

Exploring the Role of Sound in Place Experience: A Portfolio of  
Original Compositions with Accompanying Exegesis

Exegesis

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## **Abstract**

This portfolio of original compositions and accompanying critical exegesis investigates the role of sound in place experience and the types of place to which sound affords us access. While place has been artistically investigated in the past through site-specific projects and the places in which music occurs, this portfolio focusses on the sonic dimensions of place to uncover how sound affects meaning making and generates place. The portfolio is comprised of thirteen compositions presented as scores and acousmatic works, which demonstrate how sound can mediate a sense of place not only in the experience of the surrounding environment, but also in the experience of musical works. While some projects are site-specific, I also present investigations into sonic landscapes and musical place in scores using soundmarks and notation-based endnotes.

The exegesis provides an overview of the conceptual and creative considerations of each work. I first provide an overview of both practice and place-based research, and the ways in which the UK national lockdowns affected my line of inquiry. I then discuss the portfolio compositions in light of different types of place and the key roles they play in demonstrating how sound affords us unique platial experiences.

I conclude that sound plays an indispensable role in the negotiation of place meaning and allows types of place to intersect. A sense of place can be mediated not only through the experience of the physical world, but also through the cognition of sound in acousmatic and score-based work. Before providing an overview of future research avenues, I offer remarks on the advantages of artistic approaches to place and the interdisciplinary nature of practice. Musical processes are uniquely positioned to explore place beyond experiences of the physical world, allowing practitioners to make rhizomatic connections between theories, experiences, and practice-based methodologies.

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## Definitions

Endnote – derived from the use of textual endnotes used in literature and scholarship, endnotes are used in this project within music scores, presented as fragments of musical material in stave notation instead of text.

Place – the metaphysical environment which is negotiated through the subjective experience of physical space, imbued with meaning and an identity by the perceiver.

Sound in place experience – the role which the soundscape of a location plays in our overall perception of it, contributing towards the meaning we ascribe to experiences. By extension, this also refers to the role of sound in our cognition of musical place.

Soundmark – an audible indicator of a particular location for a listener or community, developed through repeated exposure to a sound (e.g., the ringing of a local church bell). The ‘soundmark’ is developed in this project for use within score-based music to show how motivic materials can create sonic connections between different works.

Space – the physical environment surrounding the body.

Visual environment – the physical space of the surrounding environment which is experienced by way of the body.

# Introduction

## Background

This portfolio of original compositions and accompanying critical exegesis investigate the role of sound in place experience and the types of place to which sound affords us access.

Although I initially intended to investigate the intersections of music and place from a creative practice perspective at the outset of this project, the profound social changes caused by Covid-19 and the ensuing UK national lockdowns brought about a shift in perspective with a renewed focus on sound and how the experience of sound can mediate a sense of place.

The early months of my artistic research for this project coincided with the second of the three national lockdowns in the UK, which was announced on 31 October 2020, and came into force on 5 November 2020. At this time, I became isolated in Newcastle upon Tyne's city centre in a studio flat, and started to carry out my research from what I assumed was a distance. I came to realise however, that the strange situation in which I found myself gave me unique, lived access to exploring sound and place; I was already involved with the place in which I was isolated, engaging with the surrounding environment.<sup>1</sup> While this was not the place I expected to be, my realisation afforded the reorientation of my research to approach practice from a more convincing and socially relevant perspective. This understanding, that consciousness is already in the world in the course of its subjective experiencing and does not exist in a detached dichotomy with the environment, underpins all of the works presented in this project.<sup>2</sup> Instead of considering how music might evoke place through the fairly narrow lens of site-specific investigation, I was able to widen the focus of my research and employ a number of creative approaches (for example, concert performance, acousmatic, and installation works) to convey the possibilities of place. The different settings of the works allowed me to consider the notion of place beyond the

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<sup>1</sup> This engagement is what Vincent Blok terms a 'meaningful ecosystem', one which exists experientially between consciousness and the space it experiences and results in the generation of place meaning. See Vincent Blok, 'Being-in-the-World as Being-in-Nature: An Ecological Perspective on *Being and Time*', *Studia Phaenomenologica* 14 (2014): 217.

<sup>2</sup> While it would be difficult to imagine oneself outside of the environment, viewing it from a location, as Heidegger would say 'on one side [with] space on the other', it is easy to overlook the immediate relationship with space that the body signifies. See Martin Heidegger, *Poetry, Language, Thought*, trans. Albert Hofstadter (New York: HarperCollins, 2001), 154.

experience of the physical environment and explore it from the perspective of sonic experiences in themselves.

It would be irresponsible not to acknowledge the difficulties and tragedies wrought by the pandemic, given that it became the initial context of my investigation. I acknowledge this here and at other times in this exegesis. That it did take place, however, demonstrates the necessity for this research. Writing more than ten years before the Covid-19 outbreak, Giralt et al. posed that 'it is increasingly more necessary to interpret the sound space of place in a complex and meaningful way, to relate [...] place with its communicative practices, with its social relations and with the manner of conceiving urban space.' Giralt et al.'s words still ring true today, as the dramatic changes in the urban environment in particular have necessitated a renewed exploration into sound and its role in place to demonstrate how place identities changed during the lockdowns and into the post-lockdown era, and the implications for practice-based approaches to place.

Despite the compelling reasons offered by the pandemic to explore the role of sound in place formation, however, it alone does not satisfy the answer why this research was necessary, nor would it suffice as the only context in which the role of sound and place should be investigated. The role of sound in place is more widely applicable to practice beyond the context of the Covid-19 pandemic and can be used to inform a number of different approaches whether in site-specific contexts, or in acousmatic and score-based musics. The social context brought about by the pandemic facilitated, and to an extent dictated, the conditions in which my investigations began, and this afforded an approach which reconciled the unique lockdown and post-lockdown contexts into a study of sound and place while drawing together strands of phenomenology, urban studies, and heritage studies. The pandemic-as-facilitator offered a previously impossible and at one time unthinkable way of perceiving the city which then led me to explore the wider creative approaches to place outlined in this exegesis.

Just as the city changed throughout the course of my research, so did my own ways of thinking about sound and place. Where Chapter 1 of this exegesis looks at some of the works composed in the earlier stages of this project during the second national lockdown, Chapter 2 changes focus and outlines the acousmatic works included in the portfolio which were used to explore sonic landscapes and how place may be perceived in sound because of previous experience of the surrounding environment and the embodied nature of consciousness. This is an important component as it translates the knowledge uncovered about urban

experience into a discussion of sonic experience beyond the frame of the pandemic and the city. The focus on sonic landscapes as a metaphor for perceiving place in sound allowed me to draw parallels between the embodied experience of space (the physical world) and the cognition of sound as topography on the part of the listener.

In Chapter 3, the urban context finds its meeting point with acousmatic music. Soundmarks as sonic landmarks of the city are discussed in relation to my carillon project *Ordinary Light*, which employed both live carillon recitals and a carillon-based acousmatic installation in the Newcastle University Arches as listening locations. Listeners could navigate between these locations freely to hear the durational music in two different ways while passing through the soundscape of the city. *Ordinary Light* explores the intersection of different types of place and highlights a key aspect of Newcastle upon Tyne's sonic heritage which, while a familiar part of the city's soundscape, would benefit from further local understanding and recognition.

Chapter 4 outlines how understandings of place and sonic experiences can be used to inform the composition of score-based works, using musical materials to form musical landscapes and soundmarks in and between them. to mediate a sense of musical place. This is done by way of different means, although the overall focus of the chapter is on how musical materials can be used as soundmarks within score-based works to tie together musical places. The novel approach to using musical endnotes as both a structural approach within single works, and as a form of intertextuality between works is introduced as a key finding of this research, demonstrating how musical materials can form constellations of relationships and shared meaning.

## **Research Objectives**

The change in direction of my research to the more focussed investigation of the role of sound in place experience naturally led to the refining of my research questions throughout the course of this project. Where originally my research questions focussed on broad relationships between music and place and the ways in which music can relate to place – for example, I had the idea of music *for* place and music *about* place, which was less focussed – my line of inquiry developed in the early stages of the project to adequately address the unexpected lockdown context in which my practice was taking place.<sup>3</sup> My research

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<sup>3</sup> Practice-based research leads to the development of research questions which adequately address the context posed by the practice. As the way in which my practice took place was dictated by the lockdown

questions, then, became a reflection of the types of place experiences I had myself, and as the project continued in the post-lockdown era, these questions were refined further which allowed me to focus the initially vague scope of my original project proposal. The research questions presented below allowed me to uncover the complexities of the sound-place relationship, while also considering the implications for my own practice and creative approaches to composing place more widely:

1. What is the role of sound in place experience, and how can this be understood through creative practice?
2. How is place meaning affected when soundscapes change?
3. How do experiences of the visible environment inform experiences of sonic landscapes?
4. In what ways can place be expressed through artistic means to mediate a sense of musical place?
5. How has my understanding of place and, thereby, my approach to practice, changed throughout the course of this research?

The possibilities that sound-place line of inquiry offered were not only limited to gaining a deeper understanding of the lived experience of sound and place, but also developing approaches to practice itself. While the works in the portfolio employ both score-based and acousmatic means, the approaches to composing these works were brought about just as much by my lived experience and research into sound and place as the process of the composition guided my inquiry. For example, the works introduced in Chapter 1 were brought about by the social context in which I found myself at the outset of this project, in social isolation under the second wave of national lockdown measures – the creative work here was brought about by my lived experience of a unique place experience. With some of my other work, however, my line of inquiry into types of place was guided by practice itself. An example of this is *bloom and splinter*, where my understanding of score-based

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measures in the early stages of this project, the practice raised different questions than initially expected. See Kristina Niedderer and Seymour Roworth-Stokes, 'The Role and Use of Creative Practice in Research and its Contribution to Knowledge', (paper presented at The International Association of Societies of Design Research Conference (IASDR 07), Hong Kong Polytechnic University, Hong Kong, November 12–15, 2007), 15, <http://niedderer.org/IASDR07SRS.pdf>

soundmarks and intertextuality between musical places was formed in the process of composing the work.

This co-constructive approach to the project binds the creative works and their contexts together, even though the types of place explored across the portfolio can be quite different (for example, place based on experience of the environment versus place mediated through musical or sonic materials). It also reflects the human experience of place, where both consciousness and experienced physical space work together to generate meaning for an individual in a rhizomatic network of perpetual becoming.<sup>4</sup>

### **Approaches to Creative Practice in the Portfolio**

The portfolio is comprised of thirteen compositions composed over the course of this project. Eight of the works are score-based, four are acousmatic, and one work employs both a score-based component for live performance and an acousmatic work intended for installation at a nearby but distinct location (played in parallel but not in synchronisation with the live performance). The score-based works are intended for live performance, some of which are tied to specific locations. For example, the scored component of *Ordinary Light* (which includes the nearby accompanying acousmatic installation) is intended for performance on Edith Adamson Carillon at Newcastle Civic Centre and was written specifically for the unique characteristics of that instrument. *Le Passage*, the score-based work for organ, is intended for performance on the Aubertin organ in the King's Hall, Newcastle University, and employs its unique sonic palette and affordances.

The acousmatic works were presented via different means. *all illusions*, *all again* and the installation component of *Ordinary Light*, for example, were presented as sound installations the Newcastle University Arches as part of the wider *A Space for Sound – The Arches Sound Project 2022 and 2023*.<sup>5</sup> *all that is lost* was presented as part of an online streamed acousmatic recital on YouTube, which offered an interesting means of premiering a new work, given the social isolation and national lockdown context of the earlier stages of my research project.

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<sup>4</sup> The *rhizome* is a concept borrowed from botany by Gilles Deleuze and Félix Guattari, which describes the interconnectedness of network relationships as opposed to hierarchically structured arborescent relationships. See Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia* (London/New York: Continuum, 2004).

<sup>5</sup> For more information on *A Space for Sound – The Arches Sound Project*, see 'A Space For Sound – The Arches Sound Project', Newcastle University, accessed March 23 2024, <https://www.ncl.ac.uk/creativearts/research/current-projects/creativearts-currentprojects-archessound/>.

Employing different approaches to practice and dissemination, instead of approaching the portfolio from a solely score-based perspective, did not only allow for a widening of the scope of my investigation and the ways in which I engaged with place, but also enabled me to draw together my own multiple creative interests as a practitioner. While my interests in contemporary classical music and score-based composition was cultivated through my academic experience, my interest in acousmatic music stems from my initial musical experiences as an electric guitarist. The focus on tone shaping, manipulating sound, and exploring the possibilities of how electronics can affect duration, sustain and frequency naturally led to me exploring how to shape other sounds and arrange them texturally. I have found through my own practice that there is significant crossover between these domains. My interest in guitar tone shaping, for example, led me to exploring acoustic instruments which afford the shaping of sound – the sonic possibilities of the pipe organ allowed me to explore combining different sounds together and experiment with longer durations, and while it is a significantly different instrument to the electric guitar, I found my approach to composing for the instrument was very similar.

Although the details of each of the works in the portfolio – such as antecedents, style, and process of development – are explored at appropriate points in this exegesis, below I highlight some key aspects of the portfolio which are of particular interest, as well as summarising some of the conclusions drawn.

## **Key Research Areas of Interest**

### ***Connections Between Types of Place***

One of the aims of this research project was to explore the connections between different types of place, and how these can intersect through practice and the everyday experience of sound. One of the key strands of this investigation was understanding how the subjective experience of the visual environment (the physical, mathematical space surrounding the body) informs the perception of place in the experience of sound, an immaterial phenomenon which has the power to impress perceived motions, landscapes and meanings upon an individual, much like the experience of the physical world. This understanding underpins not only the acousmatic works, but also a number of the score-based works where a sense of musical place is mediated through the materials themselves and the ways in which they are developed.



Places intersect within a number of the presented works. This is demonstrated most clearly where different creative approaches are used within a single work, affording more than one type of place experience. *Ordinary Light*, for example, employs a live carillon recital and a parallel sound installation in a nearby location. The Edith Adamson Carillon of Newcastle Civic Centre, a public soundmark, is fixed in its place and brings with it a rich heritage, as well as visual dimension to its experience.<sup>6</sup> The installation, however, is founded on the complex resonance of each bell and the manipulation of their frequencies to present a durational sonic tapestry, and listeners can wander freely between the two listening locations to hear the parallel components of the work. The carillon is heard in its surrounding environment, contributing towards a listener's sonic impression of the city among its other noises; the installation is heard as a growing soundscape where the carillon has been transformed into something timeless and abstracted, allowing the listener to construct their own meanings and impressions of the sonic landscape and trace the sounds as they change.

*all that is lost* explores a different intersection between types of place, where the voices of a pipe organ are dislocated from their original setting and placed into an acousmatic work alongside low-frequency electronic voices, forming an artificial soundscape comprised of physical and immaterial sound sources. This is closely related to the three 'abandon' works, which were composed at the point when the UK national lockdown measures were relaxed and subsequently removed. *Where (never) abandon* is a score-based durational work based on an erasure and recontextualization of a pre-existing organ work from Bach's *Great Eighteen Chorale Preludes*, *abandon I* and *abandon II* were created using leftover fragments of recorded viola and flugelhorn from the recording session of *(never) abandon*.<sup>7</sup> The sounds of the instruments were dislocated and manipulated to present them in a different light, using whatever materials were unneeded from the recording session to create a collaged tapestry of sound.

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<sup>6</sup> The 'soundmark' is a sonic marker of place which contributes to the perceived identity of a particular place. See R. Murray Schafer, *The Soundscape: Our Sonic Environment and the Tuning of the World* (Rochester, VT: Destiny Books, 1994).

<sup>7</sup> The significant erasure of Bach's music is discussed in Chapter 2. The chosen chorale prelude was subject to a significant reduction of the materials until only a single motif, and sixteen individual pitches remained. See Johann Sebastian Bach, 'Fantasia super Komm, Heiliger Geist' (BWV 651), in *Johann Sebastian Bach: Orgelwerke, Band 2*, ed. Hans Klotz, (Kassel: Barenreiter, 1958), 3–12.

## ***How Places Change***

Soundscapes are constantly in transition, being affected by, and affecting human beings and social change (for example, the random traffic noise in a city centre, or the ways in which technological advancement since the Industrial Revolution has changed the overall sound of the city).<sup>8</sup> One of the most fascinating aspects that drew me to this research was the dramatic change in place brought about by the UK national lockdowns. The ways that perceived place meanings and identities changed is explored in many of the works composed in the early stages of this research project, including String Quartet No. 2, “Paralysed City” which reflects on the lockdown city, and the acousmatic work *all illusions, all again* which explores the urban context following the relaxation of the national lockdown measures and sonic landscapes through recordings captured during Storm Arwen in November 2021.

One of the most significant changes I experienced during this project was my realisation of the important role that the Edith Adamson Carillon plays in the soundscape and sonic heritage of Newcastle upon Tyne. The public instrument, like the wider soundscape of the city, is subject to social change, and this understanding led me to creatively engage with the instrument and explore the key role it plays in my own impressions of the city as place.

## ***Musical Place in Score-Based Music***

This research project led me to investigate how musical materials can be employed to mediate a sense of place using knowledge based on my own place experiences and my exploration of sonic landscapes. My understanding of the soundmark of the Edith Adamson Carillon, for example, allowed me to reconsider how I use musical materials in score-based music. If the overall shape and texture of a musical work can be perceived as a sonic landscape, then the important motivic ideas or reference points in the work can be thought of as soundmarks.

This led me to develop a novel approach to musical structure within individual works, and intertextuality between related works. *Still Earth, Unstill* (for solo classical guitar) which is discussed in the context of musical place in Chapter 4, employs score-based endnotes in order to disjoint the perceived narrative of the work, mediating a sense of place where the interruptions of the endnotes *become* the narrative. Endnotes are also presented as a way of

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<sup>8</sup> Schafer, *The Soundscape*, 71.

considering the relationships between two musical works, where interconnected musical motives across different pieces work together to form soundmarks. A smaller work can refer to another larger work through a recontextualization of its musical motifs (for example the trio, *bloom and splinter* in relation to the large ensemble work *Into Convergences*). In those contexts, the smaller works are considered as endnotes in relation to a larger main work, given the functions of endnotes which are explored in Chapter 4, and the relationship between the works through using the same musical motives provides a nuanced means of employing score-based soundmarks.

### Structure of the Exegesis

In order to outline both the conceptual and methodological underpinnings of the works in the portfolio, this exegesis employs aspects of the *connective exegesis* format described by Jillian Hamilton and the *Research Question Model* of Milech and Schilo.<sup>9</sup> The connective exegesis posed by Hamilton seeks to connect practice with its wider field of study while allowing space for personal reflection on the practice. The aim of the connective exegesis is for the written component of the research project to reconcile the academic voice with the voice of the practitioner, so the exegesis is presented as one document presenting a combination of the voices instead of two disjointed sections in two noticeably different writing styles. Milech and Schilo's *Research Question Model* presents a similar approach to Hamilton's but places the emphasis of the equality and autonomy of the practical and exegetic components. It affords the production of a practical portfolio and exegesis which both answer research questions refined over the course of the project. While these two components remain related, neither undermines the authority of the other, which affords the exegesis being both a critical commentary (the practitioner's voice) and a scholarly exploration of the underlying themes surrounding the practice (the academic voice).

The exegesis is one of the central debates in creative practice research discourse, in that the practice requires an accompanying critical exploration of its context and why it is significant.<sup>10</sup> The necessary inclusion of a written component in order to satisfy a practice-

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<sup>9</sup> For *connective exegesis*, see Jillian Hamilton, 'The voices of the exegesis', in *Pre-Conference Proceedings of Practice, Knowledge, Vision: Doctoral Education in Design Conference*, eds. L. Justice and K. Friedman (Hong Kong: Hong Kong Polytechnic University, 2011), 340–343. For *Research Questions Model*, see Barbara Milech and Ann Schilo, 'Exit Jesus: Relating to the Exegesis and the Creative/Production Components of a Research Thesis', *Text 3* (2004): 1–13.

<sup>10</sup> R. Lyle Skains, 'Creative Practice as Research: Discourse on Methodology', *Journal of Media Practice* 19, 1 (2018): 86.

based approach, then, requires an exegesis format which both investigates the context in which the practice research takes place and respects its autonomy as a research output. One of the key issues shared between creative practice research and the exploration of subjective human experience (for example, hearing and perceiving meaning in music), is the difficulty of conveying tacit knowledge. The approaches described above which aim to relate the written component to a body of creative practice research, to some extent, solves the issue of language's incapability to convey subjective experience because the practice-based output is allowed to speak for itself.<sup>11</sup> The written component does not play a secondary role, explaining the meaning of, or justifying the practice, but situates it within a particular discourse and context to allow the practice to have an impact. At the same time, it also affords a further exploration of the questions raised by the practice.

My approach to this exegesis combines the reflexivity of a critical commentary on the practice with the analysis and discussion of key themes raised in the course of the practice taking place. While an emphasis is placed on the portfolio as the principal output of this research, the exegesis provides a space to critically explore the practice and, at the same time, discuss the theoretical underpinnings of the research, the contributions and developments to practical approaches to place, and draw conclusions based on both the practice and the conceptual investigations. To this end, the *situating concepts* of the research (conceptual framework), the *precedents of practice* (antecedents), and the critical commentary on the *researcher's creative practice* are dispersed throughout the exegesis in order to cater to a more holistic approach to discussing and reconciling the practice and theory.<sup>12</sup>

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<sup>11</sup> This incapability is what Roland Barthes refers to as the inevitability of the adjective and its weakness when we resort to talking about music. See Roland Barthes, 'The Grain of the Voice', in Roland Barthes, *Image Music Text*, trans. Stephen Heath (London: Fontana Press, 1977), 180.

<sup>12</sup> Hamilton, 'The voices of the exegesis', 340–343.

## Chapter 1. Place and Human Experience

### 1.1 Changing Places: The City as Context

#### 1.1.1 Introduction

This chapter examines some of the music composed early in this research project which coincided with the second of the Covid-19 national lockdowns in the UK. While a chronological discussion of each work included in the portfolio is not used as the primary structural approach in this exegesis, the aim of this chapter is to provide a context for how this project began, and the social conditions which led me to investigate the role of sound in place experience. This had a direct influence on the earliest outputs of this project, and the discussion here is used in the following chapters as a point of departure for exploring the ways in which sound affords us unique access to place.

In this research, place is comprised of the identities and meanings subjectively negotiated through the experience of the physical world and the experience of the sound. In the course of one's being-in-the-world, both the visible environment and its soundscapes are experienced together, contributing towards a sense of place for an individual. In the following chapters, however, sound is also shown to afford unique experiences of place beyond what can be experienced through the visible dimensions of the environment. This project demonstrates multiple creative approaches to place through a focus on sound, the sense of which can be mediated using a number of different creative means.

The city of Newcastle upon Tyne has played a particularly significant role throughout this research and provides the context for a number of works in the portfolio. At the start of this project, the city was under the second wave of national lockdown restrictions enforced to tackle the spread of Coronavirus. I was isolated from family and friends while living in the city centre, which had a profound effect on the direction of my research. The drastic changes in the urban environment, and my immersion in the emptiness and silence of the city, led me to consider the significant role played by sound in the human experience of place.<sup>13</sup> While the absence of cars and people was clearly visible, it was the effects of this absence on the soundscape of the city that most affected me.

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<sup>13</sup> 'Immersion' is posed by Eric Clarke as the way in which human beings are in the world, engaged in an active process of perceptual learning which leads consciousness to form an overall impression of its environment. See Eric F. Clarke, *Ways of Listening: An Ecological Approach to the Perception of Musical Meaning* (Oxford: Oxford University Press, 2005), 22.

The restrictions put in place to tackle Covid-19 led to the desolation of the modern soundscape, which in turn affected the platial identity of the city for me as a resident.<sup>14</sup> In the sections below, I examine how the soundscape of the city is closely linked to the identities and meanings we personally ascribe to it through our own subjective experience. I describe this as a loss of place which leads to a state of new modernity, the new social and cultural conditions in which everyday life is lived.

### **1.1.2 UK National Lockdowns and Place Experience**

Place is an embodied phenomenon, and all human experience is tied to place. While spaces, like the city, physically exist with geographic locations and mathematical measurements, place is that which is immaterial, comprised of identities, meanings, and experiences.<sup>15</sup> Place (the Kantian *phenomenon*) is the lived experience of space which is different for each individual, experienced through the orientation of one's own body.<sup>16</sup> Space as a mathematical phenomenon (Euclidean space, or the Kantian *noumenon* 'thing in itself') is inaccessible to human beings as we are already being-in-the-world, experiencing space from our own subjective perspective and unable to separate ourselves from intuition.<sup>17</sup> This is an important distinction which provides a framework in which the city and the platial changes brought on by the national lockdowns can be understood. While the Covid-19 pandemic had a significant effect on the space of the city, it was the identity of the city which underwent such noticeable changes for me.

It is important to note here that place identity is always in a state of flux. Lived experience is ephemeral, in that the identity of places are constantly changing as we re-experience them.<sup>18</sup> We might also call the identity of a place its character, as the environment has an active effect on consciousness as it experiences the world. The relationship between the body and the spaces it experiences is immediate, a matter of dwelling and already being-in-the-world, which means that consciousness continues to be

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<sup>14</sup> 'Platial' is presented by Robindra Raj Parmar to complement the spatial dimensions of the environment, where platial implies subjective experience through 'being-in-the-world'. Platial points to the experiential, where spatial points to the tangible and visible world. See Robindra Raj Parmar, 'Platial Phenomenology and Environmental Composition', (PhD diss., De Montfort University, 2019), 10.

<sup>15</sup> Paul Morgan, 'Towards a Developmental Theory of Place Attachment', *Journal of Environmental Psychology* 30, 1 (2010): 11.

<sup>16</sup> Immanuel Kant, *Critique of Pure Reason*, trans. Norman Kemp Smith (Basingstoke: Palgrave Macmillan, 2007), 27.

<sup>17</sup> Kant, *Critique*, 27.

<sup>18</sup> Giralt et al., 'Conviction and commotion: On soundspheres, technopolitics and urban spaces', in *Urban Assemblages: How Actor Network Theory Changes Urban Studies*, eds. Ignacio Fariás and Thomas Bender (London: Routledge, 2009), 189.

impressed by subjective experience and place identity is always being manipulated in a process of co-construction.<sup>19</sup>

The changes wrought by the pandemic, however, were so significant that the identity of the city for me changed completely. The directive to stay indoors and avoid interacting with others outside of one's household turned the city into a prison, something that has already been raised by Rob Sullivan about the typically oppressive situations imposed by the city on its people. Where Sullivan discusses the how a city can be understood as a prison owing to the endless traffic and its barrage of noise and buildings, however, the type of prison imposed by the national lockdowns was very different.<sup>20</sup> The urban oppression described by Sullivan is one of sensory overload, whereas the national lockdowns removed these stimuli and replaced them with emptiness, isolation, and the inability to leave the house of one's own accord. This calls to mind Foucault's 'carceral city', though where Foucault describes networks of structures and rules, the national lockdowns led to a superseding of such rules and in their place came a new way of understanding how the city could become carceral.<sup>21</sup> If the city was the prison, then the home became the prison cell.

The associated changes in the urban soundscape caused by the sudden absence of traffic and people led me to consider to what extent the city's identity had been changed, and what this meant for my research. As I was unable to go out into the city, I sought a way of expressing the changes taking place around me through my own practice using a medium which I could readily access at home.

## **1.2 The City Lament Style in String Quartet No. 2, "Paralysed City"**

### **1.2.1 *The City Lament for a New Modernity***

How doth the city sit solitary, that was full of people! How is she become as a widow! She that was great among the nations, and princess among the provinces, how is she become tributary!  
She weepeth sore in the night, and her tears are on her cheeks: among all her lovers she hath none to comfort her: all her friends have dealt treacherously with her, they are become her enemies.<sup>22</sup>

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<sup>19</sup> Heidegger, *Poetry, Language, Thought*, 154.

<sup>20</sup> Rob Sullivan, *The Metaphysical City: Six Ways of Understanding the Urban Milieu* (London/New York: Routledge, 2019), 64–65.

<sup>21</sup> Michel Foucault, *Discipline and Punish: The Birth of the Prison*, trans. Alan Sheridan (New York: Vintage Books, 1995), 307.

<sup>22</sup> Book of Lamentations 1:1–2 (King James Version).

The passage above from the Book of Lamentations 1:1–2 is an example of a city lament that has been set to music by numerous composers. The city lament is a style of prose composed to lament the fall or destruction of a city, and this provided me with a means of expressing my own experience of the city during the UK national lockdowns. Tamar Boyadjian’s exegesis on the laments written in the medieval Mediterranean about the fall of Jerusalem examines key tropes of the lament style borrowed from the writing of Dobbs-Allsopp.<sup>23</sup>

A number of Dobbs-Allsopp’s tropes raised by Boyadjian are relevant to the contemporary issue of the national lockdowns, and these provided a framework for me to begin composing a sonified city lament for the city of Newcastle upon Tyne.

1. The city lament has a mood of mourning for a significant loss,
2. There is an element of destruction, which in the case of the lockdowns can be thought of as the desolation of modern soundscape, and
3. There is a hope for future restoration, which can be thought of as the post-lockdown era and the relaxation of lockdown measures.<sup>24</sup>

Employing the city lament style via musical means allowed me to reflect on and express my own experiences of the city and the ways that its soundscape had been drastically affected by the pandemic. Although the city lament style is ancient, the message the style conveys is one that can be keenly felt in the modern world, particularly in the context of the UK national lockdowns.<sup>25</sup> The Book of Lamentations excerpt above has been set numerous times by composers of different periods, demonstrating the timelessness of the text and its style, and the significance it can play.

Sections of the Latin Vulgate version of the text have been notably set by Thomas Tallis and Claudin de Sermisy, among others:

Aleph: Quomodo sedet sola civitas plena populo! Facta est quasi vidua  
domina gentium; princeps provinciarum facta est sub tributo.  
Beth. Plorans ploravit in nocte, et lacrimae ejus in maxillis ejus: non est qui  
consoletur eam ex omnibus caris ejus; omnes amici  
ejus spreverunt eam, et facti sunt ei inimici.<sup>26</sup>

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<sup>23</sup> Tamar M. Boyadjian, *The City Lament: Jerusalem in the Medieval Mediterranean* (Cornell University Press, 2018).

<sup>24</sup> F. W. Dobbs-Allsopp, *Weep, O Daughter of Zion: A study of the City-Lament Genre in the Hebrew Bible* (Rome: Editrice Pontificio Istituto Biblico, 1993), 30–93.

<sup>25</sup> Boyadjian, *The City Lament*, 11.

<sup>26</sup> Lamentationes 1:1–2 (Bibla Sacra Vulgata).



This can be compared with Philip van Wilder's setting of a similar text found in *GB-Ob Tenbury 1464*, which laments the fall of Thebes instead of Jerusalem in the Book of Lamentations.<sup>27</sup>

The German translation of the text above has been set by composers including Rudolf Mauersberger and Matthias Weckmann, though the former employed a combination of other verses from the Book of Lamentations for his setting.<sup>28</sup>

Wie liegt die Stadt so wüste, die voll Volkes war! Sie ist wie eine Witwe, die Fürstin unter den Heiden; und eine Königin in den Ländern war, muß nun dienen.<sup>29</sup>

While I have not set this text as part of this research, the city lament affords a clear way of tying in my work from the early stages of this research into the context of the UK national lockdowns. String Quartet No. 2, "Paralysed City" was written following an evening when I had ventured out to go shopping for essential goods, which was one of the few exceptions to the directive to stay at home. I was struck by the silence in a part of the city centre which was regularly one of the busiest. This experience probed me to write some verses which appear in the score of the quartet as a preface to each movement; they are a verbal representation of my phenomenological experience to accompany the music of the quartet. In a sense, these verses are themselves in the style of a city lament; the purpose of the city lament context, however, is intended more for thinking about the quartet itself as a sonified lament which could stand alone without the accompanying texts if required.

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<sup>27</sup> Oxford, Bodleian Library, MS Tenbury 1464, fols. 3v–5r.

<sup>28</sup> See Rudolf Mauersberger, *Wie liegt die Stadt so wüst* (Kassel: Verlag Merseburger, 1949), and Matthias Weckmann, 'Wie liegt die Stadt so wüste' in *Four Sacred Concertos*, ed. Alexander Silbiger (A-R Editions, 1984).

<sup>29</sup> Die Klagelieder 1:1 (Lutherbibel).

- I      A thousand weary eyes –  
Pale yellow, miserable,  
You would seem dead to me.
- A deafening hush –  
The last cyclist  
Returning home.
- (Dancing somnambulists)
- II     The last glimpse of a taillight  
Turning onto Grainger Street.  
St John is crying.
- The spectral murmur of  
Abandonment:  
Leave the heating on.
- III    November grey away  
From the station into fog,  
An old song of fifty.
- Almost lifeless creature  
Hovering over water –  
Lights off
- (Except the operator's).
- IV    Asphalt black, wet still.  
A visitor  
Flapping and cooing  
Flapping and cooing  
Then gone –
- Seeking a little warmth  
Exposed rafters refuse,  
A derelict bar forsaken  
Once again.

**Figure 1.1: The four verses which preface each movement of String Quartet No. 2, “Paralysed City”.**

The 'social fact' of the UK national lockdowns was a particularly strange experience because residents of the UK collectively experienced it in isolation.<sup>30</sup> Some people, particularly those shielding for health reasons, did not see anyone beyond their own home for the duration of the measures.<sup>31</sup> This reinforces the universality of the city lament – everyone resident in cities across the world experienced the same phenomenon yet had their own subjective experience of it.

Earlier in this chapter, I described the change in the soundscape of the city during the national lockdowns as the desolation of the modern soundscape. The most recognisable soundmarks of cities across the world, those sounds which characterise or represent a particular location to a listener, were silenced.<sup>32</sup> For now, it will suffice that a soundmark is closely connected to a place's identity, and without it, that identity would fundamentally change. The silencing of familiar sounds such as traffic and the bustle of people altered the soundscape of Newcastle upon Tyne, and in combination with the lockdown measures restricting social interaction, gave way to a new modernity.

A soundscape is symbolic of a civilisation's current condition and carries with it cultural significance and meaning.<sup>33</sup> We can, therefore, look to the changed soundscape of the city during the national lockdowns to understand the social conditions of the time, particularly if we consider, following Prakesh, that 'cities are the principal landscapes of modernity', the sites of the 'breathless intensity of modern life'.<sup>34</sup> The soundscape of modernity that was once comprised of the sounds of modern technology<sup>35</sup> – a culture of noise which found its inception in the industrial revolution and gained real footing during the First and Second World Wars<sup>36</sup> – was transformed into a soundscape of loss, giving way to a new social and cultural condition where people became disconnected from one another and

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<sup>30</sup> A 'social fact' (coined by sociologist Émile Durkheim) is an external constraint placed on a society, coercing it into a particular way of acting. We might say, then, that the social fact of Covid-19 coerced or necessitated the national lockdowns, forcing people into isolation in order to protect themselves, otherwise they would catch the virus, become unwell, and possibly die from the disease. See Émile Durkheim, *The Rules of Sociological Method*, trans. W. D. Halls (New York/London: The Free Press, 1982), 52.

<sup>31</sup> For research data on investigations and interventions to reduce loneliness owing to social isolation, see Williams et al., 'Interventions to reduce social isolation and loneliness during COVID-19 physical distancing measures: A rapid systematic review', *PLOS ONE* 16, 2 (2021), 1–28.

<sup>32</sup> Jonathan Beever, 'Sonic Liminality: Soundscapes, Semiotics, and Ecologies of Meaning', *Biosemiotics* 13 (2020): 79.

<sup>33</sup> Karin Bijsterveld, 'Listening to Machines: Industrial Noise, Hearing Loss and the Cultural Meaning of Sound', in *The Sound Studies Reader*, ed. Jonathan Sterne, (London/New York: Routledge, 2012), 153.

<sup>34</sup> Gyan Prakesh and Kevin M. Kruse, *The Spaces of the Modern City: Imaginaries, Politics, and Everyday Life* (Princeton/Oxford: Princeton University Press, 2008), 1 and 12.

<sup>35</sup> Emily Thompson, 'Sound, Modernity and History', in *The Sound Studies Reader*, ed. Jonathan Sterne, (London/New York: Routledge, 2012), 117–8.

<sup>36</sup> James G. Mansell, *The Age of Noise in Britain: Hearing Modernity* (Chicago: Illinois University Press, 2017), 4.

alienated from the very cities in which they lived. The stalling of the sounds of the modern age gave way not to a stalling of modernity, but to a new way of being-in-the-world that was unlike anything in recent memory.

### **1.2.2 Understanding The Paralysed (Lockdown) City**

In my second string quartet, I depict the stalling of the modern soundscape as paralysis. This portrays the city almost like a creature or even a human being (two of Sullivan's other metaphors for the city), one which had previously been a living and breathing organism with the lifeblood of traffic and noise running through it.<sup>37</sup> If the city is a reflection of those who inhabit it – those who make it a *city as place*, in comparison to a city as physical space – a site imbued with their identities and experiences of it, the absence of those people to experience the space is akin to the city becoming dormant, 'waiting for the right moment to appear'.<sup>38</sup>

It is the strange feeling of the city being abandoned that I sought to evoke through the desolate, quiet soundworld of the first movement, which opens with slowly unfolding and carefully controlled musical lines. This is later transformed into a bustling, nervous soundscape, which does not attempt to convey the sounds of modernity but continues to reflect the anxiety of the new modernity that I experienced throughout the national lockdowns. While it may also be a memory or recollection of the busy city streets to an extent, it also represents my realisation that this was now missing, and I was left in isolation. This realisation stemmed from the sudden reduction in the barrage of stimuli that constitutes the urban experience, the inundation of sound which is tolerated through the "blasé attitude".<sup>39</sup> In light of this, the cessation of the constant visual and aural sensations of the city provided space for reflection, for noticing those things which had previously been taken for granted, breaking the habituation developed through repeated exposure.<sup>40</sup>

The UK national lockdowns necessitated the type of separation that amplified feelings of loneliness and protracted the passage of time. Alienation from friends and family, even neighbours, forced people into a new way of living which wavered between the desire to reconnect and the strange enjoyment of extensive solitude that comes from not being

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<sup>37</sup> Sullivan, *The Metaphysical City*, 16.

<sup>38</sup> Sullivan, *The Metaphysical City*, 37 and 34.

<sup>39</sup> Georg Simmel, 'The Metropolis and Mental Life', in *Georg Simmel on Individuality and Social Forms*, ed. Donald L. Levine (Chicago: University of Chicago Press, 1971), 324–339.

<sup>40</sup> The notion of 'taking things for granted' is raised by Thomas Kelly, which provides a useful way of interpreting Simmel's "blasé attitude" and how the changes brought on by the national lockdowns opened up a space for re-experiencing the city. See Thomas Kelly, 'Taking things for granted: comments on Harman and Sherman', *Philosophical Studies* 56, 1 (2011): 141–177.

allowed to leave the house, 'spaces of inner estrangement' which allowed one to find pleasure in things that were usually neglected (reading, cooking, learning to do new things). Rafael Wainer adds to this, however, that social isolation led to the lack of social and sensuous stimulation that required such strategies of self-preservation, making use of the extra 'free' time which was paradoxically created through the imposed removal of freedoms.<sup>41</sup>

The separation from others calls to mind Setha M. Low's "Divided City", which can be reconsidered in light of the Covid pandemic and its social effects.<sup>42</sup> While Low uses this metaphor to highlight historical, visible separations between people (for example, the Berlin Wall), and hidden barriers of race and class, a reinterpretation of the notion of division caused by the pandemic (another hidden barrier) adds a further dimension to the 'personality' of the lockdown city.<sup>43</sup> This metaphor also allows the social conditions of the time to be conveyed, as the city is only divided insofar as the people in it are divided. The metaphysical identity of the lockdown city forged through phenomenological experience becomes, then, a symbol of the people who were subject to its new social and cultural conditions, disconnected from another but communally experiencing the pandemic.<sup>44</sup>

The division enforced on the city-as-creature can be understood as a wound, a separation of its constituent parts. Viewed in conjunction with the silencing of the city's soundscape which temporarily stripped it of its perceived identity, this presents a powerful image – even more so when considering the worldwide collectivity and translocality of the suffering wrought by the pandemic.<sup>45</sup> For Schneider and Susser, a city is wounded when the collective well-being of its constituents and the once 'identifiable, bounded place' in which

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<sup>41</sup> Rafael Wainer, 'The metropolis and mental life in the age of COVID-19: Delaying descent into the blasé attitude', *Somatosphere*, "Dispatches from the pandemic" series (2020).  
<http://somatosphere.net/2020/metropolis-mental-life.html/>.

<sup>42</sup> Setha M. Low, 'The Anthropology of Cities: Imagining and Theorizing the City', *Annual Review of Anthropology* 25 (1996): 388.

<sup>43</sup> Sullivan describes the 'personality' of the city as something like its identity or character, in that the city is imbued with a personality or 'style' through the experiences of its inhabitants. In terms of place, personality is subjective, much like the metaphysical cultivation of place meaning. See Sullivan, *The Metaphysical City*, 39.

<sup>44</sup> The unity through social isolation echoes Jérôme Monnet's discussion of place symbols as something which 'connects across distances, it unites, it conveys, and it communicates.' The symbol of the city as something wounded and fundamentally changed connects all of its inhabitants. See Jérôme Monnet, 'The symbolism of place: a geography of relationships between space, power and identity', trans. Angela Verdier, *Cybergeo: Politique, Culture, Représentation* 562 (2011): paragraph 3. <https://journals.openedition.org/cybergeo/24747>.

<sup>45</sup> The "wounded city" is an image conjured by Schneider and Susser, which can be caused, for example, by acts of nature, civil unrest, and the effects of globalisation on economic divides. The social complications of the pandemic align with their argument that cities are constantly undergoing cycles of destruction and reconstruction because any number of threats. See Jane Schneider and Ida Susser, *Wounded Cities: Destruction and Reconstruction in a Globalized World* (Oxford/New York: Berg, 2003).

they dwell, is affected.<sup>46</sup> The changing soundscapes caused by the pandemic, for me, caused a significant shift in the identity of the city, making the wound metaphor particularly useful for understanding the sudden and bewildering changes which consciousness was subject to.

The metaphors explored above can be tied back into the city lament style which underpins String Quartet No. 2, “Paralysed City”. The mourning for loss and destruction is particularly relevant here, as both can be understood in the context of the social and sonic changes caused by the national lockdowns. Both social freedoms and the familiar sounds of modernity were lost due to the pandemic, being replaced by a new condition of modernity in which people were alienated from their environment. Although the city looked the same (save for the absence of cars and people), it had a very different – and, to an extent, oppressive – character.

### **1.3 Place Experience and Meaning**

#### ***1.3.1 Rethinking the Lockdown Context***

Just as the national lockdowns restricted social freedoms and mandated staying at home, causing issues of loneliness and helplessness, the lockdowns also opened up a space for solitude, reflection, and for reformulating our understanding of the places in which we live. Although my own experience of the lockdown city led me to compose String Quartet No. 2, “Paralysed City” upon reflection of the absence of people and the alien landscape which I was confronted with, it also allowed me to reexperience the city in a way that had not previously been possible. Returning to Simmel’s “blasé attitude” which assumes a self-preserving ignorance towards the cacophony of sounds and stimuli of the typical modern city, the sudden absence of noise and traffic allowed urban characteristics which were usually ignored to be noticed. From my own experience, I remember being entirely surprised when looking around and noticing the design of the city, the curve of the streets, and other more specific details of the environment which usually went unnoticed in favour of navigating the city safely amongst traffic and people.

I became more conscious of this dialectic between isolation and solitude as the lockdown measures moved into their later stages and restrictions were eased, and the familiar sounds of the city slowly started to return. Where on one hand, the social distancing measures had been an emotional struggle which one hopes will never again be necessary, on

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<sup>46</sup> Schneider and Susser, *Wounded Cities*, 1.

the other hand, the opportunity to behold the city without the ‘nervous stimulation’ of metropolitan life, was an experience unlike any other, and there was something sombre in the realisation that its transient appearance was fading.<sup>47</sup>

*Still Earth, Unstill*, a work for classical guitar which explores endnotes reinterpreted for structural and intertextual applications in score-based work, was composed around this time. While the contributions of this work to the portfolio focus more on how motivic materials can be used to mediate a sense of musical place – *Still Earth, Unstill* explores how score-based endnotes can affect the perceived narrative and visual performance of a musical work – the once again changing social context in which I was writing the work clearly informed my approach to developing the music. Where String Quartet No. 2, “Paralysed City” employs a sonified city lament to mourn the onslaught of the new modernity imposed by the lockdown measures, *Still Earth, Unstill* approaches this from another viewpoint, mourning the return of the burgeoning urban soundscape and the end of the prolonged solitude that social distancing afforded. While the easing of the lockdown measures was a positive step towards social reconnection, I personally found it difficult to readjust following the disruption of the solitude I had become accustomed to. *Still Earth, Unstill*, therefore, mourns the city becoming once more the victim of the blasé attitude.

### **1.3.2 Complexities of Place**

These simultaneous desires and platial experiences point towards the complexities of place which are explored throughout this exegesis and have already started to take shape above. Earlier in this chapter, place was described as always in flux. Place identity is everchanging because of the immediate relationship between human beings and their environment.<sup>48</sup> This perpetual becoming is a matter of dwelling and goes back to Heidegger’s *Dasein* which is thrown into the world, and finds itself “there”.<sup>49</sup> Human consciousness is already dwelling, permanently viewing its environment from a uniquely subjective perspective as an “agent-in-its-environment”.<sup>50</sup> Consciousness is able to negotiate meanings out of experiences through

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<sup>47</sup> Michael Peter Smith, *The City and Social Theory* (Oxford: Basil Blackwell, 1980), 108.

<sup>48</sup> Giralt et al., ‘Conviction and commotion’, 189.

<sup>49</sup> Martin Heidegger, *Being and Time*, trans. John Macquarrie and Edward Robinson (Oxford/Cambridge, MA: Blackwell, 1962), 174.

<sup>50</sup> For Tim Ingold, Heidegger’s “being-in-the-world” aligns with the “agent-in-its-environment” which inhabits or dwells in the world as part of a co-constructive relationship as opposed to being an individual removed from a world “out there”. See Tim Ingold, *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill* (London/New York: Routledge, 2000), 173.

engagement with the environment, what Heidegger calls dwelling in order to build.<sup>51</sup> In the course of already being there in 'the current of their involved activity, in the specific relational contents of their practical engagement with their surroundings', consciousness experiences place meaning as everchanging, dependent upon its experiences up to that point.<sup>52</sup>

In the case of the sudden change in the urban environment during the national lockdowns, then, we can say that the lockdown city could either be viewed as carceral or as a renewed environment allowing the blasé attitude to be superseded by a more attuned sense of one's visual surroundings. The way consciousness relates to its environment at any one time through its 'subjective colouring' determines the meanings ascribed to it.<sup>53</sup> In the familiar context of social isolation which underpins the works above, the carceral experience of the home turns the normative view of home on its head, where home becomes hostile, and the outside signifies freedom from perceived loneliness or danger. Yet, social isolation also afforded a period of solitude in a place of safety away from the outside (and the danger of illness). This highlights an Inside-Outside dialectic which is entirely malleable, depending on the subjective experience of the perceiver.<sup>54</sup> It also recalls J. J. Gibson's description of places of danger and refuge, where Gibson suggests that a cliff can either be a place of danger (risk of falling), or a place of safety (for a seagull, for example). The human experience of the home (and city) during social isolation, then, is one of continuous 'place-learning', understanding the affordances of the space which becomes a part of that place's perceived identity at any one moment.<sup>55</sup>

By now it is clear that place is an embodied phenomenon, meaning the body is the medium by which human beings are able to perceive and have a world.<sup>56</sup> The body is the link between the self and the space which is lived 'through its sensible and perceptive features.'<sup>57</sup>

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<sup>51</sup> Heidegger, *Poetry, Language, Thought*, 144.

<sup>52</sup> Ingold, *The Perception of the Environment*, 186.

<sup>53</sup> The 'subjective colouring' imposed on a location, for Bollnow, is the subjective view of the environment. See Otto F. Bollnow, *Human Space*, trans. Christine Shuttleworth (London: Hyphen Press, 2011), 18.

<sup>54</sup> Katerina Bauerová's presents the normative view of home which embodies safety and privacy, outside of which is the vast world of potential hostilities. See Katerina Bauerová, 'Dialectics of Inside and Outside: Overcoming Spatial Dualism with Gaston Bachelard and Louis-Marie Chauvet', *Just do it?! Recognition and Reception in Ecumenical Relations, Proceedings of the 19<sup>th</sup> Academic Consultation of the Societas Oecumenica* (2018): 205.

<sup>55</sup> James J. Gibson, *The Ecological Approach to Visual Perception* (New York: Taylor & Francis, 1986), 136.

<sup>56</sup> For Merleau-Ponty, the body is 'the general medium for having a world', an 'expressive space' by which we come to interact with the world. See Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. Colin Smith (London/New York: Routledge, 2005), 169.

<sup>57</sup> Edward S. Casey, 'Between Geography and Philosophy: What Does It Mean to Be in the Place-World?', *Annals of the Association of American Geographers* 91, 4 (2001): 683.



Perceptions of space are known to consciousness through the body as it experiences the environment, and although various scholars have referred to place with a range of terms, these all point to the body as the primary way that consciousness can come to know the world into which it has been thrown.<sup>58</sup> Using this understanding of how the environment is experienced, place is employed throughout this exegesis to refer to the meanings and identities negotiated through the experience of sound, whether it is part of the soundscape of a physical location or based on places generated through musicmaking.

#### **1.4 Conclusion – Possibilities of Place in Creative Practice**

While the experience of the city played a significant role in the early stages of my research (and is used as the context for a number of the others works in this portfolio), it is not the only environment I was concerned with in this project. My experience of the lockdown city led me to consider the role of sound in place experience, both in the environment of the city and beyond it. The city and the pandemic, then, acted as a gateway for me to explore the complex relationships between sound and place, and following the end of the national lockdowns, I was able to consider other ways in which sonic experience can mediate a sense of place and expand the scope of my research.

Given that every aspect of human experience takes part in place construction by way of the body as the medium, it follows that even purely sonic experiences (for example, listening to an acousmatic installation) can produce place. Of course, the sonic dimensions of the city during the UK national lockdowns had a profound effect on me, but in that case seemed to amplify the visible emptiness of the space instead of signifying something about sound itself. It points, nevertheless, towards sound as a key component of place experience. Where Clarke describes the ‘resonance’ of the body as the ‘active, exploratory engagement with’ the environment, we might think of resonance as the way in which consciousness perceives a type of sonic or musical place in sound by way of the body.<sup>59</sup> For Merleau-Ponty, this would be because of the ‘musical significance of an action’, and how the body can be

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<sup>58</sup> Bollnow, for example, refers to ‘experienced space’ [*erlebter Raum*] to describe the metaphysical dimensions of the environment known to us through the orientation of the body, which aligns with the definition of place used in this research project. This is rooted in what Aristotle describes as three pairs of directionalities, above and below, front and back, and left and right. For “experience space”, see Bollnow, *Human Space*, 18. For Aristotle’s three pairs of directionalities, see Aristotle, *On the Heavens*, trans. W. K. C. Guthrie (Cambridge, MA/London: Harvard University Press, 1939), 139.

<sup>59</sup> Clarke, *Ways of Listening*, 19.

given to music in order to bring it to life.<sup>60</sup> Both Merleau-Ponty and Roland Barthes posited, some twenty years apart, that the body exemplifies musicality. For Barthes, it was in the way that the body connects to, and creates, music through the piano or the voice.<sup>61</sup> Music itself, according to Barthes, contains figures of the body (*somathemes*), a second semiology beyond that of its first (the musical language – pitch, rhythm, harmony, and so on) which signifies something beyond linguistic description.<sup>62</sup> We might say, then, that the motion of the body has its own musicality and can resonate with sounds heard because of the signifying figures of sound. This has already been demonstrated, to some extent, in considering the way in which the noise of urban modernity coerces one into a blasé attitude. In Chapter 2, bodily movements are said to express motion because of the way in which we associate pitch and volume with our bodily orientation (high and low, near and far), and this can contribute to a sense of place which is detached from a physical, visible environment.<sup>63</sup>

Where in this chapter, two of the score-based works included in the portfolio were presented as investigations into the social context in which I found myself at the outset of this project, Chapter 2 turns to look at some of the acousmatic works included in the portfolio which were produced towards the end of the national lockdowns, and afterwards once the measures had been fully relaxed. While the works are presented in a format unlike that of my second string quartet, for example, the acousmatic works in the portfolio constitute a key part of this investigation into the ways in which sound can mediate a sense of place. This is then developed in Chapter 3, which discusses the project in which my score-based and acousmatic approaches coincide.

As a starting point, the lockdown city as place provided me with a vivid first-hand account of the effects of sound (or the absence thereof) in the negotiation of place meaning. String Quartet No. 2, “Paralysed City” was written in the style of a sonified city lament, allowing me to work out how the city had changed for me in the course of the UK national lockdowns. *Still Earth, Unstill* enabled me to refine this understanding and consider the ways

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<sup>60</sup> Merleau-Ponty uses the example of an organist reaching precisely for the stops and pedals which bring the sound of the instrument into being. See Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. Colin Smith (London/New York: Routledge, 2005), 168–169.

<sup>61</sup> Paulo de Assis, *Logic of Experimentation* (Belgium: Leuven University Press, 2018), 161.

<sup>62</sup> de Assis, *Logic*, 163.

<sup>63</sup> The corroboration of, for example, high pitches with high spatial location, or quiet sounds with something more distant, is termed “Cross-domain feature correspondence” by Zohar Eitan. These consistencies allow human beings to perceive height, depth and motion within musical sound, which is used in Chapter 2 in describing how a sense of musical place is mediated in listening to acousmatic music. See Zohar Eitan, ‘How pitch and loudness shape musical space and motion’, in *The Psychology of Music in Multimedia*, eds. Siu-Lan Tan et al. (Oxford: Oxford University Press, 2013), 166.

in which place identity can change, and this work is returned to later in this exegesis, where its musical materials are explored as a demonstration of approaches to musical place in score-based music.

## Chapter 2. Sonic Landscapes as Places

### 2.1 Landscape and Sound

#### 2.1.1 The Landscape Metaphor in Sound Perception

This chapter explores how landscape can be used as metaphor to uncover musical place in creative practice. By considering the acousmatic works in the portfolio such as *all illusions*, *all again* and *all that is lost*, and how the sounds employed therein can be thought of as characteristics of sonic landscapes, this chapter demonstrates how musical places can be cultivated through the listening experience. This, in turn, is applicable to the works in the portfolio more widely. In Chapter 1, the aural and visual dimensions of space were used in the context of the UK national lockdowns to describe how the place of the city changed for me in the early stages of this research. In this chapter, the focus turns purely to the experience of sound and how sonic landscapes can be perceived in the sound transformations over the course of an acousmatic work.

The concept of landscape is closely connected to place. Although, like place, landscape brings with it its own linguistic and semiotic issues stemming from its use as a description of something visible – for example, landscape paintings which are painted from a single point of origin that present the ‘geometric and picturesque’ attributes of a location – it is a useful term for describing the shapes and characteristics of sounds.<sup>64</sup> In order to do this, it is first necessary to unpick the complexities of landscape to make it clear in which ways it can be applied to the experience of sound.

Place is experiential and its meaning is negotiated through our being-in-the-world. It becomes imbued with the identity that one ascribes to it based on unique experiences. In comparison, space describes the geometry of the visible world, the ‘thing in itself’ which we are unable to truly know owing to our already subjective dwelling.<sup>65</sup> In perceiving the visible environment, we can trace the characteristics of the landscape and understand how it is punctuated by shapes and lines, and this contributes to our overall impression of the landscape and the meanings we ascribe to it. Where acousmatic music is concerned, the

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<sup>64</sup> Tiago Mesquita Carvalho, ‘The Aesthetics of Sound in Landscape and Architecture’, in *Philosophy of Landscape: Think, Walk, Act*, eds. Adriana Veríssimo Serrão and Moirika Reker (Lisbon: Centre for Philosophy at the University of Lisbon and Authors, 2019), 157.

<sup>65</sup> For Kant, the ‘thing in itself’ is the unknowable underlying object behind that which our senses perceive; ‘objects of possible experience’ appear to us only through our perception of them. See Immanuel Kant, *Prolegomena to Any Future Metaphysics with Selections from the Critique of Pure Reason*, Revised Edition, ed. Gary Hatfield (Cambridge/New York: Cambridge University Press, 2004), §32 [66–67].

visible world is removed from the sounds presented (insofar as it can be), and the work is experienced predominantly through listening comprehension. This is why landscape initially appears as a problematic term; landscape is perceived visually, not sonically (though as we will see in Chapter 3, the sound of a particular location plays a key role in our experience of it). Landscape is commonly used in geography and art, in which disciplines the term can be quickly applied and understood, but it also invites complexities about landscape representation and subjective perception.<sup>66</sup> To some extent, the term landscape is much like place which has several meanings in different contexts.

Nevertheless, landscape can be reinterpreted to aid in the discussion of acousmatic music and musical place more widely, separated from the visible environment and instead being used to describe our perception of sounds. Landscape can help to describe the shapes perceived in sound, the way that sounds transform over time, and the way in which music is structured. These experiences of sound contribute towards a sense of musical or sonic place which is different from the sense of place mediate through worldly experience.

### **2.1.2 The Landscape of Sound**

Both the visible and sonic dimensions of the environment are experienced via the body and its orientation in space. The body is the experiential medium through which sound is encountered and plays the central role in making sound, and art more widely, meaningful.<sup>67</sup> Place can be sensuously produced through our auditory and visual faculties, and our understanding of the sounds we hear is necessarily connected to the body that offers our primary means of perceiving the world.<sup>68</sup> In contrast to the image of a physical landscape, sound is a temporal phenomenon, and its occurrence ('sound-producing actions' in motor-mimesis cognition) can be perceived as having a physical contour or being in motion.<sup>69</sup> In the visible environment (or depictions of it), one perceives the relationships between objects as they physically appear, but sound requires time to unfold for a listener to comprehend its 'relational constitution' to other sounds.<sup>70</sup> Soundscapes cannot be static because sound occurs over time, and the dynamic shapes perceived in sonic events can contribute to a

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<sup>66</sup> Hicks et al., 'Introduction: Music and Landscape', *Journal of Musicology* 33, 1 (2016): 1.

<sup>67</sup> Salomé Voegelin, *Listening to Noise and Silence: Towards a Philosophy of Sound Art* (New York/London: Continuum, 2010), 73.

<sup>68</sup> Sara Cohen, 'Sounding out the city: music and the sensuous production of place', *Transactions of the Institute of British Geographers* 20, 4 (1995): 434.

<sup>69</sup> Rolf Inge Godøy, 'Motor-Mimetic Music Cognition', *Leonardo* 36, 4 (2003): 317–318.

<sup>70</sup> Carvalho, 'Aesthetics of Sound', 159.

temporal sense of landscape instead of one perceived from a single viewpoint (like with physical landscapes).<sup>71</sup> The sonic events which unfold in acousmatic music, then, might be thought of as characteristics of, or punctuations in, an overall sonic landscape – those features which make it a unique landscape.

These sonic events are immaterial or perceptual objects – termed sound objects (*objets sonores*) by Pierre Schaeffer, where raw sounds are detached from their extramusical meanings – which, like musical materials in a score, are organised into textures and structures and transformed over time to mediate a sense of musical place.<sup>72</sup> Sound objects are complete sounds in themselves, detached from their sound source or original context (with concrete sounds) from which they were drawn as fragments; the sound object is no longer a fragment, but a discrete sound in its own right.<sup>73</sup> Through the listening experience, however, sound objects gain significance both intrinsically and extrinsically, becoming interconnected with one another to make up the characteristics of an acousmatic work's virtual environment that unfolds over time.<sup>74</sup> Both the timbral and extramusical aspects of acousmatic sound are heard by, and exist simultaneously for, the listener, which transforms discrete sound objects into constituent parts of a more meaningful whole.<sup>75</sup>

Acousmatic music affords the dislocation of sounds from their sources, allowing listeners to construct their own meanings about the sounds they hear. The extrinsic meanings ascribed to the intrinsic relationships between sounds, like the meanings negotiated through the experience of the visible environment, are shaped by listeners' own backgrounds, experiences, and social setting.<sup>76</sup> Taking this as a starting point, the following sections detail two of the soundworks presented in the portfolio which employ contrasting types of source material in the creation of their sound objects. The sonic landscapes of these works convey different types of musical place, one which stems from the context of the post-

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<sup>71</sup> Barry Blesser and Linda-Ruth Salter, *Spaces Speak, Are You Listening?* (Cambridge/London: MIT Press, 2007), 15.

<sup>72</sup> The *objet sonore* is, for Schaeffer, evidenced in the acousmatic listening experience. The sound object is not an instrument or device playing a sound, but the sound itself, and the 'object of our listening *alone* [...] entirely contained within our perceptual consciousness.' See Pierre Schaeffer, *Treatise on Musical Objects: An Essay Across Disciplines*, trans. Christine North and John Dack (Oakland: University of California Press, 2017), 67.

<sup>73</sup> Brian Kane, *Sound Unseen: Acousmatic Sound in Theory and Practice* (Oxford/New York: Oxford University Press, 2014), 16.

<sup>74</sup> Clarke, *Ways of Listening*, 69.

<sup>75</sup> Ambrose Field, 'Simulation and reality: the new sonic objects', in *Music, Electronic Media and Culture*, ed. Simon Emmerson (Aldershot/Burlington: Ashgate, 2000), 40.

<sup>76</sup> Dennis Smalley uses 'intrinsic' to refer to the arrangement of sounds contained within the work, while 'extrinsic' refers to the perceived connections between them on the part of the listener. See Smalley, 'Spectromorphology', 110.

lockdown city and Storm Arwen (November 2021), and the other of which explores the dislocated sounds of a physical instrument, the organ.

## **2.2 Sound Objects from the City – *all illusions, all again***

### **2.2.1 Social Context of Storm Arwen, 25–27 November 2021**

*all illusions, all again* is an acousmatic work which was presented as an installation in the Newcastle University Arches in November 2022, a year after the arrival of Storm Arwen in the UK. Eight months prior to Storm Arwen's arrival, the restrictions of the third national lockdown were lifted, and Newcastle upon Tyne was transformed from a paralysed, stagnant city into a living, reanimated creature, the breath of which was the voices of those participating in the city's nightlife and the heartbeat of which was the throb and pulse of club music. This eruption in the city's nightlife and its effect on the acoustic environment indicated the extent to which lockdown had caused significant harm; the post-lockdown condition was defined by the streets of the city being thronged with people every night of the week into the early hours of every morning, enjoying the freedom to socialise.<sup>77</sup>

Storm Arwen lasted three days but did not discourage people from socialising and taking part in the city's nightlife, which between April and November 2021 seemed not to slow down. This, in conjunction with the interesting opportunity presented for capturing the effects of the weather, motivated me to compose *all illusions, all again*. Instead of capturing the sounds of the storm, however, I opted to capture the effects of the storm on the floor-to-ceiling windows of my flat in the city centre using contact microphones. The vibrations caused by the storm on the second and third nights constitute the underlying soundscape of the work, which also includes the distant sounds of people and club music which were also picked up by the contact microphones. The force of the weather, then, became an 'affordance for activity' and placemaking in a particular geographical and social context.<sup>78</sup>

The sonic landscape of *all illusions, all again* presents a virtual environment which 'grapples with "real" space.'<sup>79</sup> The work heard by listeners is not an ecological soundscape or

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<sup>77</sup> R. Murray Schafer posits that the current social conditions of a society can be indicated through its general acoustic environment. In the case of the post-lockdown city, the constant sound of people taking part in the city's nightlife indicated that people were ready to reconnect, perhaps even make up for lost time. See R. Murray Schafer, 'The Soundscape', in *The Sound Studies Reader*, ed. Jonathan Sterne (London/New York: Routledge, 2012), 98.

<sup>78</sup> Bennett Hogg, 'Weathering: perspectives on the Northumbrian landscape through sound art and musical improvisation', *Landscape Research* 43, 2 (2018): 241.

<sup>79</sup> Holly Watkins, 'Musical Ecologies of Place and Placelessness', *Journal of the American Musicological Society* 64, 2 (2011): 407.

a depiction of the reality of Storm Arwen, but a consequence of the storm where weather has acted upon sound-producing objects (in this case, the glass pane of a window).<sup>80</sup> The chaotics of the weather then becomes the medium for generating the basis of the work's materials, the frequency and prominence of the vibrations being indeterminate.<sup>81</sup> Although *all illusions, all again* presents a soundscape which is far removed from the actual sounds of Storm Arwen, it is rooted in the post-lockdown context and explores an important period in the social history of Newcastle upon Tyne. In this way, there are two simultaneous narratives at play in the music; the real-world sounds of the urban environment (the club music and people) bleed over into the soundscape through the contact microphones recordings, while the abstract acousmatic sounds of the window vibrations open up a perceptual space for listeners to create their own meaning. By avoiding capturing the sounds of the storm itself, the work affords listeners the opportunity to construct their own meanings in a space of ambiguity and potential. At the same time, by including the faint sounds of the urban noise picked up by the contact microphones, the work is tied into the context in which it was created. The work, then, both brings to life my own memories and the social narrative of the early months of the post-lockdown city and affords the invention of new narratives through sensuous engagement with the music.<sup>82</sup>

### **2.2.2. Experiencing Sonic Landscapes: University Arches Installation**

*all illusions, all again* was installed in the Newcastle University Arches in November 2022 as part of *A Space for Sound – The Arches Sound Project 2022*. The Arches present an unusual location for experiencing the acousmatic work; it is an outdoor space which has specific boundaries, and the shelter from the building overhead lends the space the impression of being semi-indoors.<sup>83</sup> There are four speakers installed in the space, one fixed in top of each

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<sup>80</sup> Ambrose Field describes approaches to acousmatic composition which include real-world sounds to simulate our surrounding environment, and 'low reality credibility' is used to describe a sonic landscape which holds little realism owing to the incompatibility of sounds (for example, collaging sounds which are from obviously different extrinsic contexts). The faint club sounds in *all illusions, all again* in combination with the effects of the weather on the glass presents a sonic landscape which has low reality credibility, primarily because the sounds don't belong together in the real world. The club sounds are far removed from the sounds of glass vibrations, and while both Storm Arwen and the club sounds did occur at the same time, the absence of any actual weather sounds in *all illusions, all again*, detracts from the credibility of the sonic landscape as the 'real world'. See Field, 'Simulation and reality', 37 (for hyper-reality) and 44 (for low reality credibility).

<sup>81</sup> Janice Randerson, *Weather as Medium: Toward a Meteorological Art* (Cambridge, MA: MIT Press, 2018), 4.

<sup>82</sup> Salomé Voegelin suggests that sound art can both replay memories and narratives and invent them through the embodied experience of 'sonic temporality', where listeners encounter sounds and negotiate meanings. See Voegelin, *Listening to Noise and Silence*, 130–131.

<sup>83</sup> For "unusual spaces", see Blesser and Salter, *Spaces Speak, Are You Listening?*, 18.



corner, pointing across and down into the Arches. This directs the sound down and towards those passing through the space, which affects the boundaries of its acoustic arena and horizon. The acoustic arena is the space in which a listener can hear the sounds of the installation, the boundaries of which can be physical (like the walls of a room) or immaterial (like the maximum distance at which a sound can be heard).<sup>84</sup>



**Figure 2.1: The Newcastle University Arches, in the top corners of which four speakers are installed for sound installations.**

When listeners are in this space, they are surrounded by the sounds of the installation which are directed down into the space. The idea of being inside of the sonic landscape of the acousmatic work is an interesting one, given that landscape is traditionally considered as something that is beheld from a singular viewpoint, something that is ‘over there’. Where sonic landscapes are concerned, however, the objectification of landscape is challenged by the listener as sonic landscapes are understood and formed *through* the body and the experiencing consciousness as it perceives shape and motion in sound; there is a sense of being in the landscape and experiencing it through one’s interactions with it, which is lost in the experience of visible landscapes.<sup>85</sup> This presents parallels with being-in-the-world and experiencing phenomena such as the weather by way of the body. The experience of the weather was one of the key factors that led me to composing *all illusions, all again*. While the acousmatic work is not indexical – it does not document or represent the sounds

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<sup>84</sup> Blesser and Salter, *Spaces Speak, Are You Listening?*, 18.

<sup>85</sup> The Landscape Quartet’s work in the Northumbrian landscape presents an example of ‘being in’ the landscape and being affected by it, much like sound objects are experienced through the body. See Hogg, ‘Weathering’, 237–238.

of Storm Arwen mimetically – the context of the weather in conjunction with the post-lockdown social conditions is crucial for positioning this work in this portfolio.

While the loudspeakers installed in the Arches are out of sight to those passing through or by, the interior-exterior dialectic of the Arches allows some of the sound to escape the arena of the Arches. This means that some of the sonic events can enter into a listener's acoustic horizon as they approach the Arches, becoming part of their 'experiential region'.<sup>86</sup> The soft boundary of the Arches works particularly well in this case, as *all illusions, all again* was designed to give the impression of the low-frequency sounds rising out of the surroundings and becoming part of the soundscape of the installation area. If a listener is only passing through the Arches, they will be momentarily enveloped in the focal point of the sonic landscape, and then as they leave the Arches the sounds will gradually fade. If the listener is positioned in the Arches for the duration of the work, then they will be able to hear the low-frequency sounds of the work grow out of the speakers above them, and then experience the sonic landscape of the work as it develops and introduces the other sounds included in the textures.

The pitched material included in the work was created using ceramic vases filled with water which were struck like percussion instruments. At the time of Storm Arwen, many people chose to continue to isolate where possible, which led to me experimenting with other ways of creating sonic material for use in *all illusions, all again*. Where the sounds of the city that bled through into the recording of the window vibrations were clearly from a recognisable sound source, the low-frequency vibrations and percussive pitched material is more abstract and adds further opportunities for listeners to perceive landscape characteristics over the course of the work. In the second work discussed below, *all that is lost*, sounds which are dislocated from their original sound source become the basis of the materials for its sonic landscape. It was written, however, much later than *all illusions, all again* and was premiered as part of an online livestreamed concert of acousmatic music, which affords a different listening experience to the sound installation of *all illusions, all again*.

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<sup>86</sup> Blesser and Salter, *Spaces Speak, Are You Listening?*, 22.

## 2.3 Dislocating Voices Through Acousmatic Music

### 2.3.1 Comparing Approaches to Composing Acousmatic Music

At the start of this chapter, the landscape metaphor was introduced as a means of comprehending the characteristics of sound in acousmatic music, which describes the shapes and connections perceived in sounds through the listening experience. The sonic materials used in *all illusions, all again* were drawn from sounds of the real world but were framed in such a way that the sounds became abstract – the window vibrations caused by Storm Arwen did not appear as the sounds of a storm, and the percussive pitched material created using ceramic vases filled with water were presented as other punctuations or aspects of the landscape. While there were some sounds that were recognisable, such as the sound of club music that bled through the windows and were captured by the contact microphones, these were dislocated from their expected environment (the sounds picked up by the contact microphones were from Newcastle upon Tyne's Bigg Market) and shifted into another listening context. In *all illusions, all again*, however, these dislocated sounds only played a minor role in the overall sonic landscape as they were only faintly picked up by the contact microphones whose primary role was to capture the effects of the storm as it acted upon the floor-to-ceiling windows.

In composing *all that is lost*, however, I took dislocation as the starting point of the creative process. One of the main components of the work is a melodic fragment played on pipe organ, the voices of which were dislocated from the instrument and recontextualised. While the organ recording appears in a much more recognisable form than any of the materials from *all illusions, all again*, this is the only way in which it makes a slight allusion to reality; its treatment in the context of the sonic landscape of *all that is lost* is intended to subvert the expectations of its traditional role by placing it in textural interaction with electronic sounds.<sup>87</sup> The organ appears alongside cyclical electronic voices which creates an unsettled, shifting texture in a sonic landscape which is quite different to the one presented in *all illusions, all again*. The electronic sounds generally constitute the lower-frequency material while the organ operates in higher registers. This contrast between real and artificial sound at different ends of the frequency spectrum is actually intended to bring the sounds into a more convincing interaction instead of highlighting their inherent differences.

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<sup>87</sup> The representation of reality, as Field notes, becomes a compositional parameter in electroacoustic music. In *all that is lost*, the organ is subject to processing which both retains its recognisable sound and dislocates it from its original context. See Field, 'Simulation and reality', 37.

In addition to the dislocation of the organ voices, pitch-based materials play a much more central role in *all that is lost*. The sounds presented are more like moving voices that interact over the course of the work, affording different types of musical place to come about through perception. The focus on pitch shows this work as a meeting point between my score-based and acousmatic work. Where *all illusions*, *all again* found its inception in my recording of the window vibrations caused by Storm Arwen, the materials of *all that is lost* began in notated form but are presented to the listener via acousmatic means.



**Figure 2.2: A score reduction of the main electronic voices motif in *all that is lost*.**

*all that is lost* was premiered as part of a livestreamed acousmatic music concert by La Hora Acusmática, a project based in Argentina that promotes new acousmatic music and composers through their YouTube and Facebook pages along with experimental videos by visual artists.<sup>88</sup> La Hora Acusmática began streaming concerts in April 2021 during the Covid-19 pandemic, which provided (and continues to provide) a space for composers to share their work. This allowed me to explore a different means of presenting my work, contrasting *all illusions*, *all again* which was presented as an installation, and opening my work up to a wider international audience.

### **2.3.2 Erasure as Reference Between Musical Places**

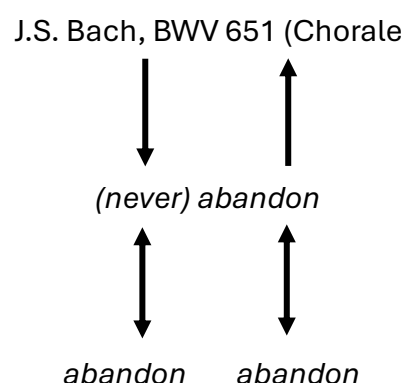
Following the thread of translating notated music into an acousmatic context, this section describes the process behind the composition of *abandon I* and *abandon II*, two acousmatic

<sup>88</sup> La Hora Acusmatica, 'La Hora Acusmática, ciclo de conciertos virtuales 2023. Quinto concierto, 20 de Octubre', October 21, 2023, video, 1:17:08, [https://youtu.be/ZUw6b\\_tA1xw?si=omJr7tn4P4GxthZS&t=2427](https://youtu.be/ZUw6b_tA1xw?si=omJr7tn4P4GxthZS&t=2427).

works which are related through an indeterminate, durational acoustic work, *(never) abandon*. The three *abandon* works employ a related, yet different approach to creating musical place. Each was created via a process of reducing or erasing musical materials which were then developed and reframed in another context.

*(never) abandon* was the first work I completed following the relaxation of the social distancing measures in the UK in 2021 and was written to better understand musical place as it can be mediated through musical materials. The piece was later workshopped and recorded with music colleagues in 2022 and became a symbol of reconnection and a return to social musicmaking. Where a number of the works in the portfolio are demonstrative of my overall understanding of musical place and its affordances (for example, my purposeful use of intertextuality through endnote relationships in *bloom and splinter*), the pieces stemming from *(never) abandon* were written early on in the research process to develop my understanding and explore possibilities.

The three pieces described in this section are interrelated through their musical materials. The musical materials of *(never) abandon* are based on a reduction of J.S. Bach's BWV 651 '*Fantasia super Komm, Heiliger Geist*', the first of the *Great Eighteen Chorale Preludes*.<sup>89</sup> *abandon I* and *abandon II* are both derived solely from recorded fragments captured during the recording session of *(never) abandon* and are comprised of random sounds caught outside of the recording of the work itself, and a second take which was not used.

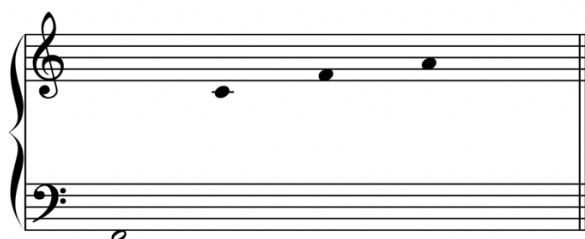


**Figure 2.3: A figure showing the referential relationships between the *abandon* works and their source materials.**

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<sup>89</sup> Bach, BWV 651, 1958, 3–12.

(*never*) *abandon* was used as a means of exploring musical place through the recontextualisation of musical materials and how a reframing of the music can present it in a new light; the knowledge I gained from this directly influenced my later treatment of musical materials in relation to endnotes and intertextuality. My approach consisted of an almost complete erasure of Bach's music, leaving behind only a single fragment of music and a handful of individual pitches. The end result bears very little resemblance to Bach's organ work, much like Tom Armstrong's use of erasure and musical borrowing in his work *JPR*, which juxtaposes fragments from Jean-Philippe Rameau's *Pièces de clavecin en concerts* (1741).<sup>90</sup> Where Armstrong's work is based on longer fragments arranged in repeating, overlapping structures, however, my approach to the notes borrowed from Bach was to completely detach them from their phrasing and place them in an indeterminate space which focussed primarily on individual harmonic interactions.



**Figure 2.4: The only fragment remaining from the erasure process applied to BWV 651 which consists of more than one note, employed as the repeating keyboard motif in (*never*) *abandon*.**<sup>91</sup>

(*never*) *abandon* is for an open score trio, one of which must be a keyboard instrument (in the recording, a piano was used); the two soloists only play single pitches (in the recording, viola and flugelhorn were used), and choose them randomly from two sets of four. The pitches were borrowed from moments in the chorale prelude of particular harmonic interest, such as moments of modulation; combined with the aspect of performer indeterminacy, this resulted in some interesting harmonic interactions.<sup>92</sup> The durations of the pitches that are sounded by the soloists are also indeterminate. Where the keyboard sounds the fragment

<sup>90</sup> Tom Armstrong, 'Re-voicing Rameau: Borrowing practices in Tom Armstrong's *JPR*' (paper presented at the Tenth Biennial International Conference on Music Since 1900, University of Surrey, September 11–14, 2017, <https://openresearch.surrey.ac.uk/esploro/outputs/99516245402346>).

<sup>91</sup> Bach, BWV 651, 1958, 3.

<sup>92</sup> 'Performer indeterminacy', in comparison to indeterminacy employed in the compositional process, includes leaving space in a work for performers to make certain choices that directly affect the way a work sounds, is structured, or performed. See Kirsten L. Speyer Carithers, 'Musical Indeterminacy as Critical and Affirmative Play', *ASAP/Journal* 8, 1 (2023): 122. See also, William G. Harbinson, 'Performer Indeterminacy and Boulez's Third Sonata', *Tempo*, New Series 169 (1989): 16.

shown above at the beginning of each phrase and allows it to completely decay each time, the soloists decide how long each of their chosen notes should last, and the rate at which they start to become unsynchronised with each other with every structural repetition, as dictated in the performance rules.

As part of a creative process, this work allowed me to understand ways in which I might fragment or borrow compositional materials for the purposes of musical reframing. *(never) abandon*, however, was more of a means to an end in developing further pieces which began to dig down into what I wanted to investigate. While *(never) abandon* was a crucial step in my process, it was in the pieces that stemmed from it in which I really started to treat musical materials in a purposeful way to cultivate different types of musical place.

### **2.3.3 Reduction and Reframing to Create New Musical Places**

*abandon I* and *abandon II* are acousmatic works based solely on recordings of the viola and flugelhorn, respectively, captured during the *(never) abandon* session. Where *(never) abandon* took musical a fragment and individual pitches from Bach's work and recontextualised them, these acousmatic works feature materials which are, on the surface, unimportant. The materials used in the works are sounds and pitches captured outside of the formal recording of *(never) abandon*, accidents or moments which weren't intended to be heard. Some of the sounds come from between takes – for example, the sound of the viola's bow catching the music stand, or a finger quietly catching some open strings – and others come from outtakes of the piece which weren't selected as the final recording.

Although the aesthetics of the two acousmatic works are quite different, both had the same starting point: recycling leftover materials to create two works which give the impression of ensembles. As the materials were either viola or flugelhorn sounds, each work became a collage of recorded fragments from each instrument. Over the course of the works, these sounds are manipulated, stretched, and processed to become less like real instruments, contributing to the realisation that the sound sources for the works were never physical instruments, but only pre-recorded vestiges of them.

The musical place of the *abandon* works refers to a previous iteration of themselves, their reduced materials stemming from a 'parent' work. The process of working this out was crucial for informing my creative approaches in the later stages of this research project – they might be thought of as stepping stones in the development of my understanding. The discussion of soundmarks in Chapter 3, and endnotes and intertextuality in Chapter 4

demonstrate a much more detailed understanding and purposeful use of musical materials and their interrelationships to mediate a sense of musical place.

## 2.4 Conclusion – Different Types of Musical Place

In comparison to the score-based works in the portfolio, those discussed above are presented largely through acousmatic means, whether intended for installation, live-streamed performance, or otherwise. Both acousmatic and score-based approaches to compositional practice allow for the cultivation of different types of musical place, and this is carried forwards into Chapters 3 and 4. The complexities of musical place are already apparent, here, in that place can be mediated not only through subjective, worldly experience, but also through perceiving meaning in, and relationships between, sounds in themselves. Musical place can refer to the sense of landscape formed by the shapes and transformations that we perceive in sounds over time, and these characteristics are explored by Dennis Smalley through spectromorphology.<sup>93</sup> Where the visual experience of the physical world can be more readily described using language to a certain extent (and sound is often found as an accompaniment to that experience, informing our navigation of physical space),<sup>94</sup> describing subjective impressions and meanings of sounds in themselves is immediately more difficult because of their immateriality. We might, then, move towards describing the sonic materials themselves using our previous understanding of worldly experience as a basis for perceiving motion, height, depth, and shape.<sup>95</sup> By focussing on the sounds in themselves, we can begin to describe how the intrinsic relationships between them are constructed and given the potential for meaning and musicality to emerge.

Using the experience of the visible world from Chapter 1 and the sonic experiences described in Chapter 2 as a point of departure, Chapters 3 and 4 discuss the remaining works in the portfolio. In Chapter 3, soundmarks as meaningful marks of an environment's soundscape are described in relation to my work with the Edith Adamson Carillon; the

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<sup>93</sup> Dennis Smalley, 'Spectromorphology: explaining sound-shapes', *Organised Sound* 2, 2 (1997): 107.

<sup>94</sup> Carolina Vasilikou, 'Sensory Navigation in the City Centre. Perceptual paths, sense walks and interactive atmospheres', (paper presented at the 3<sup>rd</sup> International Congress on Ambiances, Volos, Greece, September 2016), 559, <https://hal.science/hal-01414151/document>.

<sup>95</sup> Manuella Blackburn expands Smalley's concept of spectromorphology and vocabulary to present compositional approaches based on the visualisation of soundshapes, the understanding of which is rooted in our perception of sound based on worldly experience. For example, Blackburn describes an *attack* sound as something akin to a door being slammed, or handclapping, whereas more sustained sounds might be related to our experiences of a microwave hum or running water. See Manuella Blackburn, 'The Visual Sound-Shapes of Spectromorphology: an illustrative guide to composition', *Organised Sound* 16, 1 (2011): 6.



project focussing on the carillon, *Ordinary Light*, combines both my approaches to score-based and acousmatic work to explore how different types of musical place can intersect through the experience of sound. In Chapter 4, the issues raised in the previous chapters come to fruition, exploring how musical materials as intertextual references, soundmarks, and sonic landscapes can be applied to score-based music.

## Chapter 3. Soundmarks and Becoming

### 3.1 Soundmarks of the City

#### 3.1.1 The 'Soundmark' and Public Space

In Chapters 1 and 2, the city and notions of landscape were used to describe the relationship between human beings and their environment, and the role which sound plays in the experience and formation of place. In this chapter, two case studies of site-specific instruments found in public spaces are used to explore sonic landscapes further, the Edith Adamson Carillon in Newcastle Civic Centre, and the Aubertin organ in the King's Hall, Newcastle University. Public spaces offer the potential for placemaking through engagement with soundmarks. Batchelor refers to this potential as the 'unknowingness' of public space, an ambiguous site for making connections and negotiating place meaning.<sup>96</sup> We might say that public space offers a site for re-negotiating place meaning, too, which resonates with the circumstances that led me to undertake this research project. The social isolation brought on by the national lockdowns fundamentally changed the way in which people were allowed to engage with public space and affected the way public instruments were used. Before turning to the two site-specific projects using public instruments in the portfolio, the *soundmark* is introduced as an identifiable part of the sonic landscape which contributes to place identity, and positioned in the placemaking process using Deleuze and Guattari's notion of *refrain*.

In Chapter 2, landscape was used as a metaphor to describe immaterial place, sites formed in the mind of the listener through engagement with sound. This ability to comprehend landscape characteristics in sound, however, would be impossible without prior experience of, or *immersion* in, the worldly perceived environment.<sup>97</sup> This section turns to the landscape of Newcastle upon Tyne as it relates to its soundmarks, and while a focus on sound is maintained, the place of the city plays an equally important role.

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<sup>96</sup> Peter Batchelor, 'Lowercase Strategies in Public Sound Art: Celebrating the transient audience', *Organised Sound* 18, 1 (2013): 20.

<sup>97</sup> "Immersion" is described by Moirika Reker as the totality of bodily experience and how landscape understanding is rooted in environmental experience. While she warns against the careless use of landscape as a blanket term for anything we can behold, she advocates for landscape as representative of our immersion in the environment, echoing Ingold's "agent-in-its-environment". See Moirika Reker, 'Bridging City and Landscape', in *Philosophy of Landscape: Think, Walk, Act*, eds. Adriana Veríssimo Serrão and Moirika Reker (Lisbon: Centre for Philosophy at the University of Lisbon and Authors, 2019), 270; for "agent-in-its-environment" see Ingold, *The Perception of the Environment*, 173.

R. Murray Schafer's notion of the *soundmark* has been widely adopted in soundscape studies, acoustic ecology, and in fields such as urban design, to describe a sound which signifies a particular place.<sup>98</sup> A soundmark has unique qualities to the location in which it is situated, demarcating a place; for example, a village bell ringing at the hour.<sup>99</sup> For Kreutzfeldt and Søbchting, as well as Schafer, a soundmark carries with it a place identity, linking it to one's memory of particular place.<sup>100</sup> It is also a community sound, heard by a large amount of people – for example, the carillon in Newcastle upon Tyne is heard by members of the public twice weekly during recitals.<sup>101</sup> The soundmark is 'essentially an auditory landmark', one which punctuates the soundscape of a location, and while this might undermine the powerful visual contribution that the architecture of a carillon tower can add to the perceived environment, the term offers a means of conveying the perceived importance of particular sounds in a soundscape in comparison to others.<sup>102</sup>

In the modern world, and particularly in the UK, the carillon presents an interesting site-specific case study in soundmarking. Bells are no longer required to carry out the historical social functions of denoting times of day, year, or religious gatherings, yet they still remain a familiar sound in Newcastle upon Tyne and elsewhere across the world.<sup>103</sup> Where the soundmark of a ringing bell could have become obsolete, being silenced and holding only a historical or heritage value, carillons are used for musical performance to contribute the cultural activities of their respective cities and towns. The bells included in the Edith Adamson Carillon (carillons must have at least twenty-three bells), and individual and smaller groups of bells that are not part of a larger instrument, can be heard daily across Newcastle in different locations. Excluding the carillon in Newcastle Civic Centre there are only fourteen other manually operated carillons in the UK, meaning that the instruments typify only a minute fraction of bells found and heard across the country (in comparison to the

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<sup>98</sup> Schafer, *The Soundscape*.

<sup>99</sup> Eben J. Muse, 'The Event of Space: Defining Place in a Virtual Landscape', in *Creating Second Lives: Community, Identity and Spatiality as Constructions of the Virtual*, eds. Astrid Ensslin and Eben J. Muse (London/New York: Routledge, 2011), 191.

<sup>100</sup> Jacob Kreutzfeldt and Rune Søbchting, 'The Aesthetics of the Soundmark', *Public Art Discourse* 9, 2 (2019): 67.

<sup>101</sup> Schafer, *The Soundscape*, 274.

<sup>102</sup> Deng et al., 'Soundscape composition as a new music genre', (paper presented at the International Conference on Multimodal Experience of Music, Sheffield, March 23–25, 2015), 002, [https://www.researchgate.net/publication/279748625\\_Soundscape\\_Composition\\_as\\_a\\_New\\_Music\\_Genre](https://www.researchgate.net/publication/279748625_Soundscape_Composition_as_a_New_Music_Genre).

<sup>103</sup> See, for example, Luc Rombouts, *Singing Bronze: A History of Carillon Music* (Leuven: Leuven University Press, 2014), 39; Dolly MacKinnon, '"The Ceremony of Tolling the Bell at the Time of Death": Bell-ringing and Mourning in England c.1500–c.1700', in *Music and Mourning*, eds. Jane W. Davidson and Sandra Garrido (London: Routledge, 2016), 31; and, Brenda H. Kiser and David Lubman, 'The soundscape of church bells – sound community or culture clash', *Journal of the Acoustical Society of America* 123, 5 (2008): 9434.

Netherlands or USA, where the number of carillons is far greater). The functional decline of the tolling bell, owing to societal and technological change, meant that by the nineteenth century the soundmark of the tolling bell ‘was no longer required for society to function,’ a setting ‘in which the place of the carillon was not self-evident.’<sup>104</sup> While bells are still used in the twenty-first century for timekeeping – the bells of St. Nicholas Cathedral in Newcastle upon Tyne (not part of a carillon), for example, continue to sound the Quarters day and night – they are not socially required to do so.<sup>105</sup> Contemporary developments in music listening practices have expanded and intensified the ways in which music can be consumed, owing to the growth of digital streaming services,<sup>106</sup> and a growing internal soundworld formed through headphone listening, which Lloyd et al. posit leads to less engagement with one’s immediate environment, blocking out external cues.<sup>107</sup> Rombouts describes this change in the context of the eighteenth and nineteenth centuries, when the experience of music ‘gradually shifted from outdoors to indoors with the emergence...[of] concert halls,’ and the increase in the ‘private sphere’ of home music-making.<sup>108</sup>

Owing, however, to the historic soundmarking of bells, whether through carillon performance, the sounding of the Westminster Quarters on smaller groups of bells, or of change ringing bells – the latter of which has particularly strong traditions in Newcastle upon Tyne<sup>109</sup> – bells can often be heard on a listening walk through the city centre today, and still carry with them a significance that is ingrained in cultural memory. The carillon at Newcastle Civic Centre remains an important soundmark in the soundscape of the Barras Bridge area, although its existence is veiled, heard but not seen. Before turning to an account of the carillon project presented in the portfolio, *Ordinary Light*, the ‘soundmark’ is explored

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<sup>104</sup> Rombouts, *Singing Bronze*, 149.

<sup>105</sup> The social function of bells in the Renaissance in keeping time, announcing prayers, mass, and work, meant that bells as a soundmark were central to the urban experience. They were not only audible signals but were imbued with significance and meaning and became part of the community identity. See Niall Atkinson, *The Noisy Renaissance: Sound, Architecture, and Florentine Urban Life* (Pennsylvania: Pennsylvania State University Press, 2016), 122.

<sup>106</sup> Josko Lozic, ‘Digitalization Creates a New Paradigm of the Global Music Industry: The Traditional Music Industry is Under Pressure of the Streaming Platforms’, (paper presented at 46<sup>th</sup> International Scientific Conference on Economic and Societal Development, ‘Sustainable Tourist Destinations’, Varazdin, October 24–25, 2019, [https://www.researchgate.net/publication/342004627\\_DIGITALIZATION\\_CREATES\\_A\\_NEW\\_PARADIGM\\_OF\\_THE\\_GLOBAL\\_MUSIC\\_INDUSTRY\\_THE\\_TRADITIONAL\\_MUSIC\\_INDUSTRY\\_IS\\_UNDER\\_PRESSURE\\_OF\\_THE\\_STREAMING\\_PLATFORMS](https://www.researchgate.net/publication/342004627_DIGITALIZATION_CREATES_A_NEW_PARADIGM_OF_THE_GLOBAL_MUSIC_INDUSTRY_THE_TRADITIONAL_MUSIC_INDUSTRY_IS_UNDER_PRESSURE_OF_THE_STREAMING_PLATFORMS)).

<sup>107</sup> Lloyd et al., ‘Don’t stand so close to me: The effect of auditory input on interpersonal space’, *Perception* 38 (2009): 617.

<sup>108</sup> Rombouts, *Singing Bronze*, 150.

<sup>109</sup> ‘Newcastle Cathedral’, Bells of the North-East of England: A Bellringer’s Guide, accessed May 27, 2023, <https://northeastbells.co.uk/newcastle-cathedral/>.

further to provide a context for carillon activity in the United Kingdom and how it aligns with this place-based research.

### **3.1.2 Soundmarking and 'Refrain'**

Soundmarking is achieved, according to Kreutzfeldt and Søbchting, through ritualisation, a repetitive process whereby 'a behavioural pattern...gives rise to an autonomous form.'<sup>110</sup> In the case of the Edith Adamson Carillon, the repeating sound of the bells ingrains them as a part of the city centre's identity and sonic landscape. Deleuze and Guattari use *refrain* to describe the repetition of sound which becomes expressive of a territory (or place).<sup>111</sup> The soundmark, part of the unique 'acoustic life of the community', becomes embedded in cultural memory, allowing the sound to become symbolic of place.<sup>112</sup>

Just as Heidegger posits that we are already being-in-the-world, Kreutzfeldt and Søbchting note that the refrain takes place and forms a pattern '*before* its particular meaning is established' [emphasis original].<sup>113</sup> In order for a soundmark to be imprinted onto the sonic landscape, embedded in cultural memory, the refrain has to *be* in order to *become*. Like consciousness, it dwells prior to building. The ringing of a church bell must be a repetitive practice before it gains communal meaning. It becomes expressive, to echo Deleuze and Guattari, 'when it acquires a temporal constancy and a spatial range that make it a territorial, or rather territorializing, mark'.<sup>114</sup> The refrain becomes expressive of a community's landscape after being established through ritualisation.

The carillon tradition in Newcastle upon Tyne follows the twice-weekly recital style during which 'the carillonneur is playing for an [equally] invisible audience of passers-by in the city [...] They in turn experience the music consciously or unconsciously'.<sup>115</sup> The repertoire includes classical music arranged to suit the carillon and traditional folk tunes. It is not uncommon to hear tunes that have their origin from the North-East of England which are easily recognisable by locals, which recalls Smółka's remark that music which comes from a particular city can often be thought of as 'the sound of the city', or a distinct part of it. For Smółka, the music of a particular city is 'an element of cultural landscape that bonds together two halves of its name – the sound and the city', which becomes part of that

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<sup>110</sup> Kreutzfeldt and Søbchting, 'Aesthetics of the Soundmark', 68.

<sup>111</sup> Deleuze and Guattari, *A Thousand Plateaus*, 344.

<sup>112</sup> Schafer, *The Soundscape*, 10.

<sup>113</sup> Kreutzfeldt and Søbchting, 'Aesthetics of the Soundmark', 68.

<sup>114</sup> Deleuze and Guattari, *A Thousand Plateaus*, 347.

<sup>115</sup> Rombouts, *Singing Bronze*, 315.

location's heritage.<sup>116</sup> The claim that music can become the sound of a city could, however, be interpreted as problematic in discussions of the urban soundscape where its residual soundscape is concerned, particularly because Smółka is prioritising the musical styles of particular locations over the potentially unique sonic characteristics of particular urban centres. It could be argued that Smółka is, without explicitly stating it, arguing that a particular musical style might become a soundmark of a location in addition to, or as a substitute for, the sounds of the city, though this remains unclear. In the context of the Edith Adamson Carillon, the traditional music of the region is reconciled to the urban soundscape by way of the instrument as a soundmark of the city.

Although Smółka is setting up a context for the discussion of albums which lend a city a particular 'sound', his ideas are easily transferrable to the musical activity of the Edith Adamson Carillon. The recital format, in contrast to a formal concert performance, naturally suits the carillon and those sitting below in the Civic Centre gardens or passing by and supports Smółka's notion that the music of the city becomes part of its identity. This, however, means that although the City Carillonneur often gives tours to those interested and maintains a social media page, there is a distinct lack of common knowledge in the city about the carillon because it is always heard as one of many sounds in the city centre's soundscape. Many people regularly hear the bells, but do not know, or misunderstand, where the ringing is coming from.

The soundmark of the Civic Centre carillon sits among the keynote sounds of the city, which include passing buses and the rush of university students across St. Mary's Place, and the bustle of crowds shopping nearby on Northumberland Street. *Keynote sounds* are 'sounds of a landscape [...] created by its geography and climate', which have a distinct effect on the way people engage with their environment. Keynote sounds are experienced unconsciously but their absence would be immediately noticed. These sounds constitute the general soundscape of a location and have 'a deep and pervasive influence on our behaviour and moods', even without conscious acknowledgement. These keynote sounds were silenced during the UK national lockdowns and their absence was felt immediately when the city was bathed in silence.<sup>117</sup> Above this sonic backdrop, 'more fugitive or novel events are heard' which can become soundmarks because of their unique qualities.<sup>118</sup> The sound of the

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<sup>116</sup> Maciej Smółka, *The Sound of a City: A Study of the Phenomenon* (Berlin: Peter Lang Group, 2023), 19.

<sup>117</sup> Schafer, *The Soundscape*, 9–10.

<sup>118</sup> Schafer, *The Soundscape*, 48.

carillon is a very different sound to other sets of bells in Newcastle upon Tyne, and has the potential to become a soundmark of the city through one's experience of it.

### ***3.1.3 A Brief History of Carillon Music in Newcastle***

The carillon as an instrument was first introduced to Newcastle upon Tyne in 1929 – just under forty years before the new Civic Centre was officially opened in 1968 – at the North-East Coast Exhibition, which was a six-month event (May–October 1929) held in Exhibition Park. The Wellington Carillon, which would go on to permanently reside in Wellington, New Zealand, was presented as the Evening Chronicle Campanile to the public attending the exhibition and sat at the northwest edge of the lake near the building which is now the Wylam Brewery. This appearance of the instrument is likely what influenced the decision to include a carillon on the new Civic Centre building, as well as the recent appearances of carillons elsewhere in the country.<sup>119</sup> Photographs captured of the North-East Coast Exhibition for the Evening Chronicle in 1929 include the carillon by the lake as one of the main attractions.

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<sup>119</sup> The Loughborough carillon was completed in 1923, for example. See 'The Bell Chamber and Balcony', Loughborough Carillon Tower and War Memorial Museum, accessed March 26, 2024, <https://www.carillontower.org.uk/bells.htm>. See also Rombouts, *Singing Bronze*, 215; Rombouts documents the visit of John D. Rockefeller to the Loughborough carillon in July 1923 shortly after its completion.

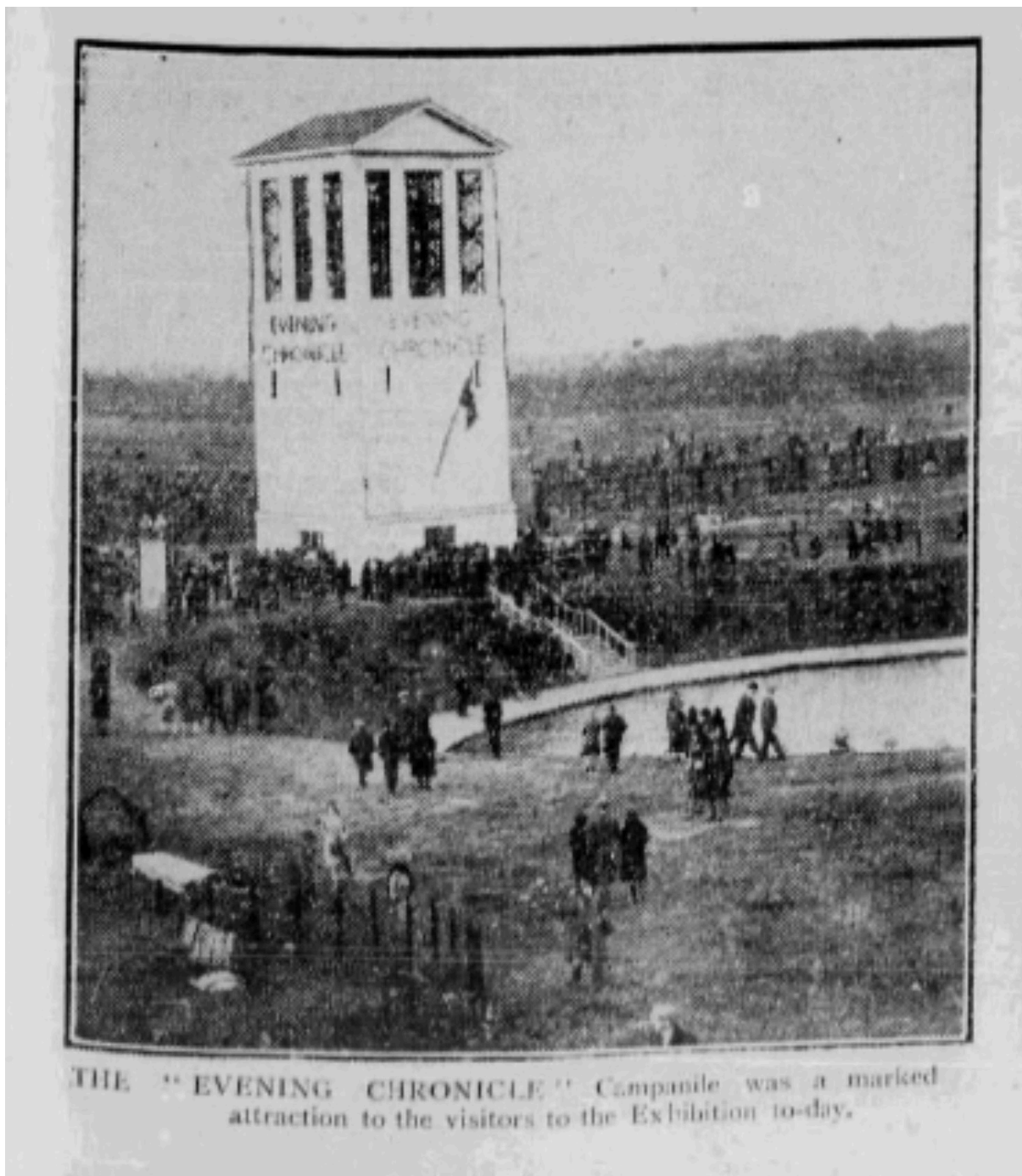


Figure 3.1: An image from the *Evening Chronicle* (May 15, 1929) of the Evening Chronicle Campanile at the North-East Coast Exhibition, west and south façade. The caption reads, 'THE "EVENING CHRONICLE" Campanile was a marked attraction to the visitors to the Exhibition to-day.' © Newcastle Chronicle/Reach plc. Reproduced with permission.<sup>120</sup>

<sup>120</sup> 'Women's Championship: At the Exhibition To-day', *Evening Chronicle* (Newcastle upon Tyne), 13,587, May 15, 1929, 7.





Figure 3.2: An image from the *Evening Chronicle* (May 21, 1929) of the Evening Chronicle Campanile, south and east façade. The caption reads, 'HOLIDAY THRONGS at the Exhibition stroll round the lake and listen to the "Chronicle" carillon.' © Newcastle Chronicle/Reach plc. Reproduced with permission.<sup>121</sup>

<sup>121</sup> 'Newcastle's White City: Exhibition Scenes: Cadets in Camp', *Evening Chronicle* (Newcastle upon Tyne), 13,592, May 21, 1929, 7.

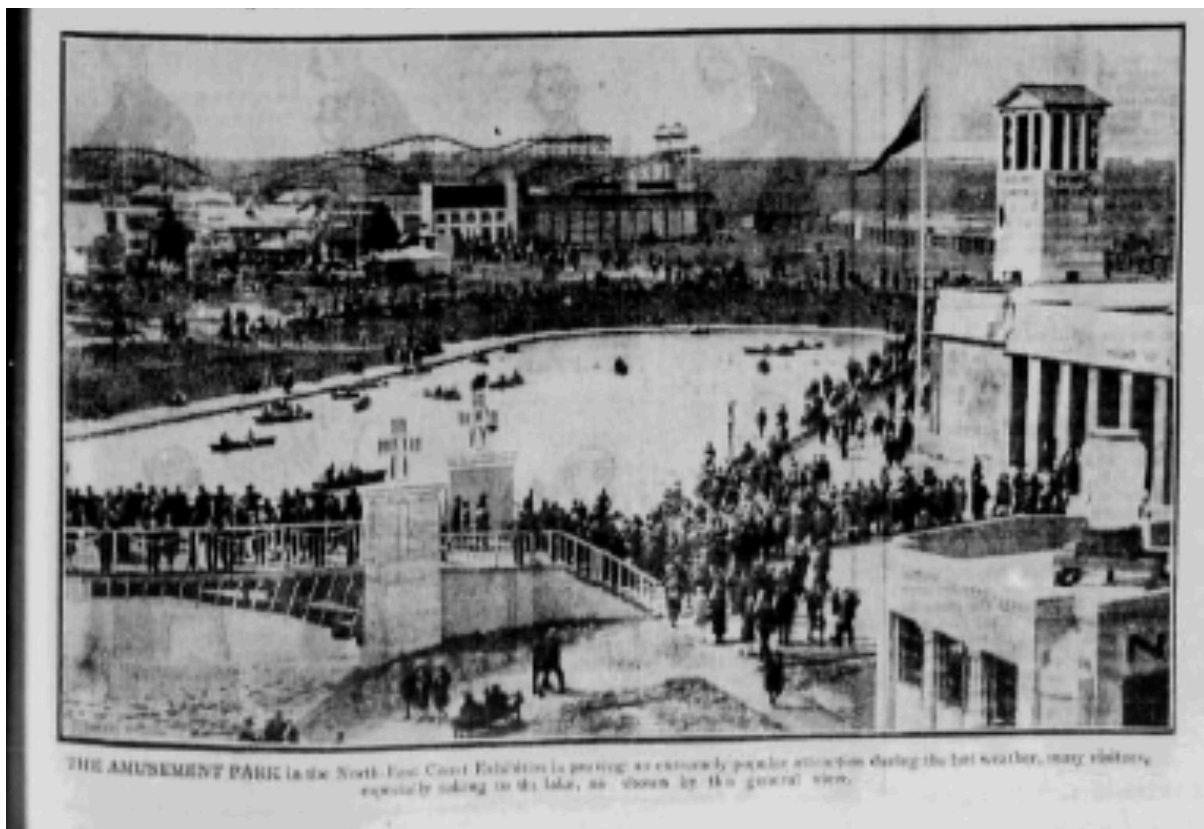


Figure 3.3: An image from the *Evening Chronicle* (May 21, 1929) of Exhibition Park during the North-East Coast Exhibition. The Evening Chronicle Campanile, south and east façade, stands on the right. The caption reads, 'THE AMUSEMENT PARK in the North-East Coast Exhibition is proving an extremely popular attraction during the hot weather, many visitors, especially taking to the lake, as shown by this general view.' © Newcastle Chronicle/Reach plc. Reproduced with permission.<sup>122</sup>

<sup>122</sup> 'To-day's Cricket at Jesmond: Cyclists' Carnival: Police Sports', *Evening Chronicle* (Newcastle upon Tyne), 13,592, May 21, 1929, 5.



**Figure 3.4: An image from the *Evening Chronicle* (August 6, 1929) of a sporting event during the North-East Coast Exhibition. The belfry *Evening Chronicle* Campanile, east and north façade, can be seen from the sporting ground. The caption reads, 'SCENE at the Police Sports at the North-East Coast Exhibition, showing a section of the huge crowd watching the start of the mile cycle handicap.' © Newcastle Chronicle/Reach plc. Reproduced with permission.<sup>123</sup>**

The arrival of the bells in Newcastle upon Tyne was reported by the *Evening Chronicle*, which documents the expectation that the bells as a new, unfamiliar sound created by a very unique and heavy instrument would draw a large crowd.

<sup>123</sup> 'Picturesque Northumberland Waterfall: Athletes in Action', *Evening Chronicle* (Newcastle upon Tyne), 13,658, August 6, 1929, 7.

# VICTORY BELLS ARRIVE.

## Carillon For Opening Of Exhibition.

### MONSTER HUNG.

#### Progress of "Chronicle" Enterprise.

THE FIRST of the Wellington (New Zealand) victory bells, obtained for the North-East Coast Exhibition by the "Newcastle Chronicle," has reached the Town Moor in safety, and been hung in the framework of the great campanile which is being erected to house the full carillon within a stone's throw of the "Chronicle" Pavilion.

Forty-eight others are to join it there to make up the peal, and a photograph on the picture page shows the scene on the wayside, to-day, as some of them were landed and carried away in lorries for storage until all is ready for hanging them.

The bell now in position is the largest of the family, weighing 3 tons 8 cwt., and its removal to the Exhibition grounds by Currie and Co. from the warehouse, caused the liveliest interest. A dozen vigorous workmen were needed at the winch to hoist it to its place in the tower.

It commemorates the work of the Australian and New Zealand Army Corps in the Gallipoli campaign (1916) and was made to the order of the Wellington business establishments. It bears the inscription: "The troops had performed a feat which was the praise bestowed upon them by Field Marshal (then Lieut.-General) Sir William Birdwood, their commander."

On Messrs. Currie's premises an "Evening Chronicle" representative watched the other members of this huge family arriving. Every one is from a separate section of the community at Wellington, which has chosen this way of making immortal the memory of the fallen. Some are monsters, rivalling in dimensions the one which is already at the Exhibition, some medium-sized and a few diminutive, the smallest of all weighing only nine pounds. But all are beautiful in the extreme.

An official of the firm of Mocklam and Waightman engaged on the work is confident that all will be ready by the end of next week, the bells will be tested a day or two before the opening ceremony, and their combined voices will surely draw thousands to the Exhibition.

### MUSIC AND DANCING.

#### Licence Granted By Magistrates.

An application for a music and dancing licence in respect of the Festival Hall and grounds of the North-East Coast Exhibition was made to Newcastle magistrates, to-day, by Mr. T. D. Hoggings, of the Town Clerk's Department.

It is proposed that there should be music from both the bandstands, and, possibly, somewhere near the lake.

The licence was granted.

Figure 3.5: An article in the *Evening Chronicle* (May 3, 1929) which announces the arrival and installation of the first and heaviest bell of the Evening Chronicle Campanile. © Newcastle Chronicle/Reach plc. Reproduced with permission.<sup>124</sup>

Nearly forty years later, the carillon installed in the Newcastle Civic Centre was bequeathed to Newcastle City Council by Mr James Adamson in memory of his late wife Edith Adamson

<sup>124</sup> 'Victory Bells Arrive', *Evening Chronicle* (Newcastle upon Tyne), 13,577, May 3, 1929, 9.

at the cost of £21,000, the bells of which were cast by Taylor's of Loughborough.<sup>125</sup> Adamson was a businessman, the founder of British Paints Ltd., whose donation of the cost of the carillon allowed for the installation of the instrument at a time when discussions were taking place over how the council should best spend their budget.<sup>126</sup>



Figure 3.6: An article in the *Evening Chronicle* (September 1, 1970) documenting the gift of a tape containing a recording of the Edith Adamson Carillon to the son of Mr James Adamson from Councillor William Harding. © Newcastle Chronicle/Reach plc. Reproduced with permission.<sup>127</sup>

<sup>125</sup> 'Edith Adamson Carillon – Newcastle Civic Centre', Newcastle City Council, accessed April 10, 2024, <https://www.newcastle.gov.uk/our-city/edith-adamson-carillon-newcastle-civic-centre>.

<sup>126</sup> 'Gift family receive carillon tape', *Evening Chronicle* (Newcastle upon Tyne), 29,034, September 1, 1970, 3.

<sup>127</sup> 'Gift family receive carillon tape', *Evening Chronicle*, 3.



# 'Abattoir is more important than a carillon'

A NEW abattoir is far more important to Newcastle than a carillon of bells or other forms of unnecessary municipal spending, said the chairman of the city's Chamber of Trade, Mr. Eric Hepple-Wilson, today.

Conditions at the abattoir were disgusting and revolting in their mediocrity.

He told an executive meeting that the police surgeon for Newcastle had written to the Chamber expressing his concern about the old and inadequate buildings of the abattoir, which led to the inevitable terrorisation of beasts and resulted in the frequent escape of animals maddened by fear into the City Centre.

He himself as a student had found a visit to the abattoir "a horrible experience". He asked the Chamber to press for the building of modern slaughterhouses as a matter of extreme urgency.

## PLANNED

Mr. Hepple-Wilson said the letter had been passed on to three butcher members of the Chamber.

One, Mr. Ian Dodds, said the problem was very much in the minds of the meat traders and pointed out that a new cattle market and slaughter house was planned at a cost of more than £2,000,000. It would mean a complete answer to all present or foreseeable problems.

Mr. Hepple-Wilson also revealed that the town clerk had told the secretary in a letter that the scheme took a considerable amount of planning but it was hoped the new buildings would be in operation by the middle of 1967.

Miss I. McWilliams said she was convinced that as far as possible procedure at the abattoir was humane and asked if it was in order to discuss the matter without even one member of the meat trade present.

## NOT NEGLECTED

Mr. H. Weiner said the Corporation was not neglecting the problem. The plans were to build the new abattoir at the old factory of Mitchell Bearings on the lower end of the Scotswood Road.

It was agreed to ask the Town Clerk for further information on the abattoir.

## 2 YEARS FOR CITY CAR RAIDER

A NEWCASTLE man who admitted stealing cars worth more than £3,000 was jailed for two years at Nottinghamshire Quarter Sessions.

James McDonald Keith (26), a labourer of Rutland Avenue, Daisy Hill, had been sent to the Sessions for sentence by Mansfield magistrates who had found him guilty of stealing two cars one worth £350 from Mansfield and the other worth £200 from Preston.

Keith asked for four similar cases to be considered. All the offences had been committed with other men.

Mr. P. D. Cotes-Freedy, prosecuting, said that the four other offences which Keith wished to have considered involved the theft of cars worth in all £2,913 from Harrogate and Wakefield.

## Resprayed

He said that a car was stolen from the forecourt of a firm in Mansfield on January 9 and later recovered in Newcastle. It had been resprayed and fitted with different registration plates.

The car was identified by its engine number. Mr. Cotes-Freedy said that other men involved in the "wholesale stealing of cars" had been dealt with and Keith was himself serving a prison sentence for a similar offence last December.

Keith's new sentence of two years will run consecutively with the one he is now serving.

## Burned woman 'satisfactory'

Mrs. Alice Tate, aged 62, of Nicholson Street, Ryhope, was found dead in her bed.

Figure 3.7: An article in the *Evening Chronicle* (June 18, 1963) reporting a discussion about whether a new abattoir was more important than a carillon for the Civic Centre. Mr James Adamson would later come to bequeath the cost of the carillon to the council. © Newcastle Chronicle/Reach plc. Reproduced with permission.<sup>128</sup>

<sup>128</sup> 'Abattoir is more important than a carillon', *Evening Chronicle* (Newcastle upon Tyne), 26,800, June 18, 1963, 7.

## MIXED RECEPTION FOR THE CARILLON

**T**HERE was a mixed reception from Newcastle councillors today to the news that the bells for the carillon to be installed at the new Town Hall are to cost £21,600.

Coun Ian Branson described it as "an awful lot of money" but did not consider it extravagant. The bells would outlive the new building many times over and would become a feature of Newcastle life, he said.

Ald Mrs Theresa Russell said the carillon would be an asset to the city and could not be thought of as something installed only for the present. "We know we are hard up and must economise, but this is for posterity," she said.

### A clock?

Coun Dennis Larrow would have preferred a chiming clock or bells installed in a more conventional belfry.

"But bearing in mind the total cost of the Town Hall, £21,000 is not a great deal of money," he added.

Ald J. Burton wondered if the public would be able to hear it above the noise of traffic in the Haymarket.

An illuminated clock or a coat of arms on the town hall's tower block would have suited Coun Percy Boydell.

Ald Dr Henry Russell said that £21,000 was not excessive.

The carillon will contain 25 bells, the largest of which will be six feet in diameter.

Figure 3.8: An article in the *Evening Chronicle* (February 6, 1963) reporting that, while councillors knew the price of the carillon would be £21,000, there was a desire to have the instrument and the intention to have it become part of the city life. © Newcastle Chronicle/Reach plc. Reproduced with permission.<sup>129</sup>

The carillon had a significant impact on the urban soundscape of late-1960s Newcastle upon Tyne, changing the composition of the background sounds of everyday life in the city. This

<sup>129</sup> 'Mixed Reception for the Carillon', *Evening Chronicle* (Newcastle upon Tyne), 26,288, February 6, 1963, 5.

was not always met with favour, most likely because the bells were still a relatively new sound to the city – the last time a carillon had been heard was during the North-East Coast Exhibition which closed in October 1929. The article below reports on the irritation of Newcastle University students whose exams were interrupted by the sounds of the carillon around two years after the Civic Centre was opened:



Figure 3.9: An article in the *Evening Chronicle* (June 10, 1970) reporting the irritation of students at hearing the carillon bells during their exams. © Newcastle Chronicle/Reach plc. Reproduced with permission.<sup>130</sup>

This notwithstanding, the carillon became a unique part of the soundscape of the city from 1968, a part which garnered interest from local residents and the *Evening Chronicle* which, forty years earlier, had introduced readers to the Evening Chronicle Campanile at Exhibition Park. As the articles above document, the carillon would often play familiar tunes at regular

<sup>130</sup> 'Carillon takes its toll', *Evening Chronicle* (Newcastle upon Tyne), 28,963, June 10, 1970, 10.



times, becoming a recognisable part of the soundscape of the city tied to its local heritage. This tradition continues to the current day, with the City Carillonneur giving regular recitals, still playing everything from classical music to familiar folk tunes.

**FEATURES**

EVENING CHRONICLE, Friday, April 12, 1991

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**EACH Saturday afternoon the bells ring out from Newcastle's Civic Centre across the city crowded with shoppers. This week Eldon went high above the crowds to find out what all the noise was about.**

**Peter Fairley's  
Eldon**

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**John Knox at the control levers of the carillon in Newcastle Civic Centre.**

**WANTED: a keen young musician with a head for heights and plenty of stamina. There is a great opportunity to play regularly to an audience of thousands — with tuition as a carillonneur provided.**

A what? You're forgiven for needing a dictionary to find out, for carillons and the people who play them - carillonneurs - are not exactly a glut on the market in these shores.

Carillons are very special bell towers where the music comes not from a gang of rope pullers but from one man or woman sitting at a console of levers to control the peal of bells above.

Newcastle is one of only 12 places in Britain to a carillon and the odds are that if you're in town of a Saturday afternoon you'll have heard it ringing out from high atop the Civic Centre.

In a little room just beneath the 25 finely-tuned bells, the biggest of them weighing in at a mile over three-and-a-half tons, you will find one of Britain's handful of fully-trained players of the beast, music teacher Mr John Knox, of 122, Holmesley Road, Sandyford, Newcastle.

John, also this year's President of the British Carillon Society, an outfit whose membership is probably on a par with the Union of Saggi-makers or Botton Knockers but none the less worthy for that, is now seeking a new devotee to keep alive the skills of making music from enough metalwork to build a Challenger tank.

**Inherit**

"I began almost by accident myself when I saw an advertisement for a professional carillonneur in Aberdeen while I was a student at the Royal Academy of Music there. I was accepted and taught by one of the great players on their 48 bell carillon.

"The problem is I'm getting to the age now where it is time to think about training someone else to take over."

What they would inherit is the use of a long-emptying walk up to the cubby hole 200 feet above the city - lined views in town guaranteed - and the chance to play the biggest noise for miles around.

"Depending on the wind it can be heard from six miles away," said John. "The best place to listen isn't right at the base of the tower but a hundred yards or so away because the sound is angled down at forty five degrees.

The story of



**An  
a-peal  
for  
help!**

very big in the Low Countries, where they first appeared in the Sixteenth Century and are also growing in popularity in America and Canada.

Which is why one of these days you might just hear some familiar strains floating out over some Mid West city - something like Baydon Races. For John is one of the few who actually scores for the carillon and naturally includes some local favourites among his selections.

**Control**

What makes it so special? The fact, he says, that you can play each note as loud and soft as you like. "There's a far more control than ringing out chimes, it allows for a great deal of expression.

If there are any Fairy Godmothers looking for a job out there John Knox has a couple of requests. The first would be to come up with a keen young trainee. And the second?

"Now we can only play two octaves. I'd love to see the carillon console with another two, making fifty bells altogether. The trouble is, these days rich benefactors aren't all that common.

When, reluctantly, the show closed and the carillon was finally dismantled the then Lord Mayor was asked would it not be nice if one day Newcastle could have one of its own. It would, he said, be highly desirable.

"Well it was but it took nearly forty years before it happened and even then the tower was built before any carillon was installed.

You tend to find historic connections behind the installation of carillons.

"Birmingham has one because the Cadbury family were keen, having seen them in Belgium. In Loughborough, Leicestershire, they have one because the town has connections with bell founding.

Although in Britain few would know a carillon if it clapped them around the ear they are



**The inner workings of the carillon made in Britain for New Zealand and which brought the crowds flocking to it when it played at the North East Coast Exhibition held in Newcastle in 1929.**

**Desirable**

A huge carillon of forty nine bells had been built in Britain for New Zealand to become the Wellington War Memorial Carillon.

The Evening Chronicle persuaded the New Zealanders to lend to the North for the Summer.

"It was the hit of the show," said John. "When



**The Chronicle's carillon building at the Exhibition.**

Figure 3.10: An advert in the *Evening Chronicle* (April 12, 1991) advertising carillon lessons and providing information about the instrument. © Newcastle Chronicle/Reach plc. Reproduced with permission.<sup>131</sup>

<sup>131</sup> Peter Fairley, 'An a-peal for help!' *Evening Chronicle* (Newcastle upon Tyne), 35,462, April 12, 1991, 14.

# Ap-pealing show

**T**HE bells will be ringing loud and tuneful in Newcastle next Monday when they celebrate the opening of the city's Carillon Week with everything from Mozart to Blaydon Races, wafting out from the Civic Centre bell tower.

The men at the keyboard, Michael Boyd, John R Knox and Michael Jennings, will be giving half hour recitals each weekday evening from

7.30pm and on Saturday afternoon from 2.30pm.

Among the special items, John Knox tells me, is a newly composed piece called Four Pieces for Carillon, composed by Robin Terry to be played by Michael Boyd on Wednesday as his opening item of the programme.

"Robin studied composition with the late David Barlow, at Newcastle University, and his music is quite unlike anything so far heard on the Newcastle Carillon," John tells me

Figure 3.11: An article in the *Evening Chronicle* (August 14, 1991) advertising Newcastle's 'Carillon Week' which featured newly composed music by a Newcastle University student for the Edith Adamson Carillon. Copyright of the Newcastle Chronicle/Reach plc. Reproduced with permission.<sup>132</sup>

## 3.1.4 The Becoming of Place: Deleuze and Guattari's 'Rhizome'

The height of the Edith Adamson Carillon tower gives its sound the means to travel across the city centre. Where the installation of *Ordinary Light* was contained within the arches and their acoustic horizon, the carillon is only inhibited by the distance the sound of the bells can travel above the keynote sounds of the Haymarket area. Both the arches and the carillon, however, maintain transient audiences, members of the public who '*become* audience members and participants simply because they encounter the art while going about their everyday activities' [emphasis original].<sup>133</sup> Although the music of the carillon does not necessarily fit Batchelor's definition of 'lowercase' – 'music which celebrates the very quiet' – Batchelor's expression of lowercase music being 'low profile' helps to describe the carillon's recital style.<sup>134</sup> While a soundmark is a characteristic sound that contributes to one's impression of a location, it is not always actively listened to – it could be heard as 'mere recognition', an *empty soundmark*.<sup>135</sup> As Batchelor suggests, 'Lowercase public art does not necessarily present the same imperative for close listening', meaning the attention levels of listeners can vary greatly. Experience testifies to this – I have both walked through

<sup>132</sup> Peter Fairley, 'Ap-pealing Show', *Evening Chronicle* (Newcastle upon Tyne), 35,568, August 14, 1991, 12.

<sup>133</sup> Batchelor, 'Lowercase Strategies in Public Sound Art', 14.

<sup>134</sup> Batchelor, 'Lowercase Strategies in Public Sound Art', 14–15.

<sup>135</sup> Joy Roles, 'Forming Soundmarks: A Critical Evaluation of the Sonic Brand within the Contemporary Mediascape', (PhD diss., University of East London, 2010), 76.

the city centre, registering that the carillon is sounding without listening closely to the music, and at other times have sat in the Civic Centre gardens and actively listened to the bells in their sounding environment.

Roles refers to an actively heard soundmark as a *full soundmark*. The full soundmark 'becomes injected with experiences and events' when 'the individual commences some form of relationship with' the soundmark. This means that a soundmark can be both empty and full in different situations. Where Roles describes a directional move from empty to full soundmark through engagement, it is more useful to reconsider this as a two-directional possibility based upon the current attention of a listener to better reflect how sounds are experienced in the course of being-in-the-world.<sup>136</sup>

This variable potential reflects Batchelor's description of public space as a site of ambiguous unknowingness. In the city there is the potential for connections to be made through the experience of soundmarks. This relationship, existing between human beings and their surrounding sonic and visual environment, can be described as rhizomatic. Opposing the linearity of arborescent structural relationships, Deleuze and Guattari's rhizome is a network of potentialities, 'not a fixed, static entity' with an unchanging hierarchy.<sup>137</sup> The connections forged through place experience are ever-evolving, co-constructive, and interconnected, and meaning is derived from the meeting of sounds and sights with consciousness. This demonstrates the 'potential for connection at any one ephemeral moment', the notion that there is always the opportunity for new connections, meanings and relationships to be developed through human experience.<sup>138</sup> The connections are neither directed solely from the environment towards human beings, nor the other way around. Contrary to the rhizome, Deleuze and Guattari describe arborescence as the 'submission of the line to the point', meaning an arborescent focus would be on the primacy of either human beings or the environment.<sup>139</sup> The focus of this portfolio, however, is on the types of places generated through human interaction with the world and its sounds; the focus is on the in-between, 'a line of becoming [which] has neither beginning nor end, departure nor arrival, origin nor destination'.<sup>140</sup>

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<sup>136</sup> Roles, 'Forming Soundmarks', 76.

<sup>137</sup> Scott Lawley, 'Deleuze's Rhizome and the Study of Organization: Conceptual Movement and an Open Future', *Journal of Postmodern Organization Science* 3, 4 (2005): 38.

<sup>138</sup> Lawley, 'Deleuze's Rhizome and the Study of Organization', 38.

<sup>139</sup> Deleuze and Guattari, *A Thousand Plateaus*, 232.

<sup>140</sup> Deleuze and Guattari, *A Thousand Plateaus*, 232.

The rhizome is characterised by becoming, the theory of which has been explored by a number of scholars in relation to both music and place. Becoming ties together all of the place experiences outlined in the portfolio, whether concerned with sonic landscape, the city, emotional responses to place, or purely musical materials. Being-in-the-world is not living in separation from the environment, but being fundamentally with it, as ‘The actions of the body makes [...] the meanings of the world emerge’.<sup>141</sup> The rhizome and the becoming it embodies speaks to the whole nature of creative practice research, in that its methodology promotes rhizomatic connection between experience, theory, and the works themselves. All of the potential connections are constantly evolving, forging links between one another in a process of co-construction.

### **3.1.5 Soundmarks and Significance**

The term ‘soundmark’ communicates the importance of a sound for a listener, though this does not necessarily indicate prominence in a soundscape. A soundmark is more meaningful than other sounds, which is discerned through the experience of these sounds, the threshold at which the listener hears them and marks one of them as more important. Like sonic landscapes formed by the relationship of sound objects in acousmatic music, soundmarks affect one’s impression of landscape through their interaction with the other sounds of the environment. This occurs whether or not, as Batchelor argues, the transient audiences subjected these public sounds are actively engaged in listening, ‘simply hear without engaging’, or any of the ‘variety of states of ambiguity between these.’<sup>142</sup>

Sound is relational, and ‘speaks to the matter of implicated bodies’, because one sound only has volume in ‘emergent relation’ to another.<sup>143</sup> Sonic conflict refers to the moment where importance is placed upon one sonic event over another, a listener hearing one of the ‘myriad of *soundspheres* that are overlapping, repelling or reinforcing each other’, made up of the urban noise of cars, people and weather.<sup>144</sup> This project is centred around the role that these sounds play in the formation of place, and how sound is inseparable from place identity and lived experience. Place experience is sensuous, where bodily perceptions

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<sup>141</sup> Victor Gonçalves, ‘Intertwining Body and Landscape: Petrarch, Rousseau and Nietzsche’, in *Philosophy of Landscape: Think, Walk, Act*, eds. Adriana Veríssimo Serrão and Moirika Reker (Lisbon: Centre for Philosophy at the University of Lisbon and Authors, 2019), 174.

<sup>142</sup> Batchelor, ‘Lowercase Strategies in Public Sound Art’, 14.

<sup>143</sup> Carvalho, ‘Aesthetics of Sound’, 159–160.

<sup>144</sup> Giralte et al., ‘Conviction and commotion’, 191.

act together to bring about a sense of place, passively hearing some sounds while actively listening to others.<sup>145</sup>

Returning to the Edith Adamson Carillon, the ringing of the bells during recitals places it in conflict with other urban noises. The sounds of traffic, people, and sirens may contribute towards an active or passive listening to the public instrument, depending on the personal circumstances of the people navigating that location. The way these sounds coalesce becomes a textural backdrop for the visual city, and how they are heard by an individual becomes the basis of the place's identity for that individual.

### **3.2 Ordinary Light – Edith Adamson Carillon**

#### **3.2.1 Overview of Ordinary Light**

*Ordinary Light* combines the score-based and acousmatic approaches employed in the portfolio, approaching the carillon from two perspectives, the first as an instrument fixed in place in a public setting, and the second as a source of pitch material for a soundwork which dislocates and manipulates the sound of the instrument to present a new way of hearing it. The work is the culmination of more than a year of exploratory practice with the carillon, detailed in the sections below. *Ordinary Light* creates an arena of listening that extends beyond the acoustic horizon of the carillon up to the Newcastle University Arches, enabling listeners to choose how they experience the work.

*Ordinary Light* invites listeners to hear the carillon playing gestural fragments in one listening location, then pass through the city centre and onto the nearby University campus to hear an installation in the arches which is based on site recordings of the carillon bells. The listeners are invited to do this in any order or wander between the locations freely. Where the carillon naturally decays while its sound travels across the Civic Centre Gardens (and is still audible at certain times on the university campus), the installation component presents a timeless space in which the sounds of the bells resonate and transform. A map of the performance and installation locations is shown in figure 3.12 below, along with indicative regions of sound travel for each location and the areas of intersection.

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<sup>145</sup> Describing the 'sensuous production of place', Sara highlight the powerful role that sound plays in producing place, exploring in her research how social musical practices lead to the development of place identity and become symbolic of place. Cohen also argues that sonic memory and heritage contribute to local identity, reinforcing the idea that the soundmark is underpinned by both individual and communal experience.' See Cohen, 'Sounding out the City', 444.

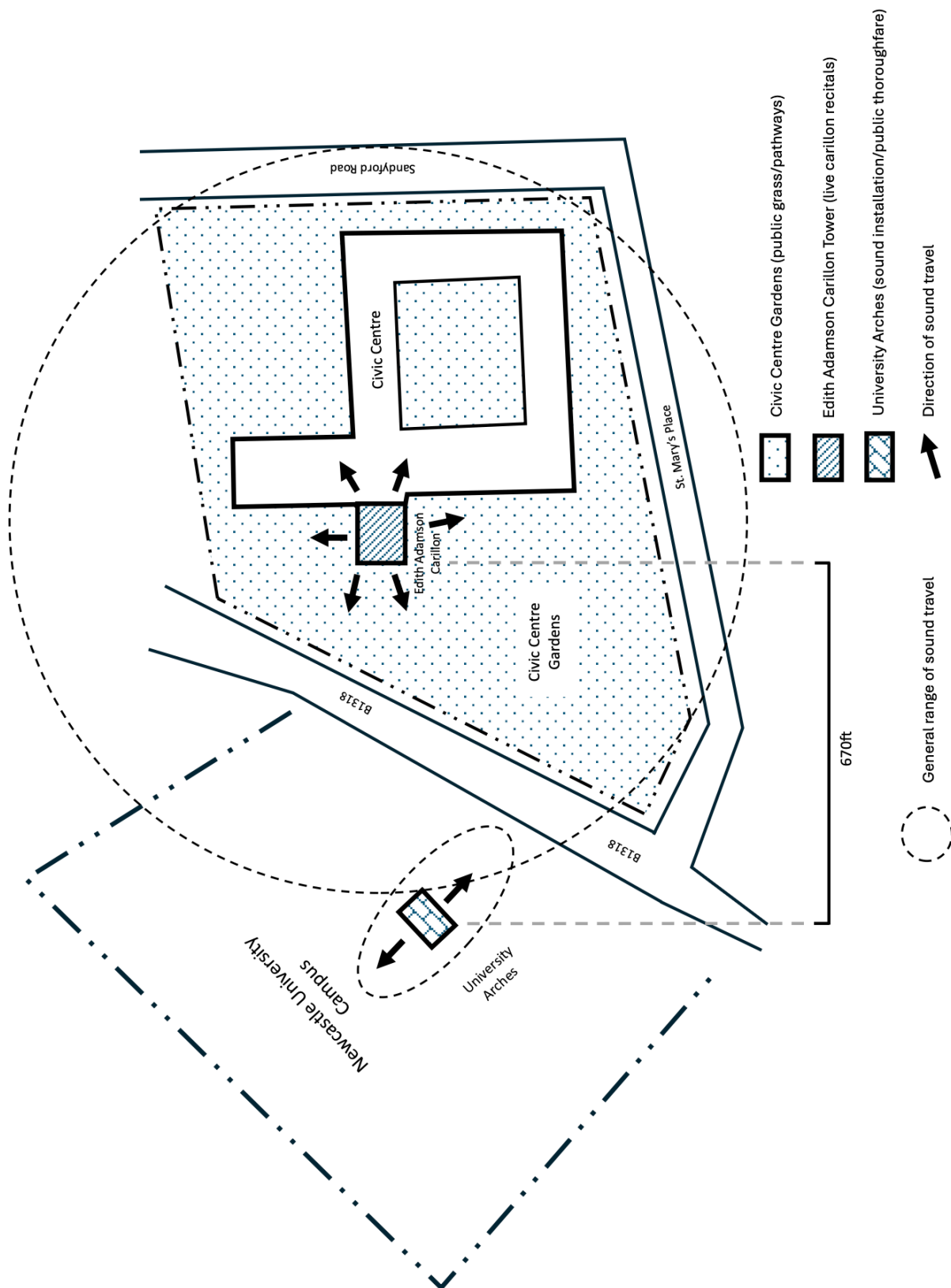


Figure 3.12: A map of the performance and installation locations of *Ordinary Light*.

The carillon's twenty-five bells were individually recorded on the roof of the Civic Centre tower, allowing me to manipulate each one independently. Like the organ voices in *all*

*that is lost*, the bells were treated as individual sounds instead of part of a larger instrument, dislocated and reconstructed in another location. Using a sound installation allowed me to experiment with bringing out the rich overtones of the bells, enabling an experience which is impossible when listening to the carillon in the outdoor surroundings of the city. Using a *musique concrète* approach, I pieced together layers of the processed bells to give the impression of not being inside the bell tower, but of being enshrouded in a texture of resonant sounds unlike those of the physical carillon.

The soundwork in the University Arches was looped throughout the installation week (13–19 November 2023), and the carillon component was presented on four separate occasions (two daytime and two evening recitals), performed twice per recital. The boundaries of each location and their acoustic horizon were indeterminate, and the time of day played a key role in the way the work was experienced. The increased traffic during the day meant that the experience of the recital and installation was very different to hearing them in the evening. In the evenings, the carillon could be clearly heard when standing near the Arches, but during the day the relationship between two components was blurred by the urban noise. While the bells could still be heard from the university campus, the ringing was distant, and the sounds of the city took on a more significant role in the experience of *Ordinary Light*.

By having the listener pass through the city in order to move between the listening locations, *Ordinary Light* invites listeners into the soundscape of the city, listening out for the sounds of the carillon and the installation as they grow and recede among the sounds of the city. Returning to the idea of sonic conflict, the listener hears the sounds of the recital and installation in the context of the urban soundscape, ascribing their own meanings to the sounds they hear while navigating between the listening locations.

### **3.2.2 Background: The Re-marking of the Urban Soundscape**

My aim for this site-specific project was to engage my own creative approaches with the carillon's unique sound and history, particularly in light of the post-lockdown era and the impact this had on my experience of the city and the early stages of my research. During the national lockdowns, the carillon could still be played, but was only heard transiently by the few passing by during the carillonneur's weekly recitals. The number of listeners was significantly reduced owing to lockdown restrictions, and there was no opportunity to hear a whole recital, or sit in the Civic Centre Gardens.

This made my re-experiencing of the carillon – to hear it again among the sounds of the re-opening city post lockdown – so much more powerful. The carillon appeared for me as a renewed soundmark, one which was becoming expressive again and going through a process of re-marking through its refrain. The Edith Adamson Carillon, along with the other returning urban sounds, became reconnected and meaningful again as place identity was renegotiated through the processes which, during lockdown, had been suspended.

My first exploratory works for the Edith Adamson Carillon were intended for the instrument alone which taught me to write convincingly for the instrument and understand its nuances. Much like the organ, every carillon is unique, which means that strictly focussing upon the Edith Adamson Carillon enabled me to utilise the characteristics specific to it. In the months leading up to the start of my work on *Ordinary Light*, I composed a number of shorter pieces for carillon.



# Monkchester Prelude

for Carillon

James M Clay

**♩=60-70 Searching, with rubato** Repeat ad lib. (as many times as necessary, creating a meditative atmosphere, almost like a call to worship or an introit to a service)

Carillon *mp*

**3 Still with rubato, but with a clearer tempo**

*maintaining the integrity of this ostinato throughout*

**7**

**11 Cantabile, bringing out the upper voice**

**Figure 3.13: bb. 1–13 of *Monkchester Prelude*, an early exploratory piece for Carillon.**

The pieces worked well on the carillon in Newcastle Civic Centre and were performed on numerous occasions by the city carillonneur, including a performance of the piece above in Loughborough on the Loughborough Carillon for its centenary in July 2023. Pieces like *Monkchester Prelude*, however, were straightforward in their composition, generally modal

and polyphonic, and did not truly achieve my aims for this place-based research. The pieces did not really engage with the carillon's environment, nor express my understanding of the instrument as part of the soundscape of the city. This notwithstanding, the works were crucial in helping me to understand the affordances of the instrument and how to go about realising a new work which really dug down into the heart of my research.

### **3.2.3 Physical and Sonic Considerations in Carillon Music**

The carillon is operated using wooden batons arranged as a keyboard along with a set of foot pedals to make the larger, lower bells less physically demanding to strike. The clavier is usually played with one hand per baton using a closed fist, though two notes can be sounded with one hand at the maximum distance of a third. Each baton causes a clapper to strike a corresponding bell, all of which are hung dead in a frame and unable to swing, unlike bells used for Change Ringing which are hung free. The bells of the carillon are particularly heavy for the size of the instrument; the combined weight of the 25 bells is approximately 22 tonnes.<sup>146</sup> The clappers themselves are heavy, and the weight of operating them (the action), renders particularly fast passages difficult to execute. Although, in contrast to older carillons, the counterbalanced weights on each clapper make operating them much less awkward (the weight is balanced out for a clapper's return to its initial position), the mechanism is closer to the *broek* (breech) system, which means the carillon is still significantly more difficult to operate than modern continental instruments, for example, where the action is much lighter.



**Figure 3.14: A view into the Newcastle Civic Centre belfry showing the static bells and their clappers. The bells are fixed to a frame, and the clappers strike them from within.**

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<sup>146</sup> 'Edith Adamson Carillon – Newcastle Civic Centre', <https://www.newcastle.gov.uk/our-city/edith-adamson-carillon-newcastle-civic-centre>.

Although the bells of the Edith Adamson Carillon are particularly heavy, the instrument can be played with a wide range of dynamics, from barely audible in the Civic Centre Gardens below, to loud enough to be heard resounding across the Newcastle University campus for more than thirty seconds (for the lowest bell).



**Figure 3.15: The belfry exterior from the top of the Newcastle Civic Centre tower. The design of the tower allows the bells to project down and across the city centre in all directions.**

The Edith Adamson Carillon presents other unique traits which make it an interesting site-specific case study. The instrument contains a low C# and D# which are conventionally omitted from older carillons for practical and economic reasons, much like short-compass (or short-octave) keyboards where the notes were not traditionally needed.<sup>147</sup> Any music written using these notes, therefore, is not immediately transferable to other instruments which are not fully chromatic but allows this nuance to be foregrounded in works intended for the Edith Adamson Carillon. This works so well because of the weight and long resonance of the heaviest bells of the carillon.

Carillon bells generally have a strong minor third overtone or ‘tierce’, which is the first tuned partial above the struck note or ‘prime’. There is a hum tone an octave below the struck note, generated by a bell’s vibrations, the ‘quint’ a fifth above the prime, and the ‘nominal’ which sounds at the octave above. While it is important to remember that there are many overtones in a single bell which contribute towards its overall tone, those listed

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<sup>147</sup> Laurence Libin, ‘Keyboard Instruments’, *The Metropolitan Museum of Art Bulletin* 47, 1 (1989): 6.

above are the most prominent overtones tuned at a bell foundry.<sup>148</sup> This means that particularly dense textures can become very muddy, but with careful consideration and experimentation, interesting resonances and overtone effects can be produced when combining different bells with one another.

### 3.2.4 Developing Ordinary Light

The score of *Ordinary Light* takes the complex resonance of the carillon bells as a point of departure. Unlike *Monkchester Prelude* and my other exploratory carillon works which focussed on the textural interactions of melodic voices, *Ordinary Light* splinters strings of harmonic gestures into discrete sonic events presented as quiet, disconnected resonances which appear almost as blemishes on the soundscape of the Civic Centre's surroundings. The fragments are purposefully lowercase, played quietly and consistently and allowed to resonate fully before another harmonic idea is sounded. The intention behind this is to encourage the listener to hear the resonances in the context of the urban soundscape as they decay into the background. My focus in this work moved from a desire to write carillon music, to an interest in investigating the human, experiential side of the urban environment and the sounds therein which Giralt et al. describe as the 'permanent protagonist[s]' of urban space.<sup>149</sup> This brought me back to the wider focus of this research – the role of sound in place experience. For me as a listener, the carillon is not an interruption into the soundscape, but a transient part of the urban soundscape of Newcastle and has a permanent role in the identity I have ascribed to the city.

The gestural approach to the score of *Ordinary Light* could be compared to Morton Feldman's *Piano and String Quartet*, where the initial chords played by the ensemble are separated by silences, though in contrast *Ordinary Light* employs indeterminate, instead of measured, silences.<sup>150</sup> This gives the impression of disconnected harmonic moments which are actually closely related and trace motivic development throughout the piece. The harmonic resonances could also be considered a set of endnotes to the installation in the Arches, akin to the concept of endnotes employed in *Still Earth, Unstill*. The resonances are intended to be heard as disconnected events, not the connected movements of musical voices, but owing to the repetition specified in the score, and the similarities between the

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<sup>148</sup> 'Carillon Bells', The Guild of Carillonneurs in North America, accessed August 2, 2023, <https://www.gcna.org/carillon-bells>.

<sup>149</sup> Giralt et al., 'Conviction and commotion', 182.

<sup>150</sup> Morton Feldman, *Piano and String Quartet* (Vienna/New York: Universal Edition, 1985).

motives of each event, there is the potential for making connections upon close listening to the carillon.

The process of composing *Ordinary Light* was quite different from my earlier approaches. The complex overtones of the bells meant that significant experimentation through listening was required. Although certain intervals and gestures worked particularly well in one register, there was no guarantee that the same interval would work well in a higher or lower register. This is due to the different timbre of each bell and the stark difference between the tone of the lower, heavier bells and the smaller, lighter bells. Each harmonic idea, therefore, was closely reviewed until interesting resonances were discovered. This allowed me to write specifically for, and in a way that worked particularly well with, the Edith Adamson Carillon as it exists in its environment.

Both components of *Ordinary Light* use duration in different ways. Where, in acousmatic music, resonances can be extended through digital manipulation, in the acoustic, score-based component the duration of the gestures is dictated by the resonance of the physical bells and the volume of the urban noise. This creates a very different durational experience to listening to the installation inside of the Arches. Paradoxically, the urban soundscape is infinite in terms of duration. While it changes over time, whether subtly or drastically, it remains a common background sound in the everyday life of those in the city. The bells, however, eventually stop resonating, and it is the carillonneur's decision when the next event will take place, creating a greater or shorter disconnect between one gesture and the next.

One interesting development in the composition of the acousmatic component was the use of air sounds as textural material, tying in the drawn-out bell resonances in the soundscape with another public instrument, the organ. My interest in this connection was informed by Kali Malone's *Living Torch* (2022), on which album Malone avoids the organ altogether, instead using the sustain of other instruments along with air sounds to create the impression of an organ.<sup>151</sup> Malone combines bass clarinet, trombone and modular synthesis with air sounds mixed in such a way that it sounds like an organ registration of complex overtones with air moving through the pipes. Eva-Maria Houben's *Breath for Organ* (2018) also explores the air sounds of the organ, but with a unique focus on the internal workings of the instrument, the components which provide the air to produce the instrument's sound.<sup>152</sup>

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<sup>151</sup> Kali Malone, *Living Torch* (Paris: Portraits GRM, 2022), CD-ROM.

<sup>152</sup> Eva-Maria Houben, *Breath for Organ* (Second Editions, 2018), CD-ROM.

Houben portrays the air moving through the instrument as its most important aspect, making the pitches of the instrument secondary. The sound of air, usually part of the unseen mechanics of the organ, makes up the majority of the 75-minute piece. The focus for Houben is on the instrument's process of creating sound, instead of the consequence.

These works provided me with another way of thinking about air sounds. While I had employed air sounds in other works like *in the air of remembering*, I had not considered the connection with the organ and its requirement to have air to make sound. I then started to employ air sounds as a textural device of their own in the *Ordinary Light* installation to explore the different relationships I could form. By layering the air sounds and the resonances of the carillon bells together, I was able to suggest a causal relationship between the two sounds, much like the movement of air through organ pipes might be audible beneath a resultant pitch. By disconnecting the sounds from one another, I was able to create space for the different sonic elements to undergo their own transformations and, in the case of the air sounds, take on a more nuanced role in the texture.

### **3.2.5 Documenting Place through Site Recordings**

The acousmatic component of *Ordinary Light* required a close recording of each carillon bell on the roof of the Civic Centre tower in order to achieve clarity and pick up the full resonance of each bell. I had initially intended to achieve a clear, isolated recording of each bell, but I found that the recording had to include at least some noise from the streets below due to the volume of the urban noise. I decided to make this an element in the installation, as the impossibility of completely isolating each bell opened unexpected avenues in the process of constructing the textures of the soundwork.

In contrast, the recording of the carillon recital was carried out to document the performance of the scored component. This was carried out on the ground level of the Civic Centre Gardens in order to provide a glimpse into what the audience would hear during the performance, whilst acknowledging that the recording will never be able to replace the experience of hearing the carillon in person in the context of the city, listening to the bells resonate across the space and merge with the urban noise, decaying into the air. Interestingly, on the day of the recording, the sounds of nearby St. James' Park could be heard during a football match, as could a passing air ambulance which momentarily creates a low drone against the carillon. These can be heard on the recording. The experience of hearing the instrument is conveyed vividly by Rombouts in *Singing Bronze*:

There after all is still the magic of the moment, of that instant in the city when you realize the tower is singing. The sounds mix with conversations on the street; as you walk further, the music's intensity changes, like a game of light and shadows; the notes bend to the swell of the wind or are given extra brilliance by the silence of the evening; and you search in vain for the name of that song hidden deep inside your memory.<sup>153</sup>

The recording of the carillon recital aims to avoid the divide between us and the environment that David Michael warns of, where nature sound recordings exclude the ugly, abject and man-made in favour of a fantasy-like focus on the beautiful.<sup>154</sup> Where a high-definition recording of the carillon completely removed from the sounds of the city would present the pure sound of the instrument unspoiled by ambient noise (something close to this might be possible from inside the tower directly beneath the bells), *Ordinary Light* presents the carillon as it is heard in everyday life – within the urban soundscape, one part of its many noises and sonic events. Although much of the experiential information of being present in the city is lost in the recording of the carillon, the recording was necessary as a form of documentation, and the limitations are acknowledged.

The recording does, however, capture a particularly good example of the of the contingent effects of *Ordinary Light*.<sup>155</sup> From 20'02"–26'55", a crow engages in dialogue with instrument, repeating the rhythms of the tolling motif played by the carillonneur. This illustrates the carillon component of *Ordinary Light*, which is for the fragments to become directly engaged with the sounds of surrounding city and the living creatures navigating it (whether human or otherwise). A particularly interesting moment occurs at 26'46", where the crow repeats the rhythmic pair played by the carillonneur instead of recalling the groups of four or five quavers from the tolling motif as it had previously done. This shows that the crow is reacting to the changes in the carillon music.

None of the recorded components of *Ordinary Light* seek the beautiful or some fantastic natural fiction like the type David Michael warns against. The project as a whole explores a key part of Newcastle upon Tyne's sonic heritage and the environment in which it

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<sup>153</sup> Rombouts, *Singing Bronze*, 315.

<sup>153</sup> Schafer, *The Soundscape*, 317.

<sup>154</sup> David Michael, 'Towards a Dark Nature Recording', *Organised Sound* 16, 3 (2011): 207.

<sup>155</sup> A *contingent effect* is an effect which does not have to take place, in contrast to a necessary effect which must take place if the conditions which necessarily cause it are met. A contingent effect may or may not take place because of an indeterminate cause (i.e., this effect, another effect, or no effect at all, could be produced by the cause). This effect may not take place again in the future, even if the same cause was to occur. See Peter Wolff, 'Necessary and Contingent Effects', *The Review of Metaphysics* 11, 2 (1957): 204–205.



is found, including the noise of people, manmade machinery and weather. Although this is work that was written for the Edith Adamson Carillon, the carillon does not find itself at the centre of the work, but as one part of a wider picture of urbanity. Unlike the overly-framed ecological fantasies that Michael describes, *Ordinary Light* does not edit out human noise – it is these noises which make the carillon a soundmark.

### **3.3 *Le Passage* – Aubertin Organ, Newcastle University**

#### **3.3.1 Overview of *Le Passage***

*Le Passage* is a set of short movements which was composed during my exploration of the organ as a public instrument. Each movement, and the overall title of the work, take their names from the artwork of Kay Sage (1898–1963), the American Surrealist artist whose works often present desolated landscapes and haunting vestiges of the past.

My initial sketches for *Le Passage* stemmed from my interest in the organ as a public instrument, but one which, in contrast to the Edith Adamson Carillon, is found indoors in a specific type of public setting. Much like the carillon, the organ is subject to social changes, such as those seen during the national lockdowns, where churches and other locations in which the organ is found became inaccessible to the public. The organ, however, affords very different creative interventions to those offered by the carillon, which drew me to composing for it. The instruments also have different types of audience, even though both instruments are intended for public listeners. The carillon's audience is largely transient, whereas the organ attracts a purposeful audience, one which usually attends a church service where the instrument carries out a functional role, or a recital specifically to hear the organ in the locations where it is fixed as part of the space's architecture.

My early sketches and works for organ in the context of this project enabled me to write some interesting music, including a set of three short movements (provisionally titled *Three Pieces*) which approached the organ's historical context in different ways, for example, exploring how I could adopt more traditional forms in the context of my own work. Although this was a useful exercise, like my early work for the Edith Adamson Carillon, the set of organ pieces did not truly engage with the instrument in the way I wanted it to, nor did it reflect my real interest in its sonic affordances. One of the movements included in *Le Passage* was developed out of materials from one of the original short pieces which focussed on more subtle organ registrations and close-voiced harmony ('I Walk Without Shadow'). I had sketched out these ideas on the King's Hall organ, designed and built by Aubertin, at



Newcastle University, an instrument affording a range of distinctive sonorities not found on other instruments within the city. This lends the piece an intimacy, being up close with the organ in the space in which it is located. On developing out the materials, I briefly explored the idea of turning the piece into a duo for organ and flugelhorn but decided against this owing to where the fleshing out of the organ materials led.

### **3.3.2 Aubertin Organ – King’s Hall, Newcastle University**

While an argument can easily be made that all organ works and performances are, to a certain extent, site specific, a distinction can be made between works which come to be played on a particular instrument and works which are written *for* a particular instrument. The difference is that the former brings a work to life using the unique palette of a particular organ’s stops (although the work could be played elsewhere), and the latter approaches a specific organ as a point of departure, where the instrument becomes integral to the compositional process and the intended outcome.

*Le Passage* falls into the latter category as a solo organ work which explores the nuances of the Newcastle Aubertin as a unique public instrument rooted in place. The Aubertin organ has a distinct sonic palette and voicing unique to Bernard Aubertin and the mechanical action of the stops allows for the subtle detuning of the ranks of the instrument by slightly shortening the distance the stops are pulled out of the instrument. There are no other instruments in the city with this action; other modern instruments built with electro-pneumatic action stops do not allow for such control of the air flow – the stops are either fully pushed in or pulled out. These characteristics were integral to the process of composition, and while the work could be transferred elsewhere for performance purposes, *Le Passage* is a site-specific organ work which, without the Aubertin organ, would not have come to fruition. The same could be said of *Ordinary Light*; while the scored component of the piece could be transferred onto another carillon with some minor adjustments, the work was written with the Edith Adamson Carillon in mind and exploited its characteristics and resonant nuances.

The Newcastle Aubertin is an interesting site-specific study, not least because it is the first Aubertin organ in the north of England and was only the third in the UK at the time of its installation.<sup>156</sup> It is now one of four public Aubertins in the UK, and remains the only UK

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<sup>156</sup> ‘Custom-made organ crowns University’s restoration project’, Newcastle University Press Office, accessed April 11, 2024, <https://www.ncl.ac.uk/press/articles/archive/2017/11/kingshallorgan/>.

Aubertin which is not found in a university chapel or other religious building: King's College Chapel, University of Aberdeen (2004); St. John's College Chapel, Oxford (2008); King's Hall, Newcastle University (2017); St Birinus, Dorchester on Thames (2023).

This makes the instrument in Newcastle University unique, possessing a curated set of stops unlike its UK counterparts. The resonance of the King's Hall is far removed from a large church or cathedral, meaning that the organ speaks in a way that is much more immediate. While the instrument can easily convey a very loud and rich sound with a full registration, it excels in more sensitive registrations using individual voices. The spatial distribution of the pipes and the pitches they create is clearly obvious when hearing the organ in the room, as the semitones quite noticeably jump back and forth between the sides of the casing.

Although the Newcastle Aubertin is only a two-manual instrument with pedals (in comparison to its larger UK counterparts), it has a collection of distinctive stops offering varied registration options, ranging from a soft and breathy Traversière 8' (Traverse Flute) on the manual II to a loud pedal Bombasson 16'.<sup>157</sup>

Pedal	Manual I	Manual II
Bourdon 16	Montre 8	Bourdon 8
Octave 8	Flûte à cheminée 8	Traversière 8
Bourdon 8	Suavial 8	Dulzhorne 8
Prestant 4	Trumpet 8	Portunal 4
2'+Mixture	Prestant 4	Flageolet 2'
Bombasson 16	Flûte 4	Quinte 1 1/3
Sacqueboute 8	Quinte 3	
	Doublette 2	
	Tierce 1 3/5	
	Mixture	

**Table 3.16: The stop list of the Aubertin organ, King's Hall, Newcastle University.**

<sup>157</sup> Compare, for example, the stop specification of the King's Hall organ with the King's College Chapel organ at the University of Aberdeen. See 'Tyne and Wear, Newcastle upon Tyne, University of Newcastle King's Hall, [H01027]', The National Pipe Organ Register, accessed February 12, 2024, <https://npor.org.uk/survey/H01027>. See also 'Grampian, Aberdeen, University of Aberdeen, King's College Chapel, High Street, [E00974]', The National Pipe Organ Register, accessed February 12, 2024, <https://npor.org.uk/survey/E00974>.

Given that *Le Passage* was written with this organ in mind, the choices of stops prescribed in the score (and used in the recording of the piece) are specific to the Aubertin organ. One of the affordances of site-specific instruments is the ability to explore their nuances, and this is something also seen with carillons, which vary greatly in their sound from instrument to instrument depending on the bell foundry and national traditions.

### **3.3.3 Kay Sage and *Le Passage***

The title of the overall work is drawn from Kay Sage's 1956 artwork of the same name, and those of the individual movements from some of Sage's other works. Where Sage's other works such as *I Saw Three Cities* (1944)<sup>158</sup> or *The Fourteen Daggers* (1942)<sup>159</sup> contain figures which are suggestive of living beings (often as sheets caught in the wind or figures of stone), *Le Passage* (1956) shows an obviously human figure from behind looking out across a barren landscape.<sup>160</sup> The idea of a 'passage' to be undertaken aligned with my research and the context in which I was carrying out the project, and there was a resonance between Sage's work and the musical materials of the organ work.

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<sup>158</sup> Kay Sage, *I Saw Three Cities*, 1944, Oil on canvas, 92 x 71 cm, Princeton University Art Museum.

<sup>159</sup> Kay Sage, *The Fourteen Daggers*, 1942, Oil on canvas, 16" x 13", Private ownership.

<sup>160</sup> Kay Sage, *Le Passage*, 1956, Oil on canvas, 91 x 71 cm.



**Figure 3.17: Kay Sage's *Le Passage*, 1956, Oil on canvas, 91 x 71 cm. © Estate of Kay Sage / DACS, London and ARS, NY 2024. Reproduced with permission.<sup>161</sup>**

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<sup>161</sup> Kay Sage, *Le Passage*, 1956, Oil on canvas, 91 x 71 cm. © Estate of Kay Sage / DACS, London and ARS, NY 2024. Reproduced with permission.

While Sage's artworks do provide some context for the work included in the portfolio, the music is not necessarily an expression of Sage's paintings. Sage's work simply provides a means for relating the music to the struggle portrayed by Sage in the last years of her painting career. The artist's encroaching blindness and the passage ahead signifies a fundamental shift in Sage's relationship with the world and the meaning she negotiated through her experiences. The world, for Sage, and the ways in which she interacted with it, were in the process of becoming something very different, and the year 1958 saw her final paintings completed.

This becoming is expressed within the musical materials, the way they are developed and reinterpreted in the different movements of *Le Passage*, and the way the various tonal colours on the organ are employed. Like Sage's work, too, there are common musical themes running throughout each movement which tie them together.

Each movement of *Le Passage* approaches the organ from a different tonal perspective, using a unique registration and colour from the organ's sonic palette. While the rest of the portfolio demonstrates different aesthetic approaches in each work, for example, durational approaches in the acousmatic works and more experimental or timbral approaches in the score-based works, the organ affords the possibility of a combination of these within a single work. While each movement bears a different title drawn from Sage's oeuvre, there are three movements with the same title – *Monolith I, II, and III*.<sup>162</sup> The use of the same title between each of these three similar movements seeks to highlight their aesthetic relationship. While the other movements of the work, such as *I Saw Three Cities* or *No Passing* are short in duration and appear almost as miniatures, the *Monolith* movements subvert the expected durations of the harmonies in favour of a more durational approach, while doing so with fewer musical ideas than the other movements.<sup>163</sup> These movements serve primarily as temporal interruptions to the flow of *Le Passage* and are presented with non-mensural notation directed to be played very slowly. The focus then shifts from the progression of the musical lines to the sustained harmonies, allowing the voices of the organ to linger.

In contrast, the other movements explore key melodic and harmonic motifs, using specific tonal colours of the instrument to bring these out. Each movement also bears a subtitle which serves to describe the way more traditional notions of form have been

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<sup>162</sup> Kay Sage, *Monolith*, 1937, Oil on canvas, 36 3/8" x 26", Albany Institute of History and Art.

<sup>163</sup> Kay Sage, *No Passing*, 1954, Oil on linen, 51 1/4" x 58", Whitney Museum of American Art.

adapted into this contemporary approach. See, for example, the prelude and postlude movement, *I. I Saw Three Cities* and *VIII. Tomorrow is Never*, which bookend the work and knit together a number of the materials from other movements.<sup>164</sup> There are also more purposefully dysfunctional explorations of form such as *VII. Second Song*,<sup>165</sup> a two-part invention with alternating time signatures which displace the harmonic resolutions of the lines, and *VI. The Unicorns Came Down to the Sea* which presents moments reminiscent of a pastorate, though the resulting soundworld is far removed.<sup>166</sup>

### 3.4 Conclusion – Public Instruments and Place

Public instruments offer unique opportunities for site-specific intervention and place engagement. The projects focussed on the Edith Adamson Carillon and the Newcastle Aubertin organ demonstrate how sound can bring about a sense of place and meaning and engage with place heritage to further contextualise creative practice. While the instruments exist in different types of public spaces, both were used to mediate a sense of place which was grounded in their unique characteristics and contexts.

The previous chapters focussed on exploring place and how sound contributes to the meanings and identities negotiated through human engagement with the surrounding environment. In Chapter 4, the musical materials developed in the portfolio are the focus of place. The types of place generated by musical motives and pitch centres in the portfolio works are explored, and a reinterpretation of landscape is employed to introduce a novel approach to musical structure and the potential for intertextuality between works using score-based soundmarks.

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<sup>164</sup> Kay Sage, *Tomorrow is Never*, 1955, Oil on canvas, 37 7/8" x 53 7/8", The Metropolitan Museum of Art.

<sup>165</sup> Kay Sage, *Second Song*, 1943, Oil on canvas, size unknown, The Santa Barbara Art Museum.

<sup>166</sup> Kay Sage, *The Unicorns Came Down to the Sea*, 1948, 36 1/4" x 28 1/4", Philadelphia Museum of Art.

## Chapter 4. Musical Materials as Places

### 4.1 Soundmarks in Score-Based Music

#### 4.1.1 Musical Materials as Soundmarks

This chapter explores soundmarks in the context of score-based music and outlines how the soundmark as a metaphor for musical motives can be used to mediate a sense of place through the construction of musical landscapes. Musical ‘places’ are described as a means of considering musical materials and how these might contribute to the overall landscape of a work. This chapter also provides a basis for moving beyond a purely poetic application of the soundmark (describing motives and pitch centres as markers in the musical landscape) by further analysing the experiential nature of the soundmark and how this can be convincingly translated into score-based practice.

Previously, the soundmark was described as a sound which becomes symbolic of a particular location for an individual or a community through *refrain*, the repetition and becoming-expressive of a sound to signify a territory.<sup>167</sup> In the case of a score-based work, the returning motivic materials and pitch centres can be considered key markers of musical place which contribute towards its perceived identity. While this may initially seem like an alternative approach to describing the musical materials from an analytical perspective, when considered in light of the way a soundmark is experienced and the nature of the repetition, the score-based soundmark as a compositional tool becomes more nuanced.

When a soundmark is said to be embedded through repetition (for example, the sound of the carillon bells ringing), any repetition is not an identical reproduction. It contains the ‘Idea’ of, for example, carillon bells, but can never be precisely the same as it was.<sup>168</sup> We might say that the second ringing of carillon bells evokes a memory of the first ringing for the listener, and even if the motif of the soundmark is the same, the repetition includes an innate difference, building upon the previous experience of the Idea. This more clearly provides a starting point for describing my approach to the musical materials of the works below, where the motivic materials shared across the works are repeated (becoming

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<sup>167</sup> Deleuze and Guattari, *A Thousand Plateaus*, 347.

<sup>168</sup> Deleuze considers two forms of repetition. The first concerns the repetition of the concept or representation, which for Deleuze is a static or ‘bare’ repetition (for example, hearing bells ringing but at different cathedrals where bellringing is the bare, but recognisable concept). The second form of repetition is the concern above, which Deleuze describes as an authentic, evolving repetition, ‘creative of a dynamic space and time which corresponds to the idea’ which contains *différence*. See Gilles Deleuze, *Difference and Repetition*, trans. Paul Patton (New York: Columbia University Press, 1994), 24.

soundmarks which are indicative of a particular musical place), but the repetitions contain an ‘instability’ – the same initial motivic material is employed in each work, but the *différence* lies in the development of the materials in the individual contexts.<sup>169</sup>

The soundmarks employed in the musical works discussed below are a result of these intertextual relationships, but it is important to recognise that musical places can also come about in individual works because of the ways in which musical elements are employed (for example, pitch centres as points in a musical landscape and the endnote as a structural and narrative device). Where Scheuregger and Efthymiou opt to describe musical place as an architecture, one constructed by a composer in terms of form and structure, I use the metaphor of landscape throughout this exegesis as it more easily translates into the human perceptions of the environment, whether discussing the landscape of natural or manmade sites.<sup>170</sup> Architecture as a metaphor for musical place is not necessarily a problematic one given that form and structure have clear linguistic ties to physical, manmade structures, but landscape offers a closer parallel to the way in which I comprehend sound and aligns with the notion of soundscape as an aural expression of space in the context of this research. Musical materials as places, then, can be thought of as the punctuations in the sonic landscapes of the works, those things that (in the physical world) lend the landscape a sense of shape, character, and meaning, and contribute to its platiality.

#### **4.1.2 Musical ‘Places’: Motivic Constellations in Into Convergences**

The development of motivic materials and their pitch centres as they become expressive and connected are used throughout the portfolio as markers of place. *Into Convergences*, in conjunction with *bloom and splinter*, demonstrates the ways in which these musical materials can signify place and assume the role of soundmarks through intertextuality, repetition, and development. This prepares the way for a novel method of delineating connections between musical works, where one parent work can be related to another by way of soundmarks.

Musical motives become significant over the course of a musical work as sound takes on meaning ‘beyond itself’ through auditory experience.<sup>171</sup> Like with Deleuze and Guattari’s

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<sup>169</sup> Deleuze, *Difference and Repetition*, 24.

<sup>170</sup> Martin Scheuregger and Lifth Efthymiou, ‘Audience Perception in Experiential Embodied Music Theatre’, *ACT – Zeitschrift für Musik und Performance* 10 (2021): 12.

<sup>171</sup> Ian Cross and Elizabeth Tolbert, ‘Music and Meaning’, in *The Oxford Handbook of Music Psychology*, eds. Hallam et al. (Oxford: Oxford University Press, 2016), 33.



rhizome, the experience of hearing the music unfold offers the possibility for multiple connections and meanings to be negotiated. Musical motives as places are established in *Into Convergences* through the becoming of the musical materials during the process of ‘working out’.<sup>172</sup> Conceptually, this work was inspired by my experience of the flight patterns of birds during the relaxation of the first national lockdown restrictions while I was out walking in Watergate Forest Park, Gateshead.

In the process of working out the musical materials as they become expressive, we can say that as a work starts to gain an identity for the composer and enters into a dialogue with them, a meaning beyond the notes in the score is established and the collective ‘work’ becomes territorialised.<sup>173</sup> The figures discussed below set out the main materials which become the subject intertextual development between *Into Convergences* and *bloom and splinter*, and also demonstrates how musical places were constructed within the work itself.

The image shows a musical score for measures 1 and 2 of a piece. The score is written for four instruments: Harp, Piano, Viola, and Violoncello. The key signature is D major (one sharp, F#), and the time signature is 4/8. The Harp part begins with a melodic line in the right hand, marked *mp*, with a list of notes above it: D<sub>4</sub>, C<sub>5</sub>, B<sub>4</sub>, E<sub>5</sub>, F<sub>5</sub>, G<sub>5</sub>, A<sub>5</sub>. The Piano part has a more complex texture with arpeggiated figures and a *pp* dynamic. The Viola part starts with a *mp* dynamic, marked 'sul tasto', and includes a tempo marking of ♩=100 and a performance instruction 'With a straining, burgeoning energy'. The Violoncello part is mostly silent in these measures. The score includes various musical notations such as slurs, ties, and dynamic markings.

**Figure 4.1: bb. 1–2 of *Into Convergences*, showing the initial motif which is spun out throughout the work.**

<sup>172</sup> Edvin Østergaard focusses on the becoming of music from a practical perspective, positing how materials are worked out in a complex creative space which affords both intentional structuring and an openness for works to unfold. See Edvin Østergaard, ‘Tuning in on the Becoming of Music’, *Open Philosophy* 4 (2021): 199.

<sup>173</sup> Deleuze and Guattari, *A Thousand Plateaus*, 348.

The chordal motif taken from bb. 1–2 in the figure above appears throughout *Into Convergences* and is reconstructed in different ways. The figure below shows pointed chordal moments where the emphasis is placed upon sustained sound (drawn from the viola Bb in bars 1–2 which underpins the moving voices in the texture). These moments are like *puncta* in the score, points of textural clarity and harmonic luminosity where movement momentarily subsides. Moments like this are used, in some ways, like deep breaths for the ensemble, but at other times are used as springboards for further motion and development. Take, for example, the resonant, calmer iteration in bars 62–64, shown below:

The musical score for bars 62–64 of *Into Convergences* is presented for five instruments: A. Fl., Ob., Vib., Hp., and Pno. The score is in 3/8 time and features several key elements:

- A. Fl. (Alto Flute):** Bar 62 begins with a *mp* (mezzo-piano) dynamic. A bracket labeled 'H' spans bars 62–63, indicating a sustained chordal moment. Bar 64 features a *mf* (mezzo-forte) dynamic and a 'To Fl.' (To Flute) instruction.
- Ob. (Oboe):** Bar 62 has a *mf* (mezzo-forte) dynamic. Bar 64 has a *mf* (mezzo-forte) dynamic.
- Vib. (Vibraphone):** Bar 62 has a *p* (piano) dynamic. Bar 64 has a *mp* (mezzo-piano) dynamic.
- Hp. (Harp):** Bar 62 has a *p* (piano) dynamic. Bar 64 has a *mf* (mezzo-forte) dynamic. A bracket labeled 'E<sub>3</sub>' spans bars 62–63, indicating a sustained chordal moment.
- Pno. (Piano):** Bar 62 has a *mp* (mezzo-piano) dynamic. Bar 64 has a *mp* (mezzo-piano) dynamic. A bracket labeled '8va' spans bars 62–63, indicating a sustained chordal moment.

The score also includes a 'Ped.' (Pedal) instruction at the bottom right and a '\*' symbol at the end of the page.

**Figure 4.2:** bb. 62–64 of *Into Convergences*, showing how chordal ‘breaths’ are used as a soundmark.

Compare the above with the figure below, where the harp and vibraphone chords work together to underpin the other moving voices:

81

The harp and vibraphone chord in bar 65 suggests a stalling of motion, the expectation of which was set up in bars 63–64 (see Figure 4.2), only to be subverted in bar 66 by the sudden thickening of the texture and louder dynamics. The process of destabilising the chordal motif continues in bar 81, where the instruments are given less space to resonate:

25

The musical score for measures 78-81 of 'Into Convergences' is presented for seven instruments: Timp., B. D., Vib., Hp., Pno., Vla., and Vc. The score is in 3/4 time and features a variety of dynamics and articulations. Measure 78 begins with a Timp. chord marked *ppp*, followed by a B. D. chord marked *mf*. The Vib. and Hp. play a chord marked *p*. The Pno. and Vla. play a chord marked *pp*. The Vc. plays a chord marked *mf*. Measure 79 continues with the Timp. chord marked *p*, the B. D. chord marked *mf*, the Vib. chord marked *p*, the Hp. chord marked *mp*, the Pno. chord marked *mp*, the Vla. chord marked *pp*, and the Vc. chord marked *mf*. Measure 80 features a Timp. chord marked *ppp*, a B. D. chord marked *pp*, a Vib. chord marked *p*, a Hp. chord marked *mp*, a Pno. chord marked *mp*, a Vla. chord marked *pp*, and a Vc. chord marked *mf*. Measure 81 concludes with a Timp. chord marked *ppp*, a B. D. chord marked *pp*, a Vib. chord marked *p*, a Hp. chord marked *mp*, a Pno. chord marked *mp*, a Vla. chord marked *pp*, and a Vc. chord marked *mf*. The score includes various annotations such as 'RH nails gently moving over skin', 'RH nails continue (not enough to dampen sound of soft yarn beater)', 'arco', and 'grv'. The measures are numbered 78, 79, 80, and 81 at the bottom of each staff.

Figure 4.4: bb. 78–81 of *Into Convergences*, showing how the chordal ‘breaths’ are destabilised.

Relative stability is not achieved again until towards the end of the work, where a string of regular quaver chords sound one after the other in an almost overstated fashion, though at a quiet, restrained dynamic:



Figure 4.5: bb. 142–145 of *Into Convergences*, where the chordal ‘breaths’ are overstated using repeated quavers at a low dynamic.

#### 4.1.3 Motif and Pitch Centre in bloom and splinter

*bloom and splinter* is related to its parent work, *Into Convergences*, through its treatment of the musical materials employed in the work, and uses pitch centres as markers of the musical places that are cultivated in the course of spinning out the materials. This section focusses on the pitch centres employed in *bloom and splinter*, followed by a discussion of the intertextual relationship with *Into Convergences*.

If pitch centres are considered points of reference or anchors in a musical work – the *puncta* (singular: *punctum*) which ‘shoot out of’ musical textures and become markers of phrase or form – then they may also be described as characteristics in the landscape of a musical work.<sup>174</sup> These moments of punctuation or instances of particular melodic or harmonic importance are used in the score-based music included in the portfolio as *place-making devices*, demarcating territories of motivic development around a central pitch or set of pitches.<sup>175</sup> As pitch centres are particularly important to my musical vocabulary as a way of grounding the music in the absence of an overall tonal or modality, it is necessary to understand how these pitch centres function as places which the music visits, or more

<sup>174</sup> Barthes’ *punctum* can be used here to describe those crucial aspects of the music which stand out as markers of place. Where Barthes’ *studium* might be the general course of the music without its ability to ‘wound’ or ‘prick’, the *puncta* of the music present themselves as anchors in the tapestry. See Roland Barthes, *Camera Lucida: Reflections on Photography*, trans. Richard Howard (New York: Hill & Wang, 1981), 26.

<sup>175</sup> Scheuregger and Efthymiou, ‘Audience Perception in Experiential Embodied Music Theatre’, 14.

importantly, becomes. Following Scheuregger and Efthymiou, who describe the spaces that are opened up through the repetition of pitch material or formal sections (spaces which have the potential to form musical place through audience experience), the following section details two examples of how pitch centres are used in the portfolio as soundmarks to demarcate musical place, and how similar approaches to gradually deviating from these central pitches at different speeds yield two contrasting aesthetic results.<sup>176</sup>

Although *bloom and splinter* is one of the shorter works presented in the portfolio, it relies heavily on pitch centres to ground the musical places that are constructed over the course its performance. The soundmark Ab–Gn is the most prominent, and is used as a focal point to which the music often returns after pulling chromatically away from the primary pitch centre Ab.



**Figure 4.6: The returning viola motif centred around A<sub>b</sub> from *bloom and splinter*.**

The returning viola motif of *bloom and splinter* shown above, is presented throughout the piece using degrees of light bow pressure, which gives the motif a distinctive timbral quality; while the volume of the motif is fairly quiet, the light bow pressure creates an airy, overtone-rich sound, contrasting the warmer qualities of the flute and clarity of the harp that surround the viola motif. My use of this technique was informed by Anna Thorvaldsdottir who uses it to particularly interesting effect in *Sola* (2019), a work for solo viola and electronics.<sup>177</sup> Where Thorvaldsdottir often uses the technique as means of transitioning from one sound to another (such as *light bow pressure* to *ord.*), I employ the technique as a means of returning to the soundmark of the initial pitch centre of the piece, Ab, which is shadowed by the harmonic sounding Gn a minor seventh above. Even in cases where the soundmark does not reappear, the use of the technique elsewhere signals a return to the initial quiet and unsteady state of the beginning of the work. One example of this is in bar 58, where the

<sup>176</sup> Scheuregger and Efthymiou, 'Audience Perception in Experiential Embodied Music Theatre', 11.

<sup>177</sup> Anna Thorvaldsdottir, *Sola* (London: Chester Music, 2019).

minor seventh interval on C<sub>n</sub> and B<sub>n</sub> is used as a fragmented motif to prepare for the resolution of the work three bars later.

The secondary pitch centres of the music are reached by straying away from the primary A<sub>b</sub> pitch centre, and can be pinpointed in the music at key moments. A reduction of the first half of *bloom and splinter* below shows the pitch centres that guide the development of the piece.

The figure displays a musical score reduction for the first half of the piece 'bloom and splinter', spanning measures 1 to 33. The score is written in a grand staff (treble and bass clefs). Key moments are highlighted with labels and bar numbers:

- b. 1:** A<sub>b</sub> (Viola motif)
- b. 14:** G<sub>b</sub> (Harp) beginning to pull down to F<sub>#</sub> (Viola)
- bb. 19-20:** G<sub>b</sub> (Viola) landing on F<sub>#</sub>
- b. 21:** F<sub>#</sub> (Flute) circled quintuplet
- bb. 28-29:** D<sub>b</sub> (Harp and Flute), preparing for a move back up to G<sub>b</sub> by way of the split 3rd chord in bar 29
- b. 31:** D<sub>b</sub>-G<sub>b</sub> (Harp) perfect 4th to land back on G<sub>b</sub> as pitch centre
- b. 33:** E<sub>b</sub>-A<sub>b</sub> (Harp) pulls pitch centre back up to starting point of A<sub>b</sub>

**Figure 4.7: A reduction of bb. 1–33 of *bloom and splinter*, showing the primary pitch centres reached by way of chromatic descent.**

These deviations from the primary pitch centre, A<sub>b</sub>, occur quickly in the work (which lasts approximately five minutes in performance), meaning that each transition is significantly condensed in comparison to, for example, the scored component of *Ordinary Light*, in which

pitch centres are significant markers of musical development over the course of the durational work. The concentrated pitch centres in *bloom and splinter* become expanded in duration in *Ordinary Light*, and the deviations from the central pitches are carried out more gradually. As the intention of *Ordinary Light* is to present multiple repetitions and the slow development of musical fragments, the changes in pitch centre are conveyed through more restrained shifts in harmony away from a central motif.

In comparison to *bloom and splinter*, the live-performed carillon component of *Ordinary Light* is much longer and quieter and plays a different role in the overall course of the music to the instruments in *bloom and splinter*. As a trio, the instruments of *bloom and splinter* quickly spin out the motivic material (the material spun out is borrowed from *Into Convergences* as a form of intertextuality), stopping the music from settling in one place. The carillon's role in *Ordinary Light*, however, is to become a part of the urban soundscape, presenting discrete sonic events which become one of many other sounds; the durationality of the music means that music is always able to settle as the fragments repeat. Although the aesthetic and durations of the music are necessarily different, however, the process of gradually deviating from the primary pitch centre is comparable to *bloom and splinter* but on a much more drawn-out scale, as is the frequent return to a central motif which is intended to re-ground the primary pitch centre of the music. The returning motif from *Ordinary Light* is shown in the figure below and, like the initial viola motif in *bloom and splinter* (see Figure 4.7), might be considered the most common characteristic of a landscape which is punctuated by the *puncta* of changing pitch centres and other motivic ideas.



**Figure 4.8: The returning carillon motif centred around A<sub>4</sub> from the score of *Ordinary Light*.**

The A<sub>n</sub> pitch centre in the main carillon motif shown above is heard more as an overall minor modal soundworld based on A<sub>n</sub> instead of a single pitch centre, or as a motif focussed on C<sub>n</sub> (which appears with greater frequency), owing to the complex overtones tuned into carillon



bells and the longer resonance of the lower bells. This is a unique affordance of the carillon, where the resonances allow the overtones to build up into their own consequent harmonic texture below what is actually being played by the carillonneur on the clavier.

## **4.2 Intertextuality as Soundmarking in Musical Place**

Two sets of works were used to develop my approach to soundmarking through intertextuality, *bloom and splinter* and *Into Convergences*, and *The Dying Earth Prayers* and String Quartet No. 2, "Paralysed City". The former works of each set employ motivic materials from their larger parent works, recontextualising the materials to cultivate contrasting musical places in ways which were not feasible in the larger works. The soundmarking of the motivic materials is brought about through the relationships between the different musical places, and the repetition and *différence* of the initial musical ideas. Much like the soundmarks of the city are embedded through repetition, the reappearance and recontextualisation of the musical motives in two different works creates a relationship which can bring about musical soundmarking. Score-based soundmarks can be thought of as markers which points towards the aspects of the musical works which relate their musical places to one another, much like a soundmark in the city points signifies its importance in the wider soundscape. The intertextuality offered through a focus on motif offers fertile ground for future research by constructing larger constellations of intertextual relationships across multiple works.

### **4.2.1 Examples of Intertextuality in *Into Convergences* and *bloom and splinter***

The overstated quaver motif from *Into Convergences* became the starting point for *bloom and splinter*, which is presented at the beginning of the work along with the viola soundmark (see Figure 4.6). The quaver motif struck me as having particular potential for development as it could not be spun out further in *Into Convergences* due to its role in bringing the chamber work to a close; *bloom and splinter* offered an arena in which to carry out this exploration.



Figure 4.9: bb. 142–144 of *Into Convergences*, showing the harp motif which overstates the chordal ‘breaths’ from earlier in the work.

Figure 4.10: A reduction of bb. 2–4 of *bloom and splinter*, which shows the harp motif drawn from *Into Convergences*, and the viola pitch centre which is used as a soundmark through the piece.

Like in *Into Convergences*, the harp presents the quaver motif in *bloom and splinter* and is used to explore the possibilities that the musical materials afford. This adds a further dimension to the musical place presented in *bloom and splinter*, where the soundmark of the viola intersects with the intertextual reference to *Into Convergences*. The harp material for the whole work is largely based around the quaver motif in the figure above, which underpins the other materials presented by the viola and flute.

From bar 41, the music becomes more insistent, and the motif below is introduced and then passed between the voices in various forms until bar 51:



Figure 4.11: The semiquaver quintuplet motif from bar 41 of *bloom and splinter*, flute voice.

This motif is modified from the motif first appearing in bar 5 of the viola in *Into Convergences*, shown below. While the motif seems almost insignificant in the overall texture of the music in the opening bars of the work, the motif is developed throughout *Into Convergences* and becomes a more important component of the music as it is spun out.



**Figure 4.12: Examples of the development of the original semiquaver quintuplet motif, spun out by the chamber ensemble throughout *Into Convergences*.**

The motif from bar 5 of *Into Convergences* becomes significant in the musical place cultivated and is eventually developed out into a five note cascading motif which moves across the voices throughout the work. In *bloom and splinter*, the general shape of the motif is altered (with the note order being high-low-high-low instead of low-high-low-high) and it is spun out as a cyclical, rising motif that builds the main melodic tension in the work.

Both versions of the motif also appear in *The Dying Earth Prayers*, which was written around the same time as *Into Convergences*. The motif, then, appears as an intertextual link between *Into Convergences* and the two investigative works in this part of the portfolio, *bloom and splinter* and *The Dying Earth Prayers*, connecting the musical places conveyed in each work while allowing each to present a unique exploration the motivic material, independently of how it was spun out in the larger parent works.

Although the motivic materials used in the process of composing intertextuality as described above are, in some ways, like the leftover materials described in Chapter 2 in relation to the *abandon* works, soundmarking through intertextuality purposefully employs important materials from a particular work in order to create a network of relationships. Unlike the leftover recorded viola and flugelhorn fragments from *(never) abandon*, which were used to create *abandon I* and *abandon II*, the intertextual references in *The Dying Earth Prayers* and *bloom and splinter*, are materials taken directly from the main motives of the parent works they are tied to.

#### **4.2.2 Examples of Intertextuality in *String Quartet No. 2, "Paralysed City"* and *The Dying Earth Prayers***

*The Dying Earth Prayers* was written at an earlier stage in this research project than *bloom and splinter*, and therefore played a more exploratory role in understanding how musical

motives could be used intertextually. The shared musical ideas with my second string quartet stemmed from sketches that I had developed in the course of composing the string quartet but which were not worked into the piece. Composing *The Dying Earth Prayers* presented an alternative context in which I could frame my textural and structural approaches, and this became a key aspect of the piece when deciding which materials to work with and how to employ them.

The string trio is around the fifth of the length of the string quartet, presenting more intimate and condensed expositions of the textures and structures (the difference in duration makes the string trio akin to a miniature, where the string quartet is a full-length work). Texturally, the string quartet takes time to construct tapestries of moving contrapuntal voices which move in and out of focus as they come together and diverge. This is mirrored in *The Dying Earth Prayers* where, albeit on a smaller scale, the string trio works towards becoming an ensemble instead of three distinct soloists. Much like the string quartet, it is often the case that the voices of the trio converge, only to quickly splinter again due to the interruptions of more angular motives. The figure below shows how the voices of the string trio begin to converge and then diverge over the course of 16 bars, with some of the voices interjecting with a staccato semiquaver motif which is meant to be conveyed as outside of the main pulse of the music.

55 senza sord.

→ molto vib.

*mf*

*mp*

*f*

*mf*

*mp*

*f*

*mp*

*ff*

*ff*

*ff*

*f*

*p* outside of, or detached from, the other lines

*mf* regaining cohesion

*mp*

**Figure 4.13: bb. 55–67 of *The Dying Earth Prayers*, showing how the voices gradually converge by bar 61, only to splinter apart again from bar 63 onwards.**

This process occurs on a larger scale in String Quartet No. 2, “Paralysed City”, and often with more sudden contrasts between phrases where the voices move together and the voices move independently outside of the pulse. In the figure below from the quartet’s first movement, the voices move as a unit until bar 168, where they immediately become disconnected. The angular material and pointillist texture are then suddenly restated in bar 171, where the entry of something more like bar 173 would have been expected given the previously more restrained tone of the music leading up to bar 168.

21

160 *stacc.*  $\text{♩} = 65$

Vln. I *p* *mp* *pp*

Vln. II *p* *mp* *pp*

Vla. *arco* *p* *mp* *pp*

Vc. *arco* *p* *mp*

164 *p* *mp*

Vln. I *p* *mp*

Vln. II *p* *mp*

Vla. *p* *mp*

Vc. *ppp* *p* *mp*

167 *mf* *mp* *pizz.* *mf* *f*

Vln. I *mf* *mp* *pizz.* *mf* *f*

Vln. II *mf* *mp* *f* *stacc.*

Vla. *pizz.* *f* *arco* *mf* *f sub.* *pizz.* *mf* *f*

Vc. *mf* *f* *f* *f*

170 *arco* *stacc.* *ff* *ff* *fff sub.* *pizz.* *pp*

Vln. I *ff* *ff* *fff sub.* *pizz.* *pp*

Vln. II *f* *ff* *fff sub.* *pizz.* *pp*

Vla. *arco* *mf* *f* *ff* *fff sub.* *pizz.* *pp*

Vc. *f* *ff* *fff sub.* *pizz.* *pp*

22

Figure 4.14: bb. 160–173 of String Quartet No. 2, “Paralysed City”, first movement, showing the contrast between the voices moving as a unit, and the voices moving as independent points in the texture.



Another instance of the voices moving in and out of focus occurs in the string quartet following a metric modulation in the fourth movement, where the music immediately changes to a faster tempo, but the violins' music is written to appear as if they had not yet moved into the new tempo. This gives the impression of two simultaneous tempi with the voices moving as duos until bar 131, when the instruments start to move more independently and push towards the disjointed, frantic ending of the work a few bars later.

Violin I, Violin II, Viola, and Violoncello parts for measures 123-126. The score shows a transition from a moderate tempo to a faster tempo. Dynamics include *mf* and *f*. A tempo change to 90 is indicated above measure 127.

Violin I, Violin II, Viola, and Violoncello parts for measures 127-129. The score shows the continuation of the faster tempo. Dynamics include *f* and *mf*. A tempo change to 90 is indicated above measure 127.

Violin I, Violin II, Viola, and Violoncello parts for measures 130-132. The score shows the continuation of the faster tempo. Dynamics include *mf* and *f*.

Violin I, Violin II, Viola, and Violoncello parts for measures 133-134. The score shows the continuation of the faster tempo. Dynamics include *f*, *ff*, and *fff*. A tempo change to 90 is indicated above measure 133.

**Figure 4.15: bb.123–134 of String Quartet No. 2, “Paralysed City”, fourth movement, where the violin music is written to sound as if it had remained in the previous tempo from bar 128.**

In *The Dying Earth Prayers*, this occurs at a point where the violin and viola are moving as a duo and passing an angular, staccato line between their voices, opening up a space for the



violoncello to pull away from them in bar 46 to present a more expressive, lyrical line outside of the pulse of the other voices.

The image displays a musical score for three instruments: Violin (Vln.), Viola (Vla.), and Violoncello (Vc.). The score is divided into three systems, each containing three staves. The first system (measures 38-43) shows the Vln. and Vla. parts with various dynamics (mf, p, mp) and articulations (accents, slurs). The Vc. part is present but mostly rests. The second system (measures 44-47) features the Vc. part moving away from the ensemble pulse, marked with 'mf' and 'pizz.' (pizzicato). The Vln. and Vla. parts continue with their rhythmic patterns. The third system (measures 48-51) shows the Vc. part rejoining the ensemble, marked with 'mf' and 'pizz.', and a note indicating it is 'regain[ing] connection with the other lines, more rhythmic cohesion'. The Vln. and Vla. parts also have dynamic markings and articulations throughout.

Figure 4.16: bb. 38–51 of *The Dying Earth Prayers*, where the violoncello moves outside of the pulse of music to present a lyrical line, before re-joining the ensemble.

Following the understanding I gained from composing *The Dying Earth Prayers*, I was able to fully realise the intertextual approach that I had been developing, using selected motives from *Into Convergences* from the outset and spending time working with them outside of the chamber work's musical place. This led to me being able to reframe the musical materials and take them in a new direction, while still retaining the crucial aspects of the materials that would connect them to *Into Convergences*.

#### **4.3 Experientially Guided Performance of *in the air of remembering***

*in the air of remembering*, like the works described above, focusses on developing distinctive musical places, but in this case is achieved through an exploration of the timbres and unique affordances of the instruments. The intimate interactions of the duo becomes a central theme, which construct and deconstruct musical phrases based on multiphonics and close dissonance. *in the air of remembering* was workshopped at the Royal Musical Association Annual Conference (Nottingham University, 16 September 2023) by rarescale, which was a key milestone in the development of the piece. The musical materials presented in the score allow for the performers to negotiate the way in which the interactions between the instruments play out in an experientially-led performance which leaves space for in-performance reactivity and creative intervention. While the metric structure of the work seems specific at first glance, the performers are instructed to feel the changes in the sound which guides the progress of the performance; the harmonic interactions between the instruments becomes more important than the prescribed durations on the page, and the materials benefit from an immersive, experientially-guided approach rather than one which rigidly reproduces the notation.

##### **4.3.1 Multiphonics as Motivic Device**

The overtones produced by the multiphonics of the bass flute are contingent upon the fingerings used by the performer, in combination with the way the air moves through the instrument. *in the air of remembering* uses legato transitions between multiphonics to create a sense of transition and becoming, and these are achieved by choosing two different multiphonics which use similar fingerings. These are somewhat unpredictable in practice, but in consultation with Carla Rees' *The Kingma System Bass Flute: A Practical Guide for Composers and Performers* (2013), I was able to predict the multiphonics that the fingerings

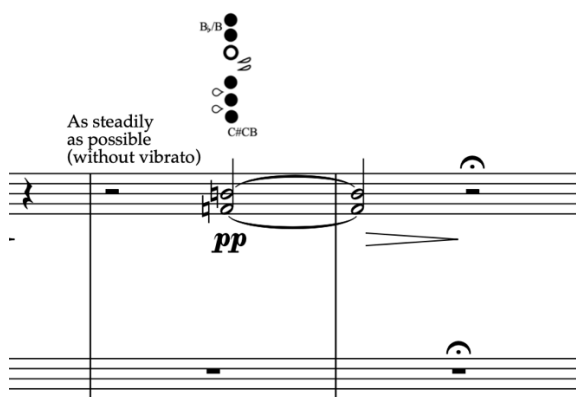
would produce, while still leaving space for the performers to shape the material.<sup>178</sup> The resulting interactions linger on the threshold of connection and disconnection, where the performers navigate the musical materials according to how they are produced in the moment. If a multiphonic does not resonate as well as another because of the air flow at that moment, the sound will decay, and the music will move forward more quickly; on the other hand, if a performer deems that a particular moment should be held to open up space for resonance, then this is communicated at the time. The performers, as well as playing the music on the page, are tasked with reacting to the sound of their instruments in the space. This is something that, while usually an unspoken aspect of performance, is given an arena for investigation and creative intervention here.

The conference workshop enabled me to receive feedback on the work which developed my understanding of the instruments and led to some refining of my initial creative choices. I removed unnecessary performance directions from the score which had made certain aspects logistically difficult to execute or had been over prescriptive and stifled the performers' ability to be fully immersed in the experiential side of the performance. I heard directly from the performers about their notation and written direction preferences, and this resulted in the finished work employing the affordances of the instruments more convincingly.

While the work was commended for its approach to the low flutes and the resonant soundworld the material opened up space for, my understanding of multiphonics and the way the flute player controls them was developed. As such sounds require the controlled use of breath in order to bring about the overtones above the fundamental, a performer would not use vibrato. The use of vibrato disrupts the airflow into the instrument, affecting the already temperamental and unpredictable multiphonic being sounded. In bars 6 and 67, the multiphonic shown below is used as a means of ending key phrases; the isolated sound follows a short silence in the phrase and is followed by a long silence.

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<sup>178</sup> 'The Kingma System Bass Flute: A Practical Guide for Composers and Performers', Carla Rees, accessed February 15, 2024, 2013, <http://www.bassflute.co.uk/>.



**Figure 4.17: The draft performance directions for bar 6 of *in the air of remembering*.**

The multiphonic was given the direction ‘as steady as possible (without vibrato)’ in the draft version of the score. Following the workshop, I removed this direction and instead opted for a clearer framing of the sound to communicate the desired effect. The multiphonic is now framed as a sound which rises out a momentary silence and then dissipates, using a *niente* marking.

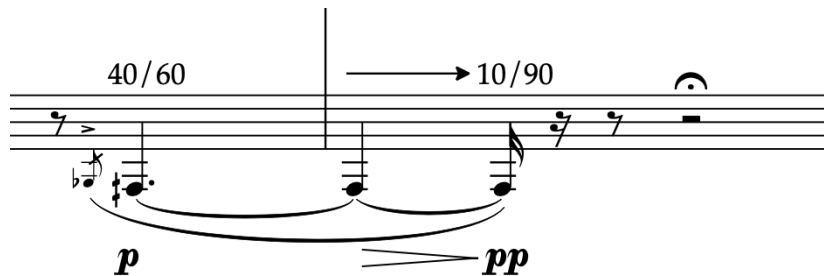
#### **4.3.2 The Use of Microtones on Low Woodwinds**

While microtones are possible on both the bass flute and bass clarinet, I had asked for the use of some microtones which were not possible on the instruments’ low registers. The workshop gave me a better understanding of the construction of the Kingma System bass flute and the arrangements of the keys to produce different pitches. It is not possible to play microtones below a low D on the bass flute, and microtones around this register become more difficult due to their fingerings; I had prescribed a microtone in this lower register in the draft version of the score bar 55.



**Figure 4.18: Bass flute microtones in bb. 55–56 of the draft version of *in the air of remembering*, the second of which was removed.**

In this case, the shape and effect of the musical phrase was more important than the microtone, so the microtone was removed. This was also done in bar 64 of the bass clarinet, where the microtone was not possible to play.



**Figure 4.19:** A bass clarinet microtone in bb. 64–65 of the draft version of *in the air of remembering*, which was removed.

### 4.3.3 Microtonality on the Baroque Flute

Baroque Flute was used in second movement of the work to provide a timbral and registral contrast. The instrument is wooden and is not equally tempered, which provides the opportunity to include microtonal inflections. Instead of automatically matching the temperament of the clarinet in performance, the flautist is directed to control the angle of air flow into the instrument to play specific microtones, the pitches of which are provided with a key in the preface to the score. This is a unique affordance of this period instrument used in a contemporary context.

In the draft of the score, the baroque flute writing only touched on the surface of the instrument's melodic possibilities, shown in the figure below.

The image shows a musical score for two instruments: Baroque Flute (Bar. Fl.) and Clarinet (Cl.). The score is divided into two systems. The first system covers measures 36 to 42, and the second system covers measures 39 to 42. The key signature is one sharp (F#) and the time signature is 3/4. The first system includes a 'poco accel.' marking and a tempo change to quarter note = 40. The second system includes a 'rit.' marking and a tempo change to quarter note = 40. Dynamics include pp, mp, mf, and p. The score is for measures 36-42 of the draft version of 'in the air of remembering', which did not employ microtones in the baroque flute voice.

**Figure 4.20:** bb. 36–42 of the draft version of *in the air of remembering*, which did not employ microtones in the baroque flute voice.

The changes made to the score highlighted the harmonic and timbral strengths of each instruments, resulting in a work which was more coherent and informed. This then allows for a much more focussed discussion with performers on how to bring the work to life.

#### 4.4 Structure as Landscape: Score-Based Endnotes in *Still Earth, Unstill*

##### 4.4.1 Fractured or Non-Linear Narratives

This section explores how musical place can be formed using a reinterpretation of endnotes for use in music scores which affects the narrative and structure of a work. In the sections above, musical place was formed through the use of pitch centres and musical motives, and the ways in which the materials become expressive. This links to the discussion in Chapter 3 about the soundscape of the cities, and how soundmarks become symbolic of a place and territory. This was adapted above to provide a means for understanding how significant musical moments can become the *puncta* in the overall texture and course of a musical work playing out. In this section, the musical places in *Still Earth, Unstill* are explored to provide another approach to composing place which is focussed not just on the musical materials, but on the approach to musical structure.

*Still Earth, Unstill* places particular emphasis on its non-linear narrative structure which has implications for the visual aspect of the performance of the work for those experiencing it. The use of endnotes as a structural tool creates a new sense of narrative which enforces planned interruptions in the musical materials. The endnotes employed in the work are located in the back of the score away from main movements; their purpose is comparable to literary endnotes, but in the form of notation. The endnotes are signalled using superscript numbers above the staff, just as they would be marked in a written text.



Figure 4.21: bb. 14–21 of *Still Earth, Unstill*, showing an example of a superscript number in bar 20 which signals an endnote.

In the course of the performance, a performer must stop when they reach an endnote number of above staff, turn to the back portion of the score, and perform the corresponding endnote. The performance notes in the front matter of the score stipulate that these must not be printed out independently of the main score but must be moved between during the performance by turning back and forth through the pages of score.



Figure 4.22: The corresponding endnote from the previous figure (4.21). This is the first endnote that appears the score, after which the player returns to the section of the main score where they paused the performance and continues.

The use of endnotes creates an alternative narrative to that of a traditional score where, instead of the performer presenting a linear narrative from the first to the last page of the score, the act of moving between the front and back portions of the score becomes integral to the narrative. The disruption to the linearity of the music and to the visual performance makes the experience of the piece different to if the endnotes had simply been included as part of the main body of the score. The following section explores how I developed the endnote approach to structuring the music of *Still Earth, Unstill*, and the unique musical and narrative possibilities this offers.

#### **4.4.2 Translating Endnote Functions: David Foster Wallace's *Infinite Jest***

Although one of the significant implications of using endnotes is structural – the notation is presented in two parts connected through the performance process (the main score in the front and the endnotes at the back) – endnotes serve a more complex function which allows for the further development of the musical materials which appear in the main part of the score, where their development in the main course of the music might seem inconsistent or inappropriate, or where more time needs to be spent exploring a musical motif. This ties back into the literary use of endnotes, where endnotes serve multiple purposes.

David Foster Wallace (1962–2008) uses endnotes in *Infinite Jest* to generate a unique approach to narrative which disjoints the traditional novel-reading experience; like in *Still Earth, Unstill*, the use of endnotes and the need to go back and forth between them becomes the narrative of the work. Wallace, an American author well-known for his use of complex sentence structure and literary approaches, is arguably most renowned for his use of (at times, very extensive) endnotes and footnotes in order to provide further details to his novels, affecting the way they are approached by the reader. While footnotes were used extensively in his final novel, *The Pale King*, which was published posthumously, it is in his most well-known novel *Infinite Jest* that Wallace employed endnotes as a means of disrupting the structure of the work.<sup>179</sup> *Infinite Jest*, aside from its extensive use of endnotes in the back 97 pages of the novel, is known for its length, complexity of language, and challenging writing style.<sup>180</sup> Not only does Wallace employ over 388 endnotes, some of which extend more than 15 pages of and have their own footnotes (and sub-footnotes), but much of the novel is non-chronological, making a first readthrough particularly challenging. I

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<sup>179</sup> David Foster Wallace, *The Pale King* (London: Penguin Books, 2012).

<sup>180</sup> David Foster Wallace, *Infinite Jest* (London: Abacus, 1997).



found the experience of reading and rereading the novel particularly interesting from the position of a composer as the use of endnotes posed unique potential for approaching musical structure.

Translating Wallace's approach into the score as a primarily non-linguistic domain was an interesting task which led me to devising a way of employing endnotes via musical means. The text of an endnote, for example, could be re-imagined as a diversion to a smaller section of music in another part of the score, having an impact on the way the score was navigated and performed. The approach to using separate sections of interconnected music which contribute towards a complete narrative relates, to some extent, to *Format 2* of Boulez's third piano sonata, which offers up to eight different ways of ordering the sections (*Commentaire, Glose, Texte, and Parenthèse*).<sup>181</sup> All four of these sections must be performed for *Format 2 – Trope* to be completed, and *Still Earth, Unstill* must likewise have all of the endnotes performed in the course of the performance. Like Boulez's work, there are rules which must be followed for the narrative of the music to be conveyed, though in *Still Earth, Unstill* there is no indeterminacy in respect to the order of the endnotes.<sup>182</sup> The directions to move between sections of the score are also akin to Stockhausen's *Klavierstück XI*, however while *Klavierstück XI* is presented as fragments of mostly two or three bars which can occur in an indeterminate order, *Still Earth, Unstill* is presented in two main parts which the performer moves between, having a very different effect to the fragments of *Klavierstück XI* and adding a dimension of theatricality to the performance.<sup>183</sup>

Endnotes are both detached from the main body of a work, but at the same time remain connected to the point at which they are signalled. In a similar way to footnotes, endnotes can be used to provide more information or further elaborate on an argument made in the main body of a text or, in this case, the score. The endnotes in the classical guitar work, therefore, were used as one way to further spin out particular musical ideas outside of the main musical flow of the score.

Endnote 6, for example, is used to spin out the ideas set out in the first 8 bars of the third part of work. The first 8 bars of part 3 are shown below:

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<sup>181</sup> Pierre Boulez, *Troisième Sonate pour Piano: Formant 2 – Trope (1955–1957)* (Vienna/London/New York: Universal Edition, 1961).

<sup>182</sup> Pierre Boulez, 'Choice and Interpretation [score preface]', in *Troisième Sonate pour Piano: Formant 2 – Trope (1955–1957)* (Vienna/London/New York: Universal Edition, 1961).

<sup>183</sup> Karlheinz Stockhausen, *Klavierstück XI* (Vienna/London/New York: Universal Edition, 1957).

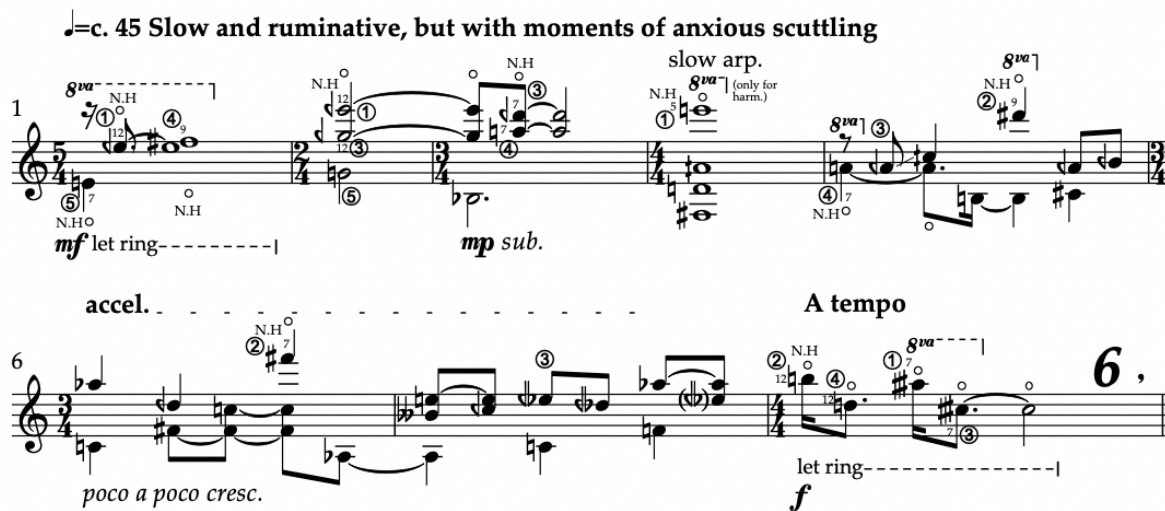


Figure 4.23: bb. 1–8 of *Still Earth, Unstill*, third movement.

The harmonics motif and moving quavers are retained in endnote 6, which is played when the superscript 6 in the score is reached in bar 8, but the material is framed in a different way and approached with a subtly different feel in the endnote. This approach interjects reinterpretations of the music just heard into the performance and can also be thought of as a type of annotation, here, where the other possibilities of the material are momentarily explored.

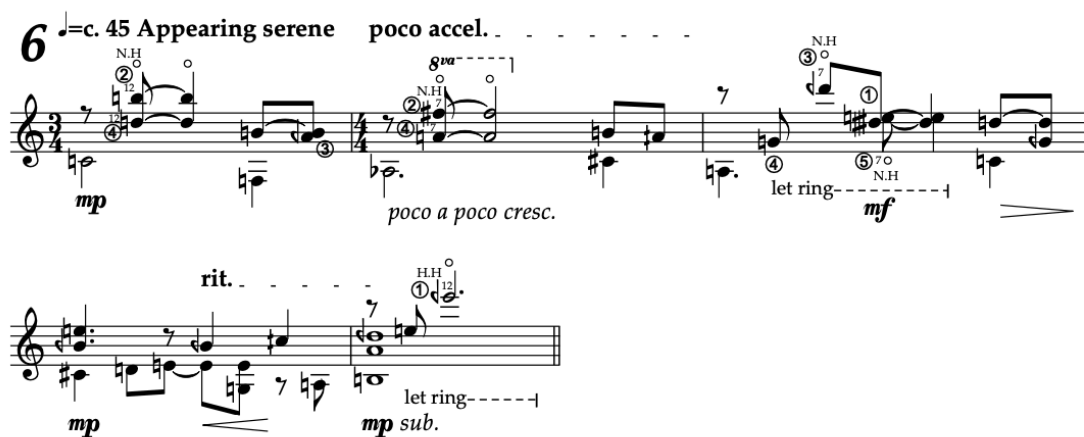


Figure 4.24: Endnote 6 from *Still Earth, Unstill*.

The narrative and annotative functions of the endnotes in *Still Earth, Unstill* exist simultaneously, and neither takes precedence over the other. Both of these are integral to the work as a whole, what Eva Dolo describes as the interdependence between the main

novel and endnotes of *Infinite Jest*.<sup>184</sup> The endnotes provide further exploration, or other interpretations, of the material presented in the front part of the score and at the same time affect the narrative of the work. These are the latter two endnote functions highlighted by Ira. B Nadel in his analysis of Wallace's *Infinite Jest*, interpretation and narrative; the first function Nadel describes is to be informative, which is better suited to language-based communication and less useful, here.<sup>185</sup>

These functions work together with the visual aspect of the performance to convey a complete musical narrative to the listener. The act of making 'the reader go literally physically "back and forth"', as described by Wallace adds another dimension to the work, one which is primarily visual for those witnessing the performance of *Still Earth, Unstill*. This, however, also affects the music as the performer must halt the performance in order to turn to the back of the score and reorientate themselves in a (sometimes, very) different musical place. If the endnotes were omitted, the musical place would remain unfractured, which would present a very different musical narrative.

#### 4.4.3 Endnotes versus Footnotes

In the spirit of Wallace's *Infinite Jest*, the endnotes employed in *Still Earth, Unstill* vary in length and content. Endnotes like 2, 6, and 11, are longer phrases which pulls the performance away from the flow of the music from the main part of the score and into another musical place; these are, again, eventually interrupted by the performer who is required to return to the main part of the score.

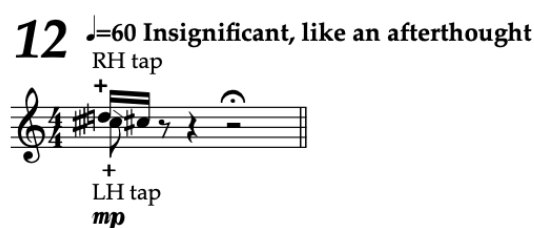


Figure 4.25: Endnote 11 from *Still Earth, Unstill*.

<sup>184</sup> Eva Dolo, 'Too Much Fun – Endnotes in *Infinite Jest*', in *Symbolism: An International Annual of Critical Aesthetics, Volume 15*, eds. Rüdiger Ahrens and Klaus Stierstorfer (Berlin/Boston: De Gruyter, 2015), 76.

<sup>185</sup> Ira B. Nadel, 'Consider the Footnote', in *The Legacy of David Foster Wallace*, eds. Samuel S. Cohen and Lee Konstantinou. (Iowa: University of Iowa Press, 2012), 233.

Some endnotes like 12 are very brief in contrast, and it takes more time for the performer to turn to the back of the score to play it and then return to the front part of the score than it does for the endnote itself to be performed. This mirrors Wallace's satirical use of very brief endnotes to add minor pieces of information to the body of the novel, where the act of going back and forth and, by extension, the interruption itself, could be considered more important than the information contained there. These moments were, for me, more effective than those endnotes which pull the reader away on a lengthy tangent, and in some ways frame those smaller fragments of information to have a greater impact. I included spaces for this in *Still Earth, Unstill*, where even a single, quiet gesture could be voiced in isolation.



**Figure 4.26: Endnote 12 from *Still Earth, Unstill*.**

The helps to convey why endnotes were chosen over footnotes. Regardless of the size of the endnote, a purposeful stalling of the flow of the performance is required so that the performer can turn to the back part of the score and reorientate themselves in a different musical place to the one they were just in, only to have to do the reverse soon after. Where Wallace did this to reflect the fractured nature of reality as he perceived it, I consider endnotes to represent the sort of creative spontaneity and openness towards the multiple potentialities for motivic development that the creative process affords.<sup>186</sup>

In comparison to an endnote, a footnote would have little to no visual impact, and the music would seem to just jump suddenly between different ideas. While this could be a useful aesthetic, it did not fit what I was trying to achieve in this work. The endnote adds further dimensions to the work, affording annotative and narrative developments which would not work musically in a linear score, and allows for the cultivation of different musical places which are visited by way of interruption. The footnote, in contrast to the interruptive endnote, gives further information in the form of an aside from a body of text, and this has

<sup>186</sup> Dolo, 'Too Much Fun', 86.

already been used as a musical approach by Brooks, Östersjö and Wells, where the ‘footnotes’ to their research project publication were presented as an album of music.<sup>187</sup> This approach is somewhat closer to the leftover materials described in Chapter 2 regarding the *abandon* works. Where *abandon I* and *abandon II* were created using leftover recorded fragments from the *(never) abandon* recording session, the album *Footnotes* is comprised of those things referenced (or left over) from Brooks et al.’s research project. Using an endnote in *Still Earth, Unstill* offered a way of presenting materials which were not left over, but had great importance for work itself, and the following sections detail how the concept of the endnote was developed further other purposes in the portfolio.

#### **4.4.4 Rethinking Endnotes as Intertextual Relationships**

While the endnotes in *Still Earth, Unstill* can be framed as intertextual references to the main body of the score, where the motivic materials are momentarily explored in a different way, the intertextual relationships discussed earlier in the chapter can also be understood by way of the endnote. The relationship between peritexts (foot and endnotes) and the main body of a text, or in this case, between the different parts of the score, is motivic, in the sense that an endnote in the back part of the score can develop (further spin out the musical materials), reinterpret (develop the motif in a different musical context or into a different idea), or ‘annotate’ (briefly present related material or an aside from the main narrative) a motif presented in the main part of the score.<sup>188</sup> This can invite the listener into a different musical place, as the endnote also affords the reframing of musical materials outside of the flow of the music from the front part of the score. Although in the case of *Infinite Jest*, Wallace’s endnotes can extend so tangentially that the reader can easily end up in a different thread altogether, the referential connection between the endnote and body of the novel maintains the reader’s association to the original storyline.

To perceive of peritextual relationships as motivic affords further reinterpretations of Wallace’s approach for score-based practice. In the first section of this chapter, musical motif was described as a way of cultivating musical place, becoming a touchpoint reference

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<sup>187</sup> Brooks et al., ‘Footnotes’, in *Voices, Bodies, Practices: Performing Musical Subjectivities*, ed. Laws et al., (Belgium: Leuven University Press, 2019), 171–232. See also, Brooks et al., *Footnotes* (Orpheus Institute, 2020), Bandcamp.

<sup>188</sup> Severs describes peritextual elements as those which exist on the peripherals of the novel as a physical object; for example, the endnote is found at the back of the novel and the publication information at the front. See Jeffrey Severs, *David Foster Wallace’s Balancing Books: Fictions of Value* (Chichester/New York: Columbia University Press, 2017), 139.

throughout a work. A good example of this found in Wallace's novel is outlined below, which will pave the way for a discussion of intertextual relationships between musical works.

The lengthy narrated interaction between *Infinite Jest* characters Rémy Marathe (a Canadian wheelchair terrorist) and agent Hugh Steeply (Organisation of North American Nations' *Office of Unspecified Services*) is divided across the 1079 pages of the novel but takes place over one night, and the conversation is a touchpoint Wallace returns to as the rest of the story unfolds non-chronologically. The first interaction takes place within the first 100 pages of the novel.<sup>189</sup> This interaction includes the signposting of the fairly brief endnote 39, which in turn redirects the reader, by way of the second of its own footnotes, to endnote 304.<sup>190</sup> Endnote 304 is eight pages of densely written text with five numbered footnotes and two lettered sub-footnotes; by this point the reader has been redirected to a fairly abstract storyline recounting the plagiarism of an assignment paper by a student from the Enfield Tennis Academy (the setting around which one of the main storylines revolves).<sup>191</sup> While this sounds far removed from the plot surrounding Marathe and Steeply, endnote 304 is frequently returned to as a touchpoint which provides context for the dystopian political upheaval in the novel.

Wallace's labyrinthine interlinking of the narrative threads in *Infinite Jest* is akin to motivic development, where the endnote becomes a symbol of connection between two different components that share a narrative link of some kind. Returning to the idea of the motif as a soundmark indicative of shared motivic relationship, the concept of the endnote perhaps offers a more convincing picture of the relationship between a larger parent work and a smaller work focussed on a condensed recontextualisation of the larger work's musical motives. In this way, the endnote begins to take on a different meaning to when it is used within a single work like *Still Earth, Unstill*.

#### 4.5 Conclusion – Connections Between Musical Places

Building on the ideas of musical place and landscape raised in Chapter 2, and the soundmarks of the city outlined in Chapter 3, the examples above demonstrate how musical place can be cultivated in score-based practice by adapting the notion of the soundmark from the experience of the sonic dimensions of the worldly environment, and endnotes from

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<sup>189</sup> Wallace, *JJ*, 89.

<sup>190</sup> Wallace, *JJ*, 994.

<sup>191</sup> Wallace, *JJ*, 1055–1062.

the work of David Foster Wallace. This provides a new means of understanding the ways in which musical works can become interconnected, and how musical materials can be considered in terms of their role in texture, structure, and the mediation of a sense of place which is distinct from another work's musical place.

In comparison to the sense of place mediated through urban experience and the soundscape of the city, musical place is more concerned with the interactions between, and perceptions of, sounds. This notwithstanding, there are clear links between the experience of the visible world and the experience of sound in the formation of musical place. Approaching this from the score-based perspective above provides new dimensions to the idea of musical place and sonic landscape, one which is tied the motivic nature of the musical materials and how they are spun out and become expressive. This, in conjunction with the explorations of place in the previous chapters, demonstrates the complexities of place and how there are a number of factors at play in the process of platial becoming.

## Conclusion

### Main Findings

This project developed out of my interest in exploring the connections between sound and place, and how my own compositional practice could be used as a means of understanding the types of place to which sound can afford us access. Where my initial line of inquiry was focussed on broad types of place and using creative interventions within particular sites to explore their histories and affordances, the Covid-19 pandemic and subsequent national lockdowns left these places inaccessible to me. This afforded me the opportunity to carry out more focussed investigations into the connections between sound and place which my initial research plan did not take into consideration, such as sounds which became important to me through re-experience (the Edith Adamson Carillon as a soundmark), and a focus on how aspects of sonic landscapes like soundmarks could be effectively employed in the musical materials of my score-based work.

The research questions raised throughout the course of this practice-based research project focussed on both the role of sound in place experience, and the implications for practice based on understandings of how sound contributes to an overall sense of place in the course of our being-in-the-world. Through the creative investigations presented in the portfolio, I have been able to develop approaches to practice which engage with place in different ways. Chapter 1 presented approaches to place whereby practice was a response to the social context of the UK national lockdowns which affected a distinct shift in the identity of the city for me as a resident. My renewed experience of the city following the relaxation of the lockdown measures then brought the Edith Adamson Carillon to my attention, leading to my investigations into soundmarks in the context of the city presented in Chapter 3. In comparison, Chapter 2 investigated approaches to place which were based on forming sonic landscapes in acousmatic music. While the acousmatic music in the portfolio is presented in a different way to the score-based works, the type of sonic place mediated by soundscapes is rooted in the human experience of the physical world and the embodied nature of experience and ties them in with my other creative work. Chapter 4 explored how these different approaches could be amalgamated to express the metaphor of musical place through a focus on musical materials themselves. The experience of both worldly soundscapes (and the soundmarks perceived therein) and musical materials contributed to the development of novel approaches to mediating a sense of musical place within my score-



based works, and this offers the potential for future development in research projects following this one.

## **Implications for Sound and Place**

### ***The Connections Between Sound and Place Experience***

Sound plays a significant role in the human experience of the environment and affords us access to unique types of place by way of the body. Sound is a key component of perceived meanings and identities ascribed to experiences of the physical world because of the characteristics it adds to experience. The typical image of an urban city like Newcastle upon Tyne, for example, would not be complete without the sounds of traffic and people (the sounds of urban modernity). I learned from my own experience of the UK national lockdowns that a change in the soundscape of the city necessarily leads to a reinterpretation of the meaning and identity of the city. The lockdown city enforced a new modernity where familiar urban sounds were silenced and replaced by a soundscape of desolation and an accompanying sense of alienation. This experience was central in the early stages of this research project, and led to the creation of String Quartet No. 2, “Paralysed City” and provided a context for my classical guitar work *Still Earth, Unstill*, the latter of which also offered an avenue for exploring musical place through the use of score-based endnotes. The changes following the relaxation of the lockdown measures also led me to develop an interest in the Edith Adamson Carillon as a public instrument tied to Newcastle’s sonic heritage and prompted the realisation of its role in my own perception of the city’s identity. The carillon provided an interesting angle for interpreting the role of sound in place experience as it probed me to explore soundmarks as key indicators of place. This demonstrates the importance of sound in the experience of the physical world. Sound does not only afford interesting experiences but is a fundamental part of being-in-the-world in the way human beings relate to their surroundings, navigate the city, and make meaning.<sup>192</sup> The soundmark as an indicator of place was then applied in other contexts, for example, in *Into Convergences*, where soundmarks in the score (key motivic and textural ideas) were employed to lend the work a sense of identity and musical place.

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<sup>192</sup> For Hall et al., everyday sounds and noise are key components of the embodied experience of the city, which contribute towards the complexity of the urban identity (along with space, history, and movements of daily life). While the authors are discussing interviews in noisy settings as a way of engaging with place and qualitative research methodologies, they underline the sounds of the city as a fundamental part of its nature. See Hall et al., ‘Sound and the Everyday in Qualitative Research’, *Qualitative Inquiry* 14, 6 (2008): 1031.

My experience of changing soundscapes, like that of the lockdown city, was equally significant in my acousmatic explorations, particularly in *all illusions, all again*, which was created at the time when the lockdown measures were being gradually relaxed, and the soundmarks of the city were returning. This coincided with Storm Arwen which led me to capture the effects of the storm on the windows of my flat in the city centre. While the sounds of the effects of the storm on the windows produce an abstracted low-frequency soundscape unlike a real stormscape, the acousmatic work invites both reflection on the period in which the work was created, and a reinterpretation of the sounds for individual meaning making beyond that of its original context.

My initial experiences of the city led to a wider consideration of the connections between sound and place, and how the embodied experience of sound might be employed in acousmatic and score-based music to mediate a sense of sonic place detached from the visible environment. In Chapters 1 and 2, the nature of experience was shown to be connected to the body, as it is by way of the body that we have access to the world. Merleau-Ponty describes embodied perception as not just being born anywhere, but in the ‘recess of the body’, the flesh being the material means of capturing the invisible.<sup>193</sup> This has implications for the experience of sound itself, in that the cognition of sound is closely tied to the orientation of the body and how we experience the physical world through movement. From these experiences, sound is imbued with meaning, mediating a sense of place, regardless of whether it stems from an environment’s soundscape, or is presented as part of a musical work.

### ***The Connections Between Types of Place***

Although a number of place types are raised in the course of this exegesis, the embodied nature of experience means that they do not exist in isolation from one another. Any type of place experience is contingent upon a bodily understanding of being-in-the-world, and the same can be said for the experience of sound. The perception of sonic landscapes, such as those afforded by acousmatic music, is based on prior experience of the physical world and its landscapes, just as the perception of motion, height, and depth in sound is rooted in the orientation of the body in space. Where the experience of physical space allows for the development of place meaning for an individual, the experience of sonic landscapes affords

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<sup>193</sup> Maurice Merleau-Ponty, *The Visible and the Invisible*, trans. Alphonso Lingis (Evanston: Northwestern University Press, 1968), 9.

the perception of subjective meanings in sound and interrelationships between sounds presented to a listener (the way sounds seem related or might be a cause of consequence of another).<sup>194</sup>

I employed this approach in works such as *all that is lost*, and *abandon I* and *II*, which purposefully blur the lines between actual and perceived sound sources. These works present a point of convergence between types of place, where real instruments become unreal, distorted and dislocated through the lens of acousmatic compositional processes. The process for *abandon I* and *II* was the redeployment of leftover materials (accidental sounds and material from other recorded takes) from the recording session of my score-based durational work (*never*) *abandon*, using fragments of viola and flugelhorn to construct acousmatic textures which present the sounds of the instruments beyond their physical, acoustic capabilities. In a similar way, *all that is lost* combined the voices of a physical instrument, the pipe organ, with low-frequency electronic voices, conveying a sonic landscape of shifting textures in which different types of place converge.

The connections between types of place is most clearly demonstrated in *Ordinary Light*, which incorporates both the physical location of the Edith Adamson Carillon (hearing the bells within the urban soundscape), and the immateriality of an acousmatic work installed in the nearby Newcastle University Arches. The carillon is presented in two different ways, both as a perceived soundmark in the city centre tied to its heritage, and as disembodied voices which are manipulated to resonate for long periods of time and transform over the course of the acousmatic work. These two place experiences are connected through the body of the listener who navigates between the two listening locations (the Civic Centre Gardens and the Newcastle University Arches). This work demonstrates the convergence between types of place with greater clarity than the other acousmatic works described above, given that two ways of experiencing sound as a component of place are presented alongside one another within the wider soundscape of the city. *Ordinary Light* also brings attention to the carillon as a key component in my own experience of the city, and how its provenance in Newcastle underpins its significance as part of the city's sonic heritage that is often overlooked.

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<sup>194</sup> From an analytical perspective, Dennis Smalley's spectromorphology affords a means for describing the content and shape of sound in electroacoustic music. Smalley's highlights, like in the discussions raised in Chapter 2, that sonic events of particular frequencies can be given positional designations in the spectral space of a score transcription of an acousmatic work. Sounds can also be related to one another and to perceived causes through *source bounding*, which is enacted by the listener through their perception of sound. See Smalley, 'Spectromorphology', 108 and 110.

## Implications for Practice-Based Methodologies

### *Exploring Place Through Practice*

Creative practice offers unique means of mediating a sense of place, whether through reflecting on experiences of the physical environment, through the cognition of sound, or by considering types of musical places in scores and acousmatic works which are afforded specifically through practice-based methodologies. A focus on sound as a key component of place experience opens us the possibility of reconsidering place in musical contexts informed by prior experience of being-in-the-world. The use of soundmarks in my score-based works affords a repurposing of knowledge gained from worldly experience as an approach to creative practice and provides a means of relating works through their musical motives and outlining the roles of materials on structural and semiotic levels within the course of a work unfolding. Much like soundmarks of the urban environment are used as reference points and indicators of place, soundmarks in score-based and acousmatic works contribute to perceived musical places and meanings negotiated through listening. Through this research project, I have been able to reinterpret the soundmark for use in score-based music, where important motivic relationships become markers of musical place. Musical places can also be visited throughout the course of a work using pitch centres as anchors or points of reference, which form a perceived sonic landscape as the music develops.

The use of endnotes in *Still Earth, Unstill* as a way of altering the narrative and structure of the music, and as a means of conveying intertextuality between musical works through a focus on motivic materials, is one of the most interesting outcomes of this research. Employing these approaches has a significant effect on the musical place of the works, affecting their identities and the way in which they relate to one another. The endnote as a structural and intertextual device offers new creative approaches which deserve further exploration in future research projects to understand how they can be utilised in other contexts. I explored the use of score-based endnotes in the context of a solo work for classical guitar, and while this works to good effect where the performer must physically turn to the back and forth between the front and back parts of the score, it seems on the face of it that this approach may be unsuitable for ensemble works due to the logistics of having each performer navigate between the main part of the score and the endnotes. This, however, could be a future avenue of research in order to better understand the affordances and limitations of the endnote as a compositional technique. The endnote as a way of conceiving the relationships between musical works which share motivic material,

however, is better suited to ensemble works where one ensemble is considered the larger parent work, and is related to a smaller, reduced ensemble work (the endnote) which employs a reinterpretation or further spinning-out of the musical materials of the first work. This helps to convey the motivic relationship explored in Chapter 4 which brings about score-based soundmarks. This works well by considering *bloom and splinter* as an endnote to *Into Convergences*, which employed a reduction of the larger work's ensemble, and used specific motives from *Into Convergences* as a starting point for spinning out new music. This relationship could afford the formation of wider constellations of related musical works, all tied together in the way their materials are used and recycled, which would be an interesting avenue for future research. It might also offer a theoretical framework for understanding the relationships between other musical works.

### ***The Interdisciplinary Nature of Creative Practice***

In the introduction to this exegesis, I referred to Giralt et al. who posed that it is quickly becoming more necessary to understand the aural dimensions of place 'in a complex and meaningful way' and how space can communicate meaning.<sup>195</sup> This points towards the need for an interdisciplinary approach to place-focussed practice-based research which can draw on other research domains, affording a comprehensive understanding of place experience as it relates to the physical world, and how it can be interpreted in a range of musical and creative contexts. This research project drew on a range of disciplines to inform the composition of the portfolio, and to gain an understanding of the social, communicative and ontological dimensions of place. This emphasises the rhizomatic nature of practice, in that practice affords the potential for connections, for forging networks across interdisciplinary boundaries which can be used to reinforce the research domains of practice. The compositions included in the portfolio balance the technical aspects of practice with underpinning concepts drawn from, for example, phenomenology, urban studies, and acoustic ecology. Without incorporating these, this project would lack the articulation required to convey knowledge about the role of sound in placemaking and would be too narrowly focussed on technicality. This does not underplay the role of practice as a research methodology, but in fact demonstrates it as an approach to knowing which openly invites collaboration and interdisciplinarity, and affords multiple areas of impact beyond

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<sup>195</sup> Giralt et al., 'Conviction and commotion', 181.

communities of practitioners within the same discipline.<sup>196</sup> My investigation of the Edith Adamson Carillon, which resulted in the live carillon recitals and installation of *Ordinary Light*, had an impact both for my own practice, and for the carillon as a part of Newcastle's sonic heritage. My work with the City Carillonneur has drawn attention to the significance and unique features of the instrument which will, I hope, probe a future increase in support both from the local governing body and members of the public.

Practice-based research as a methodology is much like Heidegger's notion of dwelling. For Heidegger, dwelling is already taking place for human beings, and this affords building – we dwell in order to build. Where, in other research disciplines, a hypothesis concerning a focussed area is formulated and then proven or disproven, practice-based research allows more nuanced research questions to naturally arise from the practice itself, which is already taking place. Repurposing Heidegger, then, we might say that practice comes before postulation, or that asking questions about practice is a result of being engaged in it. This affords a unique approach to understanding place in this project, as I did not set out with a specific hypothesis about the role of sound in place but sought to better understand the connections between music and place more broadly through a creative portfolio. In the course of undertaking the practical component of this research project, I was able to refine my set of research questions which had initially started out as fairly vague and open-ended.<sup>197</sup>

Prior to this research, my approaches were less concerned with the interdisciplinary nature of practice and more with formal methodologies, processes which generated musical materials. While this made for interesting research, I have found that engaging with place, and incorporating phenomenology with elements of heritage and urban studies into the project has allowed my practice to take on additional dimensions which it did not previously consider.

### **Future Research Plans**

This research project has shed light on the connections between my own practice and other research avenues with the potential to have a significant impact beyond the scope of this project. While my approaches to practice and my understanding of place have undergone

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<sup>196</sup> Skains, 'Creative Practice as Research', 84.

<sup>197</sup> Skains, 'Creative Practice as Research', 93.

significant developments, the knowledge uncovered through this research project could take on greater significance in research areas beyond practice itself.

### ***Carillon Scholarship and Awareness***

While *Ordinary Light* brought local attention to an important aspect of Newcastle upon Tyne's sonic heritage and its significant place in the world of carillon music, my carillon research offers the potential to have a future impact on local policy, and to bring further awareness to the Edith Adamson Carillon both nationally and internationally. Following this research project, I plan to work on collaborative projects with the City Carillonneur, Jon Bradley, to improve public engagement with the carillon and probe greater financial support for carillon-related activities and the maintenance of the instrument. My plan includes adopting the carillon as part of my own performative practice to contribute to the musical life of the city and seeking funding to support outreach projects. Unlike the carillons in Loughborough and York, the Edith Adamson Carillon in Newcastle Civic Centre remains hidden and little understood; the instrument is part of a local government building, whereas in York the carillon is housed in the Minster, and in Loughborough, the War Memorial tower. A research project which focusses on increasing the instrument's visibility to the public, and on connecting this part of Newcastle upon Tyne's heritage with the national and international carillon communities, would highlight the importance of the instrument in the nation's history. Given that both Change Ringing (locally and nationally) and carillon music in other parts of the UK are important aspects of the musical life of different cities, it seems that the Edith Adamson Carillon could at some future time become more visible, more widely understood, and better supported. Connections could also be made with urban and sound studies, tracing the directions of sound travel and distance of the carillon's acoustic horizon, perhaps as part of a project which considers the soundmarks of Newcastle upon Tyne and plots them in relation to others on a map of the city.<sup>198</sup>

Projects such as this will open up research avenues in music policy, specifically concerning how historical, functional instruments such as the carillon are supported in the United Kingdom, and how this can be protected and promoted to the public and other musicians. This could tie the instrument into the current discourse of 'music cities' and contribute to painting a clearer picture of Newcastle as a music city comprised of a number

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<sup>198</sup> This could also aid in drawing conclusions about the role of bells in the wider sonic life of the city, in a way likened to Niall Atkinson who explored the sound of bells in the urban experience of Renaissance Florence. See Atkinson, *The Noisy Renaissance*.

of components (for example, the carillon, live music venues, busking scene, and nightlife). The carillon also offers educational potential, allowing students to engage in unique practical activities that can be brought to life as part of an experiential approach to learning, while simultaneously introducing students a crucial aspect of local history which is often overshadowed by the strong folk music traditions in North-East England.

There are natural connections between folk music and the carillon (the carillonneur often performs folk tunes as part of the repertoire), which may also afford future collaborations between performers and composers of different styles and traditions. This will open the instrument up to a different type of audience and performance style, with the possibility of using the space around the Civic Centre for live music performances which incorporate a live carillon.

There is a distinct lack of carillon scholarship available to musicians, particularly in relation to UK carillon music and instruments, and what is available relates either to tuning carillon bells or tracing their historical development and diaspora.<sup>199</sup> Some publications have moved towards looking at contemporary applications of the carillon, but the focus of these is outside the UK.<sup>200</sup> While there are a number of recital and instructional videos available online through platforms such as YouTube, these often stem from the USA or elsewhere where the carillon has greater visibility. The lack of scholarship is perhaps because the carillon seems to exist on the periphery of musical activity, and unlike live music concerts is not heavily marketed. A focussed project highlighting the creative affordances of the carillon and the part it plays in local heritage would enable the musical activities of the carillon to garner greater local and national attention and enable a wider pool of musicians to get involved with composing or performing on the instrument.

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<sup>199</sup> Schneider and Leman discuss the tuning of the carillon in Bruges, which consists of 47 bells (four-octave carillon). See Albrecht Schneider and Marc Leman, 'Sound, Pitches and Tuning of a Historic Carillon', in *Studies in Musical Acoustics and Psychoacoustics. Current Research in Systematic Musicology*, vol. 4, ed. Albrecht Schneider (Cham: Springer, 2017), 247–298. Luc Rombouts' *Singing Bronze* provides an overview for the history of carillon music and development, though the discussion is largely focussed on the countries in which there are strong cultures of carillon music like Belgium, the Netherlands, and the USA. See Rombouts, *Singing Bronze*.

<sup>200</sup> See, for example, Tiffany Kwan Ng, 'The Heritage of the Future: Historical Keyboards, Technology, and Modernism', (PhD diss., University of California, 2015), which considers contemporary applications of carillons and organs in the post-war USA and the Netherlands. See also Canfield-Dafilou and Werner, who use a modal analysis of the Lurie Carillon at the University of Michigan as a means of understanding the possibilities of each of the instrument's bells for audio effects. See Elliott Kermit Canfield-Dafilou and Kurt James Werner, 'Modal Audio Effects: A Carillon Case Study', (paper presented at Proceedings of the 20<sup>th</sup> International Conference on Digital Audio Effects (DAFx-17), Edinburgh, September 5–9, 2017), 247–254.



### ***Creative Applications of the Endnote***

The endnote, which was described in Chapter 4 as a structural device used to fragment and reconstruct the narrative of, and as a means intertextuality between, musical works, deserves further research to understand its potential for other creative applications. While the endnote approach in *Still Earth, Unstill* yielded interesting results, I would like to spend more time exploring ways of incorporating this technique into other score-based works. I believe it could be used to add further navigational layers to performers' scores which goes beyond the turning back and forth of the score in *Still Earth, Unstill*, and a more comprehensive overview of the creative affordances of the technique could then be presented as an article which references a body of exploratory creative work. The classical guitar work included in this portfolio, as well the intertextual works *bloom and splinter* and *The Dying Earth Prayers*, would be used as points of departure for a more extensive practice-based investigation into the technique's affordances.

As an intertextual device, the endnote as a link between a larger and smaller work could be expanded to refer to a collection of more condensed musical works which refer to a larger whole through the reinterpretation or recontextualisation of its musical materials, much like a set of textual endnotes can refer to a larger body of writing. These applications, however, are still closely aligned to what has been presented in this portfolio, and it would be useful to supplement this with an exploration into the other affordances of the endnote as a musical device. It could be used, for example, to describe collections of materials drawn from other sources, such as recontextualised fragments of soundscape recordings, viewed as endnotes from the soundscape.

My carillon research and application of the endnote provide the most fertile ground for future research, and I think the evidence of this lies in the rich history of the carillon as an instrument and its potential for contemporary applications in conjunction with its public context, and the unique structural nature of score-based endnotes which offer a further experiential dimension beyond the music itself, whether as a performer or as a listener.

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