hokusai image *The Great Wave off Kanagawa*, (2) a photograph depicting people immersed in a hot spring by Mette Tronvoll, entitled *Isortoq Unartoq #6* (1999).



Figure 31: Dan Scott in workshop 3

Scott responded to the objects presented to him predominantly in a conceptual and verbal manner, interspersed with using objects to make sounds, which he then commented on further. He moved from association to association, frequently also creating links between objects, making evident a chain of associations and mental connection. A recurring strategy was that of singing.

The penultimate object, the stone vase, excited the most interest, expressing his fascination with paradox and 'inherent contradictions' as observed between stone and microphone. It resulted in extended sonic explorations, rather than verbal examinations.

The first item presented to Dan Scott was a wedge-shaped wooden door stopper. His first response was to attempt to ascertain the object's identity and use. However, he reviewed and reclassified it as a 'sound-making device' in light of the workshop context. Context, it seems, can be understood as having a strong impact on how we understand the world. Within the context of this workshop, reading an object as sculpture or instrument is dependent on the situation and how the item within it 'leads us to a different end', either the appreciation of the object itself or the sound that it makes, which then becomes the 'object'. Furthermore, examining any object in the context of 'sound and listening allows you to uncover aspects' different from those experienced in purely visual terms. For example, Scott also compared the object to a three-dimensional version of a volume envelope, which might allow the artist to represent multiple sonic aspects such as volume and pitch. When using objects in composition they become 'vessels' used to achieve an audible end.

There also is a context dependent difference in an item's associated emotive content; for example, when personal objects are used in music this link is not directly apparent to a listener, when used in art piece however, the object becomes 'invested with this personal resonance' that may be a focal point. Similarly, practical articles such as cables are not commonly considered conceptually in a musical context, whereas in an art setting such items would take on meaning.

When handed a plastic container with roasted almonds, Scott began by shaking it, first randomly, then more rhythmically, commenting that he enjoyed the sounds generated. He then proceeded to open the box and to smell its contents, which he associated with singing, via a route that linked almonds as edibles with mouths and bellies. Whilst he appreciated that the box functioned well as a sound-making device, he found the juxtapositions it embodied even more appealing and he described that there was something 'strange about the mix of this plastic and these nuts which have a very timeless feel about them'. This he recognised as important factor in attracting his attention, which he also described as a paradox, a 'weirdness', an 'inherent contradiction', a sensation 'short-circuiting' the brain. For example the notion that a 'pot can listen' seemed such an impossibility that it prompted him to develop a series of projects featuring pots.¹⁵¹ Such perceived contradictions reflect a view recognising the existence of contradictions in the world, an ambiguity and 'non-fixedness' shared with sound and listening. Unlike listening, looking and discussing fixes and positions objects in time and space.

Scott's current practice begins with conceptual, rather than sound making, which was apparent throughout the workshop. His first step would involve thinking, a process he compared to playing an instrument. He is not interested in expressing such concepts through sound or even communicating ideas about it. His concern is, rather, that 'sound expresses something about itself' and his interest is in setting up a system that facilitates this. However, he does not go as far as to believe he could remove his presence from the work entirely as it depends on the choices made in its development. Nevertheless, making sound or playing music involves an enjoyable physical experience and the body, which he increasingly aims to bring into his practice. He mentioned performance and singing as particular instances of personal expression.

Starting from a point of expressivity in sound making, Scott found the plastic flower interesting as it related to sincerity and fake-ness, which could be perceived as a metaphor for art, where a real flower represents the idea in the mind of the artist, and a plastic flower its real-life execution. It might also represent the relationship between actual sound and its recording. Through relating a flower to the visual appearance of a mouth Scott arrived again at the notion of singing, which made him think about J. G. Ballard's story about 'singing plants'.¹⁵² We briefly talked about Martin Creed's band, Owada,¹⁵³

¹⁵¹ *The Palace of Green Porcelain*, a joint exhibition at BREESE LITTLE gallery with Katie Schwab <http://www.breeselittle.com/#/exhibitions/4543108482> or *On the sonority of clay*, a SoundFjord residency, <http://sonorityofclay.tumblr.com>.

¹⁵² Scott probably referred to *Vermilion Sands* by J. G. Ballard, a science-fiction story from 1971 in which plants are programmed to entertain rich visitors to a resort with opera arias.

¹⁵³ Owada was formed by Turner Prize-winner Martin Creed in 1994, with releases on David Cunningham's Piano label.

whom Scott regards as overly conceptual and lacking in physicality and emotional presence. Like Creed, Scott is interested in music, more specifically in the songwriting format and the act of singing. Specific structures, he believes, have specific effects on human beings.

Two roll-on essential oils applicators were the next set of items. Scott responded to them by initially reading the labels, noticing their fragrance, followed by personal memories of his mother's aromatherapy skills and an inquiry as to their properties. We proceeded to discuss sensorial relationships and their 'mingling' as, for example, described in Daniella Cascella's book *En Abîme: listening, reading, writing*.¹⁵⁴ We also considered olfactory artist Sissel Tolaass' *The Fear of Smell – The Smell of Fear*¹⁵⁵ and her collaboration with Martyn Ware in *Molecular Sound*,¹⁵⁶ which tried, unsuccessfully in Scott's opinion, to connect sound with smell. For Scott himself, smell produces as strong and surprising association with instruments, for example, he recounted removing his saxophone from its box, which also made him think of other instruments and their smell. This connection is not one he had thought about before and attests to the possibility that different contexts can evoke new associations, thereby creating new angles.¹⁵⁷ He then returned to examining the oil labels and commenting on the Latin names, which led us to discuss songs and Latin, early liturgical music and plainchant.

Like Mark Peter Wright, Scott also commented on the domestic nature of the objects I had chosen, which he found 'very comforting' and 'cosy'. However, in a normal situation he regards a non-domestic setting and 'inhospitable environments' as more productive. Working at home is 'too conducive to doing other things'. A difficult situation provides a challenge and less habitual associations. The idea of difficulties brings us back to bodies and from there to a recognition that Scott has a 'strong interest in people and how they construct ideas and meaning'.¹⁵⁸ He finds it hard to experience sound as disembodied, divorced from people. Reduced listening and acousmatic sound is not of interest in itself but rather the desire that moves people to such considerations. As a possible reason he suggested the tendency in Western art to let an art object speak for itself, 'separate from its maker, separate even from the thing it refers to.'

¹⁵⁴ *En Abîme: listening, reading, writing* was published by Zero Books in 2012.

¹⁵⁵ The piece dates from 2006 and explores the effect of smell on fear.

¹⁵⁶ *Molecular Sound* was presented at the Media & the Senses conference at Goldsmiths, University of London, in 2011.

¹⁵⁷ This idea is something that, I believe, can be made use of in a method that applies blending to the development of new work or interdisciplinary research, which I will talk about further as part of Chapter Six and the Conclusion.

¹⁵⁸ Dan Scott has a background in anthropology.

The small stone vase was the first item that elicited a real sonic response. Scott began by blowing over its hole, listening to its interior and exploring its resonances. Unable to record this directly Scott cites the contrast of stone and microphone as an example of 'weird things' that pique his interest. It turns this object into something sonically very fruitful. He returned to the doorstopper to beat against the vase creating rhythms and explains that rhythm is a stimulating musical element. He also inserted the wood into the opening of the vase to create a visual object, rather than a sounding one. Returning to blowing across the top of the vase we discovered its tuning and spent a considerable amount of time exploring breath/voice/blow combinations with aspects of improvised throat singing. Additionally, Scott attempted to play sounds from his mobile phone into the vase, without much effect.

As a last object Scott chose the photograph depicting people immersed in a hot spring by Mette Tronvoll, entitled *Isortoq Unartoq #6* (1999). It reminded him of the 1991 album *Spiderland* by Slint, which depicts band members in a lake with only their heads showing. Another reason for his choice was our discussion about people, and the image prominently features interesting faces that spark the imagination. We then discussed the content of the image, its location and ethnicity of the people shown. Scott's first impression that they might be Japanese, he felt, could have been influenced by initially seeing the Hokusai woodprint next to it. He also imagined them as a singing choir and commented that conceiving of people in an image as listening opens up a different angle on 'what's going on'. When asked how he might translate the picture into a piece of sound art he returned to the idea of singing and the Icelandic tradition of 'unaccompanied folk singing'.

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Glossary

Blend: A blend describes the outcome of blending, where elements from inputs are combined into something new.

Blend diagram: In conceptual blending a blend diagram represents a blending system. In the context of this thesis and with regard to procedural blending a blend diagram conveys the development of a work of sound art over time, demonstrating the flow of relevant inputs, blend nodes and outputs within blend lines and blend fields.

Blend field: In procedural blending a system of interconnected blend nodes and blend lines is termed a blend field. Abbreviated as BF

Blend globe: A blend globe describes a system of inputs present within a work as a whole, often as juxtapositions or polar pairs, regardless of temporal distribution (see Figure 16 on page 85). In this it differs from a blend field.

Blend lens: A term introduced to procedural blending to denote specific views or other factors that determine the selection of inputs or elements from inputs that are taken forward into the blend. These can be, for example, the restraints that using a specific software or a commission brief bring with it. Emotions may also affect choices. Abbreviated as L.

Blend line: A trajectory of blends is called a blend line, for example one strand of an investigation as it unfolds over time. Abbreviated as BL.

Blend node: The point where inputs resolve into one trajectory I have termed a blend node. They frequently also function as inputs to ongoing practice. Abbreviated as BN.

Blending theory: see conceptual blending.

Conceptual blending: A model of cognition set out by Gilles Fauconnier and Mark Turner (2003). It posits that input spaces are blended into something new via a subconscious process. It was from this theory that I developed procedural blending as set out in this thesis.

Conceptual integration network: In conceptual blending a conceptual integration network describes a network of mental spaces.

Connector: In procedural blending a connector relates to the way in which elements are connected through mapping. However, it also refers to everything by which inputs can be connected, be that shared elements across inputs, a third concept through which others can be made to relate, or physical activities such as walking that promote connections to be made.

Cross-domain mapping: See mapping.

Cross-space mapping: Cross-space mapping describes a mapping across mental spaces.

Element: In blending terms, inputs are made up of elements, some of which are taken forward into the blend whilst others are dropped. For example, describing sound art in terms of an input, it contains elements such as installation or performance. Abbreviated as E.

Field recording: The term field recording describes a practice which records sounds in the environment rather than a studio. It is used in a variety of contexts from documentation to creative applications.

Generic space: In conceptual blending the generic space describes a mental space which contains those elements that two inputs have in common and by which these inputs can be connected.

Frame: In conceptual blending a frame is understood as the organising context of an input.

Input: In conceptual blending an input designates one of the originating concepts of a blend. In procedural blending an input is a temporal container which can be populated by everything that potentially flows into practice, from concepts to commission briefs to tools, emotions and physical interactions. Abbreviated as i/p.

Input space: see mental space.

Installation: A three-dimensional art format or genre usually relating to specific spaces.

Mapping: In the context of this thesis, mapping describes an activity by which aspects of one domain are connected to those of a second domain. In conceptual blending, elements from two or more domains or inputs are projected onto a newly created output.

Material anchor: In conceptual blending a material anchor describes a physical representation of a blend.

Mental space: In conceptual blending information relating to inputs are held within the mind as temporal mental spaces. They can be facts, memories and even imagined aspects.

Mode: A mode describes a 'way or manner in which something occurs or is experienced, expressed, or done' (Oxford Dictionary online).

Multimodal: In the context of this thesis the term multimodal covers a range of categories such as tools, methods or genres.

Musique concrète: Musique concrète was developed by French composer Pierre Schaeffer and describes music created using a variety of recorded materials from musical instruments to field recordings.

Output: A notion designating all that might result from process. This may be an artwork, a realisation that carries on as an input to subsequent works, but could equally be a theoretical commentary. Abbreviated as o/p.

Process: In the context of this thesis the term process is a label for everything that contributes to the creation of outputs within sound art practice, from procedures, methods and tools to personal aspects.

Procedural blend: A blend within procedural blending where inputs are connected in and through process.

Procedural blending: Procedural blending is a model of process in sound art practice developed as part of this thesis. It is based on the theory of conceptual blending and contains both conscious and unconscious aspects.

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