



University
of Glasgow

Parkes, Bethan Rachel (2011) *Affective spatialities in the acousmatic arts*. MMus(R) thesis.

<http://theses.gla.ac.uk/3372/>

Copyright and moral rights for this thesis are retained by the author

A copy can be downloaded for personal non-commercial research or study

This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the Author

The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the Author

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given

Affective Spatialities in the Acousmatic Arts

Thesis and Creative Portfolio

Bethan Rachel Parkes BA

Submitted in fulfilment of the requirements of the degree of
MMus (Sonic Arts)

School of Creative and Cultural Studies,
College of Arts
University of Glasgow

August 2011

© Bethan Parkes, 2011

Acknowledgements

I would like to thank my supervisor Dr Nick Fells for his support, insight, encouragement and enthusiasm for this project, and the lengthy discussions on the subject of this research. I would also like to thank Nick and Professor John Butt for the very informative research training seminars, and Nick, John and Dr Martin Parker Dixon for the feedback on my presentations for these seminars. I would also like to thank my family – Steve, Catriona, Sarah, and Grandad Jim, for their patience and support throughout. The Artisan Roast crew – Megan, Phil, Dave, Ben, Ben TD, and Erik – must be thanked for the coffees, and for providing me with a second home when my flat was being renovated around me. Finally, I would like to thank Jamie for always being there for me, for his help and support, and for cooking dinner for me all the time.

Contents

Affective Spatialities in the Acousmatic Arts (thesis).....	4
Creative Portfolio (commentary).....	40

Thesis

Abstract

This paper investigates the concept of *affective spatialities* in the acousmatic arts, by means of an exploration and exemplification of the theory that the listener may experience a sense of presence in the environment of the acousmatic work (the virtual acoustic space) which is inherently linked to their awareness of their *state* of being there. The claims and concepts of this theory are investigated in particular in relation to Gernot Böhme's aesthetic theory based on the concept of *atmospheres*, and are developed specifically in relation to auditory experience. The value of this theory as an approach to listening, and as a direction for contributing to the discourse on acousmatic spatiality is exemplified through a discussion of a personal listening experience of Jeph Jerman's *Albuquerque Hotel Room*.

Contents

<i>Abstract</i>	4
Introduction	6
Chapter One: Affective Spatialities	9
Chapter Two: Worlds	15
Chapter Three: Presence	18
Chapter Four: A Listening Experience.....	24
Conclusion.....	33
Bibliography	36

Introduction

In *The Phenomenology of Aesthetic Experience*, Mikel Dufrenne makes an important distinction between two categories of reflection in aesthetic discourse. The first of these comprises “the sort of reflection which treats of the structure of the aesthetic object” – an approach in which the perceiver “detach[es himself] from the work by substituting an analytical perception for the perception of the whole”¹. In the discourse surrounding the notion of spatiality in the acousmatic arts², this approach dominates, with a focus on the technological, representational and structural aspects of spatiality, and on the definition of terminology and methodologies for primarily objective analysis. Dufrenne, however, contrasts this structural discourse with a second type of reflection which considers the “sense” of the aesthetic object, constituting an approach in which the perceiver “gains intimacy” with the artwork as opposed to “decomposing” it³. This challenges the disinterested approach of traditional aesthetics through suggesting a fundamental change in the perceiver’s relationship to artworks, with the implied reciprocity of this relationship pointing toward an aesthetics of *engagement*. In pursuing this notion of aesthetic engagement, I would like to propose an approach to acousmatic spatiality which takes the *affective* qualities of space and environment as its primary aesthetic consideration, viewing this as something which exceeds the technical structure of the work, proceeding from it but not being reducible to it.

This approach finds support in a series of articles written by Gernot Böhme, in which he proposes and elucidates a theory of aesthetics which takes as its basis the concept of *atmosphere*, defined as the relationship between environmental qualities and human states⁴. Atmospheres consist of an affective and a spatial element – they have a certain character of feeling which fills a space “like a haze”⁵, enveloping and affecting subjects in their sphere of extension. It must be noted however, that the “character” of atmospheres is not an entirely objective quality, as “to define their character, one must expose oneself to them, one must experience them in terms of one’s own emotional state”⁶; and yet as Böhme notes “their quasi-objective status is preserved [through] the fact that atmospheres can be experienced as surprising, and on occasions, in contrast to one’s own mood”⁷. Thus, as an intermediate phenomenon existing “in-between” subject and object, the ontological status of atmospheres is unstable, which imbues them with a certain intangibility, an irrationality

¹ Dufrenne, *The Phenomenology of Aesthetic Experience*, 388.

² I use the term acousmatic arts here to refer to works created for mediation by loudspeakers. While this encompasses the acousmatic music genre, it is not restricted to it, and thus throughout this paper the term acousmatic will be used with this broader applicability in mind.

³ Dufrenne, *The Phenomenology of Aesthetic Experience*, 388.

⁴ Böhme, “Atmosphere as the Fundamental Concept,” 114.

⁵ *Ibid.*

⁶ Böhme, “The Art of the Stage Set,” 2.

⁷ *Ibid.*, 4.

which results in their irreducibility to structure and their consequent exclusion from traditional aesthetics.

Indeed, Böhme differentiates his theory from traditional aesthetics in a number of ways, the first of which reflects Dufrenne's categorisation of aesthetic reflection. He writes of the judgemental nature of the "old" aesthetics, citing its function as facilitator of criticism, and as justifier of a "positive or negative response" to art, noting the progression from this to the dominance of semiotic theory in which consideration of the sensuous experience of the artwork is conspicuously absent⁸. Böhme, however, is chiefly concerned with this sensuous experience as the point of departure for his aesthetic theory, with the concept of atmosphere providing a way through the complex notion of the experiential "in-between" in a way that *occupies* this intermediary space, rather than denying its existence through the polarisation of subject and object that occurs in traditional aesthetics.

Böhme's second critique of traditional aesthetics confronts its specific role as a theory of the arts. Its emphasis on judgement, abstract universals and rationality restricts the discourse to the realm of what is referred to as "real, true, high ... authentic art"⁹. In Böhme's theory, however, the concept of atmosphere encapsulates the affective nature not only of art works, but also of the broader "life-world"¹⁰ – the world which we inhabit, engage with, build and dwell in¹¹. Indeed, in Böhme's definition, atmosphere accounts for the way in which we describe an evening as melancholy, or a valley as serene¹². He writes of "the atmosphere of a city"¹³, and the way in which a story can "conjure up" an atmosphere¹⁴. Thus we can see in these examples a broad applicability, which encompasses, and, importantly, *reconnects*, the artistic, the human and the natural.

It is in investigating this concept of reconnection, of reciprocity and relation, that the value and potential of applying an aesthetics of engagement to the study and creation of acousmatic spatiality reveals itself, through the mutual challenging of the traditional dichotomies of subject and object, nature and culture, and rationality and feeling¹⁵. Indeed, as a principal challenger of these distinctions, Böhme's concept of atmosphere provides us with a starting point from which the area between these poles (the in-between) becomes accessible, opening up a window to allow theories that allude to this in-between status into the discourse on acousmatic spatiality - theories of space

⁸ Böhme, "Atmosphere as the Fundamental Concept," 114-5.

⁹ *Ibid.*, 115.

¹⁰ Böhme, "Aesthetic Knowledge of Nature," 37.

¹¹ Here I am making reference to Heidegger's "Building, Dwelling, Thinking" which I will return to later.

¹² Böhme, "Atmosphere as the Fundamental Concept," 119.

¹³ Böhme, "The Atmosphere of a City".

¹⁴ Böhme, "Atmosphere as the Fundamental Concept," 124.

¹⁵ Böhme notes that his aesthetic theory challenges these dichotomies in, Böhme, "The Atmosphere of a City," 12.

and place that extend beyond representation, theories of presence and immersion, and environmental/nature aesthetics, as well as certain aspects of phenomenology concerned with aesthetic experience.

In establishing this theoretical framework it thus becomes conceivable to propose a theory pertaining to what I will call *affective*¹⁶ *spatialities*¹⁷ in acousmatic art practices. This theory suggests that in the production of virtual acoustic space a composer can create a sonic environment in which the listener may experience a sense of presence, a sense of “being-in” a *world* that comes into existence in their experience of the work, which results in the transcendence of the listening environment. This sense of presence is intrinsically linked to the listener’s “awareness of [his] *state* of being in an environment”¹⁸ (my emphasis) and thus to the listener’s affective engagement with the virtual acoustic space. The listening process therefore becomes a process of inhabitation, of engagement, and of transcendence. Composers are aural architects¹⁹ of virtual sonic environments, concerned with “establishing conditions” in which atmospheres may be experienced²⁰, and the listener is an occupant (rather than an observer) of a “world” that is brought forth in aesthetic experience.

This paper presents an exploratory investigation into the key claims and concepts of this theory, in particular in relation to the areas of thought whose in-between status I alluded to above. The notion of affective spatiality is elucidated in the first chapter, drawing upon literature that addresses the relationship between environment and human states, and demonstrating the affective importance of *sonic* spatialities. The second chapter investigates the idea that a “world” is brought forth in aesthetic experience – a world that the listener inhabits through affective engagement. This concept of inhabitation – of *presence in the virtual acoustic space* – is explored further in chapter three, followed by a demonstration, in chapter four, of the affective potential of acousmatic spatiality through the investigation of the concept in relation to a personal listening experience of Jeph Jerman’s *Albuquerque Hotel Room*.

¹⁶ In his article on *Affective Atmospheres*, Ben Anderson highlights a distinction made between affect and emotion – with affect being impersonal and objective, and emotion being personal and subjective – however, as Anderson notes “Atmospheres [or, we might add, any concepts in which the subject/object dichotomy is challenged] do not fit neatly into either an analytical or pragmatic distinction between affect and emotion”, and thus I follow him in utilising the term *affective* not in opposition to “emotional”, but as encompassing it. Anderson, “Affective Atmospheres”, 80.

¹⁷ I have created this term to specifically refer to spatial/environmental affectivity, which includes the notion of atmosphere insofar as it is a spatial phenomenon.

¹⁸ Böhme, “Atmosphere as the Fundamental Concept,” 120.

¹⁹ Blesser and Salter, *Spaces Speak*, 165.

²⁰ Böhme, “Atmosphere as the Fundamental Concept,” 119.

Chapter One: Affective Spatialities

The concept of affective response to space and environment is explored in detail in the field of environmental/nature aesthetics, providing us with examples of the relationship between environment and human states, and also, perhaps more crucially, with an approach to aesthetics that embraces the in-between, that takes aesthetic experience, rather than detached observation, as its underlying stimulus. Indeed, this approach is necessary for an aesthetics of nature – unless as Allen Carlson suggests, we adopt a natural scientific approach (which is the equivalent of the disinterested approach of traditional art aesthetics) in order to establish “correct categories”²¹ for aesthetic judgement of nature²². Böhme, however, criticises this approach, suggesting that through an aesthetics of atmospheres we may develop an aesthetic knowledge of nature based on direct experience, as an alternative to the instrumentalised, detached relationship provided through the natural sciences (here we can note a similarity to Dufrenne’s categories of aesthetic reflection). He is followed in this regard by Arnold Berleant²³, Noël Carroll²⁴ and Ronald Hepburn²⁵, whose aesthetic theories, based on engagement, on “being moved by nature” and on “appreciation” of nature respectively, offer valuable insight into the in-between, contingent character of the matter.

Berleant, in fact, extends his theory of engagement to the arts, arguing with regard to both the arts and nature that “the cognitive relation with things is not the exclusive relation or even the highest one we can achieve.”²⁶ Hepburn, however, does not critique the traditional aesthetic approach to the arts, rather articulating a distinction between art and nature, writing that “it is not quite the same with art as it is with nature...[In the appreciation of nature] the experience is more of a cooperative product of natural object and contemplator.”²⁷ It is, however, precisely this concept of engagement – the notion of a cooperative product of the experienced and the experiencer – that forms the foundation of the in-between, in relation to which we can write of *affective spatialities* in the acousmatic arts. Indeed, we can see from this that it is the traditional aesthetic approach to art which here perpetuates the nature/culture dichotomy, but that through adopting an aesthetics of engagement, in opening up the space in-between subject and object, and between rationality and feeling, we can in fact overcome this. The interconnectedness of the three dichotomies thus becomes apparent - the challenging of the subject-object dichotomy leads us to a different

²¹ Carroll, “On Being Moved By Nature,” 256.

²² Ibid.

²³ Berleant, “The Aesthetics of Art and Nature.”

²⁴ Carroll, “On Being Moved By Nature.”

²⁵ Hepburn, “Trivial and Serious in Aesthetic Appreciation of Nature.”

²⁶ Berleant, “The Aesthetics of Art and Nature,” 236.

²⁷ Hepburn, “Trivial and Serious in Aesthetic Appreciation of Nature,” 77.

understanding of our relationship with the world, in which the polarisation of nature and culture, and rationality and feeling, become irrelevant.

Indeed, in justifying his distinction between the appreciation of art and the appreciation of nature, Hepburn equates the notion of art with traditional aesthetic approaches, and the corresponding art-forms that comply with these ideas. He writes that, for example, “formalist [aesthetic] theories require a determinate, bounded and shaped artifact [and] expression theories presuppose an artist behind an art-work”²⁸ and thus neither can extend to include aesthetic experience of nature – which is not “expressed”, and has no set boundaries for contemplation – or the complex notion of environment in general, which is unframed and enveloping, surrounding the perceiver, thereby discouraging detached contemplation.

These theories, however, are likewise inadequate for our discussion of affective spatiality in the acousmatic arts, as, despite the fact that there *is* an artist (or artists) behind the creation of acousmatic spatiality, the idea of *affective* spatialities does not stem from the notion of artistic expression in the traditional sense that the affectivity “aris[es] from artists expressing their concurrent emotions or feelings in the production of art”²⁹. It rather has its roots in the more contingent, unstable realm of spatial/environmental experience in the life-world, reaching to the in-between of environmental qualities and human states, the in-between of experienced and experiencer, rather than being attributable *entirely* to the work, or the artist or *his* feelings through the work. Likewise, the immersive, environmental nature of spatialised sound unhampered by visual correlates envelopes the listener, discouraging the disinterested, contemplative stance required by traditional aesthetics.

Furthermore, while in the acousmatic arts the boundaries for contemplation may be considered to be the perceived limits of the virtual acoustic space, the unbounded-ness of spatial experience in the life-world is not simply to do with the fact that its perceptual stimuli are often unframed³⁰. Indeed the question “where am I?” may be answered in a variety of ways that exceed the perceptually given. As Yi-Fu Tuan notes, even at the point at which our senses fail to provide us with information about where we are, the mind extends to the unperceived field of “mythical space”³¹ – which may be constituted through any combination of memory, implicit knowledge, and imagination – in an attempt to orientate us, and in failing to do so disorientation, displacement, and insecurity

²⁸ Ibid., 66.

²⁹ Davies, *Musical Meaning and Expression*, 170.

³⁰ In fact Carroll suggests that there are actually certain natural expanses that have natural frames anyway, or as he prefers “natural closure”. He provides examples: “caves, coves, grottoes, clearings, arbors, valleys, etc.” Carroll, “On Being Moved by Nature”, 251.

³¹ Tuan, *Space and Place*, 86.

may prevail. Indeed, even the enclosed interior spaces of our buildings can extend beyond their walls, through our tacit knowledge of where the building is – a knowledge that extends beyond the notions of which street, city, or country, to such contingent concepts as how far it is from such and such a place, where it is in relation to home, notions which will impact upon our *state* of being there – contributing to “how I feel here”³². Likewise, our spatial experience in an underground bunker may extend beyond its internal space through our knowledge that it is situated underground, and it is this fact that may, for example, lead to a further sense of enclosure, and oppression, or perhaps instead to an increased sense of security.

Indeed, our response to these environments and situations is entirely contingent – as Hepburn writes: “there is no simple one-to-one correlation between mental state and natural item [for which we may substitute environment or spatial qualities]. I may interiorize the desert – as bleak emptiness, *néant*: or I may interiorize it as unscripted openness, potentiality.”³³ Tuan further demonstrates this through his investigation into the relationship between environment and feeling, which is worth quoting here in full:

“The problem of how environment and feeling are related comes to a head with the question, can a sense of spaciousness be associated with the forest? From one viewpoint, the forest is a cluttered environment, the antithesis of open space. Distant views are non-existent. A farmer has to cut down trees to create space for his farmstead and fields. Yet once the farm is established it becomes an ordered world of meaning – a place – and beyond it is the forest and space. The forest, no less than the bare plain, is a trackless region of possibility. Trees that clutter up space from one viewpoint are, from another, the means by which a special awareness of space is created, for the trees stand one behind the other as far as the eyes can see, and they encourage the mind to extrapolate to infinity. The open plain, however large, comes visibly to an end at the horizon. The forest, although it may be small, appears boundless to one lost in its midst.”³⁴

Thus we uncover something of the nature of our spatial experience – as Tuan quotes from Irving Hallowell: “Perhaps the most striking feature of man’s spatialization of his world is the fact that it never appears to be exclusively limited to the pragmatic level of action and perceptual experience.”³⁵

This is hugely important to the discussion of spatiality in the acousmatic arts. In dealing with electronically mediated auditory environments we are limited practically and physically in terms of both action and perception. Nonetheless our will to orientate ourselves (to answer the question “where am I?”), whether satisfied or not, persists and therefore, as rehearsed in our spatial experience of the life-world, we extend our minds beyond the perceptually given, and thus our

³² Böhme, “Atmosphere as the Fundamental Concept,” 120.

³³ Hepburn, “Trivial and Serious,” 73.

³⁴ Tuan, *Space and Place*, 56.

³⁵ Hallowell, *Culture and Experience*, 187. Quoted in *ibid.*, 87.

acousmatic spatial experience does not necessarily involve purely those elements that are objectively perceived. The subject becomes intrinsically bound up in the spatial experience, inhabiting the space through his awareness of his *state* of being there, a state which is related to the qualities of the environment. Indeed the question “where am I?” is suitably altered by Hepburn to be “where (aesthetically) am I?”³⁶ in order to account for that part of the answer which includes feeling, atmosphere, affectivity. Certainly, the geographical, the natural scientific, the structural answer is not sufficient to define our spatial experience – neither is a similarly constituted disinterested aesthetic approach when dealing with Hepburn’s question in relation to spatiality in acousmatic works.

It is worth noting, however, that there is a distinct emphasis on the visual in the field of environmental aesthetics: Tuan’s description of the spatiality of a forest refers specifically to visual spatial attributes, mentioning “views”, “viewpoints”, and the notions of visible horizons and “as far as the eye can see”, relating the quality of spaciousness to what is visible. Likewise, Hepburn’s example of a “sense of place” in relation to a village is articulated largely in reference to the visual³⁷, with his one reference to the auditory – “the sounds of its activities (human sounds or machine-sounds dominant)” – having a distinctly source-causal emphasis. In particular in relation to environmental aesthetics, however, sound as an articulator of space, as a spatial quality that is not reduced simply to the idea that its source/cause is present, is extremely important. As Natasha Barrett describes, while our vision may be obscured, there is no “sonic boundary” when we are “sitting in a quiet park, full of trees, bushes, flowers, birds...” and thus if there is a busy road about 500m away, for example, “you can’t see the road because it is obscured by trees and bushes, but the sound from the road now places a clear perimeter on our previously expansive idea of the space [of the park]”. If, as Barrett continues, the sounds of a “low flying helicopter and a more distant passenger plane” are added to the auditory cues, “you are...completely enclosed within a sound space”³⁸. This everyday experience of the acousmatic alerts us to the fact that “acoustic space is capable of simultaneity, superimposition and non-linearity”³⁹. Although this is perhaps most evident in urban, lo-fi soundscapes in which “individual acoustic signals are obscured in an overdense population of sounds”⁴⁰, we may become de-sensitised to this aspect of sound in particular in such

³⁶ Hepburn, “Knowing (Aesthetically) Where I Am,” 6.

³⁷ In relation to the visual Hepburn writes that “In quest of [a sense of place], I make long-shots and closeups: viewing the village from higher ground, its roof-tops, church spire or tower, the landscape beyond it, the curving of roads leading into it, then the modest (or strident) self-presentation of its shops and amenities, its way of cherishing (or its indifference to) its own environmental setting, its rocks and its soils and its chosen building-materials (homogeneous or conflicting)...” (Ibid., 1.)

³⁸ Barrett, “Spatio-Musical Composition Strategies,” 313.

³⁹ Davis, “Acoustic Cyberspace.”

⁴⁰ Schafer, *The Soundscape*, 43.

chaotic sonic environments, with a visual, linear, source-cause approach consuming our auditory attention, prioritising in our consciousness those sounds whose sources we can see or know, and relegating the acousmatic, “background” sounds to the subconscious. Nonetheless these sounds, understood (as in Barrett’s description) as spatial articulators rather than simply signifiers for an object, have a major role to play in the answering of the questions “where (aesthetically) am I?” and “how do I feel here?”

Our sonic experience of space is, like Tuan’s “mythical space”, uncertain and contingent, extending beyond the stability of the visual: indeed, sounds articulate space in a different manner entirely. Taking Tuan’s example of the forest environment, and re-examining it from an auditory perspective presents us with a different spatial experience (albeit one that is in reality generally combined with the visual). Trees do not block auditory cues from beyond them as they do visual stimuli, the distance merely results in the sound reaching the listener in a spatially transformed manner – as Trevor Wishart writes, the spatio-acoustic properties of a forest are “typified by increasing reverberation as the distance of the source from the listener increases”⁴¹, and in this way sounds may open out and articulate spaces that are not visible to us.

Furthermore it is worth noting the instability of this auditory “image” due to the transitory nature of sound. A sound can give us a strong sense of spaciousness or of place, of interior or exterior for example – it may have a strong affective quality, and then it may be gone, lingering only as an affective reverberation. A sound’s absence may be as affective as its presence. A sound can open up a space for us, and then steal it back to an oppressive silence, closing it to uncertainty. Or the sound may fill a space that was once open, and, upon its passing there is a return to a silence, perhaps like Hepburn’s desert – bleak emptiness, or unscripted openness, potentiality. Indeed, as Brandon LaBelle notes, sound’s ephemeral, fleeting existence, (along with its capacity for spatial simultaneity, superimposition and non-linearity) “imparts great flexibility, and uncertainty, to the stability of space... disregard[ing] the particular visual and material delineations of spatial arrangements, displacing and replacing the lines between inside and out, above from below”⁴².

In the creation of the virtual acoustic space, composers are able to recreate, exploit and develop this aspect of sonic spatiality. In this way the virtual acoustic space is no longer simply a setting for a piece of music – it is not a fixed “container” (like a concert hall) as Pauline Oliveros writes⁴³, and does not necessarily adhere to “formalised” spatialities such as those discussed by Wishart⁴⁴, but

⁴¹ Wishart, “Sound Symbols and Landscapes,” 45.

⁴² LaBelle, *Acoustic Territories*, xxi.

⁴³ Oliveros, “Acoustic and Virtual Space,” 214.

⁴⁴ Wishart, “Sound Symbols and Landscapes,” 45-46.

may instead, rather like our everyday aural experience, exhibit ever-evolving boundaries, characteristics and forms, dependent upon the emergence and decay of the sounds that articulate it. Indeed, as Marshall MacLuhan writes:

“[a]uditory space ... [is] a sphere without fixed boundaries, space made by the thing itself, not space containing the thing. It is not pictorial space, boxed-in, but dynamic, always in flux, creating its own dimensions moment by moment. It has no fixed boundaries; it is indifferent to background.”⁴⁵

The electronic mediation of sound, in creating an entirely acousmatic (non-“pictorial”) experience, enhances the possibility for exploitation of this flexible spatiality, allowing for the complex evolution of spatialities within a single work. David Toop suggests, after Böhme, that atmospheres “are most clearly felt as contrastive and ingressive experience. In other words, being surrounded by a barely noticeable atmosphere is too subtle to be experienced at anything higher than subliminal levels, but moving from one distinctive atmosphere to another can provoke a dramatic awareness of the transition, of the awareness of each state.”⁴⁶ While this “awareness” of atmospheres is influenced by other factors (such as the level of “interested enchantment” from the listener, which we will come to later in our discussion of presence in the virtual acoustic space) and may therefore be subtle but extremely engaging (or blatant but ignored), this idea that auditory space is always in flux allows for developments through the receding of existing sound-spaces and the introducing of new ones, and for the uncertainty of ‘affective reverberation’ – the lingering effect – of sounds that have come and gone. Thus we can see the potential in examining spatiality in the acousmatic arts in the context of the relationship between environments and human states – in examining how the purely auditory impacts upon the affective element of “man’s spatialization of his world”.

⁴⁵ McLuhan, “Five Sovereign Fingers Taxed the Breath,” 207. Quoted in Schafer, “Acoustic Space,” 83.

⁴⁶ Toop, *Haunted Weather*, 63.

Chapter Two: Worlds

Seizing upon the fact that Hallowell refers to man's spatial understanding of the world as the "spatialization of *his* world" (my emphasis), it follows to suggest that we may refer to a "world" similarly constituted with regard to the subject in the experience of spatiality in acousmatic art works. This, then, points towards a distinction between the concept of the *space* articulated by and through the acousmatic work – which may be reduced to physical/acoustic properties and notions of spatial allusion and representation – and the concept of a *world* brought forth in aesthetic experience, which suggests an inherent subjectivity, thus allowing the notions of atmosphere and affective spatiality into its realm.

This world is the cooperative product of the perceived and the perceiver. It comes into being when the perceiver is sufficiently engaged with the perceived such that he "loses himself"⁴⁷ in it – it becomes *his* world, through his engagement with the sensuous. In the acousmatic situation, this results in the transcendence of the listening environment, and the concurrent feeling of presence in the virtual acoustic space. However the concept of a world brought forth in aesthetic experience does not simply mean the creation of something like an "alternative" world into which the perceiver is "transported", as is often suggested in relation to the experience of computer display-based Virtual Environments. The notion of *presence* that I would like to put forward here is not successfully described by this idea. This is best clarified by noting that, as Hallowell suggests, the idea of a "world" coming into being, as cooperative product, also occurs in our aesthetic experience of the unmediated life-world. A particularly good example of this appears in *Sea Room*, by Adam Nicolson, owner of the Shiant Islands. He notes that some of those who visit the Shiants "[allow] the islands to envelop them, to be the encompassing limit of their world, even for a while." He continues:

"That is a strange but perfectly real effect: after a few days here, the place seems to expand. The Shiants no longer seem, as Compton Mackenzie described them, like 'three specks of black pepper in the middle of that uncomfortable stretch of sea called the Minch' but a world in themselves."⁴⁸

Indeed, in order to maintain a single concept of a "world" that comes into being in aesthetic experience of both nature (or more broadly the life-world) and art, thus reflecting Hallowell's idea of a world, I would like to move away from the concept of a complete "transportation" through becoming situated in an *alternative* world, as suggested by Dufrenne when he writes that "music or drama transports me on a magic carpet and puts me down in another place which is no longer in the

⁴⁷ This is referring to Böhme's concept of the "I ... los[ing] itself in the listening act" which I will return to later. Böhme, "Acoustic Atmospheres," 18.

⁴⁸ Nicolson, *Sea Room: An Island Life*, 140.

world"⁴⁹. The affective experience of acousmatic spatiality is a cooperative product that does not rely on a "magic carpet" (into which we may read connotations of *illusion*) rather simply a process of engagement that prioritises the auditory sense, *revealing* a world, opening it up to us.

Indeed, in listening to acousmatic works, one may experience a sense of envelopment as described by Augoyard and Torgue – "[t]he feeling of being surrounded by a body of sound that has the capacity to create an autonomous whole, *that predominates over other circumstantial features of the moment*"⁵⁰ (my emphasis). It is in this way that the auditory may predominate over the visual, forming the sensory stimuli by which we orientate ourselves. Thus the listening environment is transcended, in that the virtual acoustic space is the listener's (auditory) environment, inhabited through the *feeling* of being there. Will Montgomery and Brandon LaBelle suggest that there is an "acute sense of displacement"⁵¹ in this experience, and Wishart identifies a disorientation⁵² in listeners in situations in which there is no visual focus or identifiable source for the sounds; however, in a situation in which the listener successfully engages with the work, the displacement becomes a re-placement, the disorientation becomes a re-orientation. It is a case of learning to re-orientate ourselves *aurally*, to take notice of the way in which our aural environment impacts upon us. Thus, in overcoming the primacy of the visual and engaging with an auditory environment in the context of the acousmatic arts our *sonic* sensibility is brought to the fore.

In fact, the capacity of immersive sound "to create an autonomous whole" relies on this sonic sensibility – the way in which sound affects us – and we can thus say that the autonomous whole of which Augoyard and Torgue write is essentially the *world* that is brought forth through the engagement with the auditory environment, through "losing oneself" in the auditory. Conceiving of it thus (as a "whole") the relationship between perceived and perceiver that brought this world into being cannot be seen as a uni- or even bi-directional relationship, but rather something like a unification.

Certainly, the concept of aesthetic experience, understood as engagement, harbours within it the notion of simultaneous reciprocity, of the interdependency of the experienced and the experiencer, which is the underlying concept of the "in-between". This notion of simultaneous reciprocity represents an attempt to articulate a relationship that is not causal or logical, not chronological, not uni- or bi-directional, but which rather implies a sense of unification, of oneness. In this context then, it is required that we think of the word simultaneous *outside* of its temporal sense, rather than

⁴⁹ Dufrenne, *The Phenomenology of Aesthetic Experience*, 153.

⁵⁰ Augoyard and Torgue, *Sonic Experience*, 47.

⁵¹ Montgomery, "Beyond the Soundscape," 211.

⁵² Wishart, "Sound Symbols and Landscapes," 44.

articulating the nature of causal, sequential, or chronological relationships⁵³. A similar problem is reflected in Heidegger's relating of the notions of building and dwelling. He writes that

"[d]welling and building are related as end and means. However, as long as this is all we have in mind, we take dwelling and building as two separate activities, an idea that has something correct in it. Yet at the same time by the means-end schema we block our view of the essential relations. For building is not merely a means and a way toward dwelling – to build is in itself already to dwell."⁵⁴

We shall return to the concept of dwelling later, but for the moment, translating this problem into our present discussion, we may say that if we similarly consider subject and object (or environment) to be separate – autonomous – and simply related through the act of perception, even considered as a bi-directional, mutual relationship, we are blocking our view of the "essential relations" (the in-between). In these essential relations there is a certain "simultaneity" involved – *building is not merely a means and a way toward dwelling – to build is in itself already to dwell.*

Indeed, once the subject-object dichotomy is challenged, and the realm of the in-between invoked, it becomes impossible to talk of subjectivity without needing to inherently refer to that which the subject is intrinsically involved with in order to *be* a subject, and vice-versa. Dufrenne exemplifies this difficulty in the following:

"the notion of a world of the subject may be reversed and compensated for by the notion of a subject of the world. "World" and "Subject" must be considered equal terms. If we have stressed affective quality as a quality of the world for the subject, we must not forget that it is also a quality of a subject for a world. In other words, just as a world is required by a subject who is a subject precisely in relation to a world, a subject is required by the world, which is a world only in being witnessed."⁵⁵

Certainly it is through these notions of simultaneity and of *unity* that we may further develop the notions of engagement and immersion to fully reflect the idea of presence in the virtual acoustic space that I would like to articulate here.

⁵³ In a sense the word simultaneous even in its temporal sense takes away any idea of causality or chronological relationships, but this clarification of its meaning here is required in order to move away from the idea of simultaneity purely unifying *temporally* disparate objects or events. It thus gains a more ambiguous meaning, which allows it to encompass a *spatial* sense of simultaneity.

⁵⁴ Heidegger, "Building, Dwelling, Thinking."

⁵⁵ Dufrenne, *The Phenomenology of Aesthetic Experience*, 453.

Chapter Three: Presence

Arnold Berleant writes that the “aesthetic mark” of experiences such as

“canoeing on a serpentine river when the quiet evening water reflects the trees and rocks along the banks so vividly as to allure the paddler into the centre of a six-dimensional world; camping beneath pines black against the night sky; walking through the tall grass of a hidden meadow whose tree-defined edges become the boundaries of the earth...is not disinterested contemplation, but total engagement, a sensory immersion in the natural world that reaches the still uncommon experience of unity.”⁵⁶

This progression through the idea of “sensory immersion” (which may be seen as passive) to the idea of an “experience of unity” (the whole – the unification of subject and object), describes that which results in the formation of a world. We have noted that sensory immersion, although initially passive (i.e. through hearing rather than listening), discourages a detached, disinterested approach, and thus it forms part of a process in which the subject must become involved in order for a world to be formed. Indeed, in the acousmatic arts, the naturally immersive⁵⁷ nature of sound is not sufficient to bring forth a world in which the experiencer feels a sense of presence – as I highlighted in my paper on *Presence in the Virtual Acoustic Space*, the idea of presence in real or virtual environments of any form is constituted through a form of interaction or engagement with the environment. It was suggested that this mode of engagement is affective, in contrast to visual-tactile based virtual environments in which presence is usually achieved through a process of appropriate feedback on *action*. Emotion and feeling then take the place of action; atmospheres take the place of affordances⁵⁸.

The importance of this has since been demonstrated through James Andean’s exploration into Gibson’s ecological psychology in the electroacoustic concert context. In acknowledging that “affordance requires a ‘mutual relationship’ between organism and object or event” he begins to question the applicability of this concept to electroacoustic music. He writes:

“How is the relationship between listener and electroacoustic work mutual? We can see how the environment impacts upon the listener in this situation; but how can the listener impact the environment? Part of the problem here is a particular characteristic of the Western concert tradition, and of the Western art tradition generally, which is largely predicated on one-way communication from creator to receiver. The listener is, in essence, a passive participant, and is limited somewhat in

⁵⁶ Berleant, “The Aesthetics of Art and Nature,” 237.

⁵⁷ The term immersion has a number of meanings, including an active sense of engagement and involvement, but here I am using it in its passive sense of surrounding or covering. It is interesting to note however there is a reciprocity involved between the two meanings, as immersion in the passive sense encourages immersion in the active sense, and immersion in the active sense relies on immersion in the passive sense.

⁵⁸ See Gibson, *The Ecological Approach to Visual Perception*, See esp. Chap. 3 and 8.

their capacity to explore the environment perceived through the work, as they are unable to effectively impact that environment, and thus unable to adequately interact with it”⁵⁹

As Andean acknowledges, the uni-directional relationship between artwork and receiver (or *creator* and receiver as Andean suggests) goes against the ecological approach he is trying to employ, and thus the traditional approach to composition and performance of these works is cited as a reason for the failure of the application of the concept of affordances in this context. However, the overcoming of this problem – that of the listener being “unable to effectively impact that environment” – would require a fundamental change in the presentation context, moving more towards the approach of the designers of Virtual Environments. This problem is caused by employing an approach which is geared toward visual and tactile perception – indeed Gibson’s notion of affordances is constructed in his *Ecological Approach to Visual Perception*. When we substitute the aural for the visual, it clearly becomes more useful to employ Böhme’s ecological approach, based on atmospheres and feeling, which promotes an engagement based on affective rather than physical action-based impact.

While this may demonstrate the importance of Böhme’s theory in relation to the auditory in general, in exploring the notion of presence in the *virtual* acoustic space, we do of course have to consider the consequences of electronic mediation for the idea of affective engagement with the environment. Rather like the visual, the notion of electronic mediation suggests detachment – it is a mediated rather than immediate experience. Yet at the same time, in creating the acousmatic situation, electronic mediation of sound has encouraged an approach to listening in which sounds are no longer simply relegated back to their sources. Indeed, as we have noted, the lack of visual correlate for the aural stimuli facilitates an overcoming of the primacy of sight – the hierarchy of the senses is altered. This has the effect of releasing sound from a situation in which its potential is often unfulfilled - as Dyson notes in relation to film sound theory, “[t]he screen, then the image, and finally the object absorb sounds’ ephemerality and dimensionality, tying sound to the visual object”⁶⁰. The ephemerality and dimensionality mentioned here, as fundamental attributes of sound, are thus reinstated in the acousmatic situation in which there is no visual object, thereby, perhaps paradoxically, allowing the suggestion that the process of electronic mediation can help to emphasise, or bring to our attention, the truly immersive⁶¹ nature of sound. Indeed, sound’s ephemerality and dimensionality, as discussed in *Presence in the Virtual Acoustic Space*, play a major role in the experience of presence, facilitating a move away from an object-centred approach to

⁵⁹ Andean, “Ecological Psychology,” 132.

⁶⁰ Dyson, *Sounding New Media*,” 76-77.

⁶¹ In both of the senses articulated earlier.

listening – Katharine Norman’s “referential listening” – and encouraging instead what she refers to as “reflective listening” or “interested enchantment”⁶².

In rejecting the referential/object-centred approach, and replacing it with interested enchantment, we adopt an attitude to listening that becomes “listening as such, not listening to something”⁶³. Indeed, purely auditory cues provide us with the perfect opportunity to consider both object and space “outside of a materialist frame.”⁶⁴ As Böhme writes,

“In a listening which does not leap over...sounds to the sources where they might stem from, listeners will sense ... sounds as modification of their own space of being. Human beings who listen in this way are dangerously open: they release themselves into the world and can therefore be struck by acoustic events. Lovely tunes can lead them astray, thunderclaps can shatter them, scratching noises can threaten them, a cutting tone can damage them. Listening is a being-beside-yourself (*Außer-sich-sein*); it can therefore be the joyful experience of discovering oneself to be alive”⁶⁵.

An interested enchantment (which in its two constitutive words articulates the simultaneous reciprocity of listener and sound) is exactly this: the interested listener releases himself into the world, insofar as he is enchanted by (struck by⁶⁶) acoustic events. Furthermore, the concept of sensing sounds as a modification of one’s own space of being encapsulates the notion of the in-between of subject and object in a spatio-affective sense, and thus is particularly useful for our present purpose.

How then can we conceive of the listener’s “own space of being”? It is insufficient to understand this simply as the space taken up by the body – a concept which would very quickly result in the return to a complete subject-object distinction, utilising the notion of inner and outer experience to differentiate between the subjective and objective. As suggested above, the interested listener releases himself into the world, and it is through this process that his “space of being” is formed. Thus this concept of the listener’s space of being is better articulated through Böhme’s notion of the “expansion of corporeal space” which endeavours to overcome the “false topology of an Inside and an Outside”⁶⁷. Indeed it provides us with a spatially articulated model for the experience of the in-between – in the experience of acousmatic works the expansion of the corporeal space into the virtual acoustic space constitutes the unification of the subject and environment, affirming their spatial simultaneity, something which is important for the experience of atmospheres.

⁶² Norman, “Real-World Music as Composed Listening,” 12.

⁶³ Böhme, “Acoustic Atmospheres,” 17.

⁶⁴ Dyson, *Sounding New Media*, 5.

⁶⁵ Böhme, “Acoustic Atmospheres,” 18.

⁶⁶ We can see in Böhme’s following elucidation of this idea that the idea of being “struck” here is not intended to be understood as struck in a passive sense, rather mirroring the idea of enchantment in that its meaning is something like the meaning in the phrase “I was struck by the fact that ...”, implying the involvement of the perceiver.

⁶⁷ Böhme, “Acoustic Atmospheres,” 18.

Indeed, Böhme writes that atmospheres are “sensed in bodily presence by human beings”⁶⁸, an idea that may initially appear problematic in the context of electronically mediated sound. While we are still understood to be present for the sensuous experience of the sound waves, it may be debated whether we can be bodily present in the environment articulated. This is another symptom of the emphasis on a visual-tactile, action- and object-centred approach to the idea of presence⁶⁹, but nonetheless it requires our attention here as it is tied up with a questioning of what we mean by bodily presence.

In his article on *The Space of Bodily Presence and Space as a Medium of Representation*, Böhme, following through from a Kantian definition of space, initially defines the space of bodily presence as

“the space within which we each experience our bodily existence: it is “being-here”, a place articulated absolutely within the indeterminate expanse of space – absolutely in the sense that it is without relation to anything else, especially to things: the “here” is implicit in the intuition of oneself”⁷⁰.

However, this explanation of the concept of bodily presence is dangerously close to the understanding we are here trying to avoid. While the notion of “being-here” provides us with an important starting point, the determinate nature of the space of bodily presence indicated here allows Böhme to suggest that “the difference between the absolute “here” and the expanse of space is the difference between inner and outer”⁷¹. As previously noted, this points toward a reinstatement of the subject/object dichotomy and the visual/tactile and object-centred conception of space. However, it is this that is overcome by Böhme’s revision of the idea of bodily presence, as he writes that “although bodily space is always the space in which I am bodily present, it is at the same time the extension, or, better, the expanse of my presence itself”⁷². The notion of “being-here”, then, is no longer restricted by a closed notion of “here” as the space of the body itself. It expands to include “the space of actions, moods and perceptions”⁷³, and it is in this way that the listener may be “bodily present” in relation to the electronically mediated sonic environments of acousmatic works. As we have noted in our discussion of atmospheres and affordances, in the context of the acousmatic arts it is the space of *moods*⁷⁴, defined as “physical expanse, in so far as it

⁶⁸ Böhme, “Atmosphere as the Fundamental Concept,” 122.

⁶⁹ This emphasis points towards a notion of bodily presence which is absolute thus perpetuating the subject/object dichotomy.

⁷⁰ Böhme, “The Space of Bodily Presence,” 4.

⁷¹ Ibid.

⁷² Ibid., 5.

⁷³ Ibid.

⁷⁴ In the context of this paper the term “moods” is perhaps not the most appropriate, however as suggested in the following definition it may be understood as space of affectivity.

involves me affectively”⁷⁵, with which we are concerned. Indeed, in his paper that specifically addresses *acoustic* atmospheres, Böhme in fact suggests that the idea of the expansion of corporeal (bodily) space is particularly suited to the process of listening as he compares it with Descartes’ concept of “feel[ing] out” a stone with a stick, writing that

“[it] is even more appropriate to say that when we are listening and not simply tapping around with a stick, we are outside ourselves. And this being which is outside itself does not encounter voices, tones, sounds, out there, but is itself formed, moved, moulded, crenated, cut, lifted, pushed, expanded and constricted by voices, tones, sounds.”⁷⁶

The notion of the “I” *losing itself*⁷⁷ in the listening act is, therefore, perhaps better understood as the *expansion* of the self into the acoustic space – an aural “being-here”. The “here” in being-here is thus equated to this *contingent* notion of one’s space of being, which is formed in relation to the environment. This moves away from the determinate notion of bodily presence as something “without relation to anything else”, instead suggesting a simultaneous reciprocal relationship between man and space. This relationship is articulated particularly well in Heidegger’s essay on *Building, Dwelling, Thinking* as he writes:

“When we speak of man and space, it sounds as though man stood on one side, space on the other. Yet space is not something that faces man. It is neither an external object nor an inner experience...I am never here only, as this encapsulated body; rather I am there, that is, I already pervade the room, and only thus can I go through it”⁷⁸

In Heidegger’s continuation of this idea, in which he states that “[m]an’s relation to locations, and through locations to spaces, inheres in his dwelling...[thus] the relationship between man and space is none other than dwelling”⁷⁹, Heidegger provides us with a useful concept for our elucidation of the notion of presence. Indeed, as David Seamon writes (quoting from Bernd Jager), this relationship between man and space – dwelling – is not, “[a] mere extension of existential space and place; rather “it becomes itself the fundamental human activity, in the light of which both place and space find their first clarification””⁸⁰. This notion of dwelling, described as a “human activity”, demonstrates the “active” sense of the relationship between man and space – which, as we have seen is not limited to engagement by action, (like Heidegger’s notion of going through a room), but can take the form of engagement by affection, or indeed, as is usually the case, a mixture of the two.

⁷⁵ Ibid.

⁷⁶ Böhme, “Acoustic Atmospheres,” 18.

⁷⁷ Ibid.

⁷⁸ Heidegger, “Building, Dwelling, Thinking,” 156.

⁷⁹ Ibid.

⁸⁰ Seamon, “Concretizing Heidegger’s Notion of Dwelling.” Quote from Jager, Bernd, “Theorizing and the Elaboration of Place,” 154.

This affective engagement – the relationship between environment and human *states* – is exemplified in Seamon’s elucidation of the concept of dwelling, in which he writes that

“The world in which we find ourselves completes us in what we are...In other words, people are immersed in their world, and this immersion is qualitative, subtle—in many ways, ineffable. Thus a walk through a well-tended garden evokes a different state of being than a similar walk through an uncared-for garden or an unsightly vacant lot. Similarly, entering a church evokes a different human stance than entering a nightclub or a shopping mall or an empty street or a street filled with human activity”⁸¹.

It is thus, through this “qualitative immersion”, that the virtual acoustic space may become a *world* for the listener, who experiences a sense of *presence* in this world, concurrent with his awareness of his *state* of being there. Therefore, in the engagement between man and space in the experience of acousmatic works – in the expansion of corporeal space into the virtual acoustic space – man (the listener) aurally dwells there: he simultaneously attends to, and is affected by the sounds, in that the sounds modify his space of being. It is possible, then, in light of this, to return to Hepburn and Böhme’s questions – “where (aesthetically) am I?” and “how do I feel here?” – and understand the way in which they may apply to the experience of acousmatic art works, thus allowing us to write of affective spatialities – of the *sense* of acousmatic spatiality which proceeds from, but which is not reducible to, its structure.

⁸¹ Seamon, “Concretizing Heidegger’s Notion of Dwelling.”

Chapter Four: A Listening Experience

When we consider the spatial aspects of acousmatic art works in light of the above discussion, it becomes clear that the notion of spatiality includes but also extends far beyond the technological, the geographical, the representational and the structural, in particular when the questions “how do I feel here?” and “where (aesthetically) am I?” come into play through the notion of affective spatialities. As we have noted, this occurs in aesthetic *experience* and thus any investigation into affective spatialities in an acousmatic art work must be based upon experience of the work.

However, there is a certain difficulty in writing about experience, which is addressed in Stefan Helmreich’s article “An Anthropologist Underwater”. Borrowing a term from Michael Silverstein’s *Translation, Transduction, Transformation* which “urges readers to imagine the work of rendering meaning from one milieu into another as akin to transduction”⁸² he notes that “ethnographic experience is always *transduced* into ethnographic text”⁸³ (my emphasis). This concept of transduction, exemplified by Silverstein through the notion of an energy transfer, suggests a fundamental transformation. Indeed Helmreich notes that “meaning is ... sometimes radically transformed—in such transfers”⁸⁴. Thus in our investigation into affective spatialities in the acousmatic arts, which involves discussion of *experience* and the in-between, (in which we here understand *meaning* to be constituted), we must be aware of the implications of and complications in transducing aesthetic experience into aesthetic text.

The immediate issue that we encounter when writing about sound of any kind is the difficulty involved in conveying the distinct nature of sounds through words. Indeed this usually results in the reduction of the sound back to its source-cause in order to describe it (although this does so poorly, as the same source-cause objects can produce a multitude of different sounds. Furthermore the possibility for simultaneity and superimposition in acoustic space means it is not always possible or desirable to isolate individual sounds in this way). Thus, in particular when we are writing of *listening as such, not listening to something* we often find it difficult to describe it in order to communicate what it *is* (when to communicate is understood as to make common or share – suggesting a certain abstraction to commonly understood language). This is, in part, due to a lack of vocabulary, although that is a situation which has been improved through the work of various writers in sonic arts and broader sonic studies. However, there is another, more crucial problem, hinted at in Michel Chion’s observation that in speaking about sounds we “shuttle constantly between a sound’s actual content,

⁸² Helmreich, “An Anthropologist Underwater,” 627.

⁸³ Ibid.

⁸⁴ Ibid.

its source, and its meaning... it is no mean task to speak about sounds in themselves”⁸⁵. It is in Chion’s mentioning of *meaning* that we can identify the problem. In understanding meaning as an in-between phenomenon (and therefore not closed or fixed) we are inherently involving the subject with the sound when talking of its meaning. The very fact that meaning comes into the discussion of sound highlights the fact that sound exists to us as heard, or listened to, and as such it has a certain particularity that is a feature of experience. This is to understand sound as existing in (and defining) the space of bodily presence. Indeed in our efforts to talk about “the sound itself” we may abstract it into Böhme’s “space as a medium of representation” – that space which “has nothing to do with me as a human being, but is an abstract schema according to which a multiplicity of different things is represented”⁸⁶ – and talk, for example, of its acoustic or physical properties, but this, arguably, moves even further away from its essence. This abstraction is, to a certain extent however, a requirement for the transduction of experience into text in that we must be able to identify and select (represent through words) certain aspects of what we are experiencing in order to write about them, thus “decomposing” the experience to a certain extent, to refer back to Dufrenne’s categories of reflection. Nonetheless, in aesthetic experience we “gain intimacy” with the experienced, inhabiting the world that is revealed to us, rather than detaching ourselves from it, and thus the ultimate aim in Dufrenne’s second category of reflection is to communicate a “sense” of this, returning, then, from *abstraction* (space defined by physical/acoustic properties and notions of spatial allusion and representation) to describing, as far as our language will allow, *particularity* (the world brought forth in aesthetic experience).

This problem is mirrored in the specificity or particularity of *affective* experience. Indeed, the questions which we have highlighted as being central to the experience of affective spatialities – *where aesthetically am I and how do I feel here?* – are constituted on an individual level, and therefore, as the invoking of the in-between of subject and object suggests, we must acknowledge the multiple complex particularities that occur in the relationship between experienced and experiencers. Therefore while in light of this the notion of a “general” listener cannot be qualified in the discussion of aesthetic experience, it becomes impractical to account for all potential subjectivities, and this is the reason why this discussion of affective spatialities takes as its basis an individual, personal listening experience.

However, having noted some of the issues with the transduction of aesthetic experience into aesthetic text, it must be clarified that while the following discussion takes the form of a personal listening experience, its function is not to *transfer* that experience to the reader in order that they

⁸⁵ Chion, *Audio-Vision: Sound On Screen*, 29.

⁸⁶ Böhme, “The Space of Bodily Presence.”

might experience a transduced version of the work. Instead its purpose is to demonstrate a small part of the affective potential of acousmatic spatiality, through *revealing* this aspect of *my* experience by way of a transduction into text. The experiential transduction is also complemented by references to the work of other authors who have documented or theorised about relationships between environment and human states, in order to contextualise this personal experience in the broader field of affective response to space and environment. This approach, then, aims firstly to avoid any apparent closing of the work through the specificity of my experience, without resorting to a chaotic, pluralistic account of the variation involved in the listening process; and secondly to provide support for its claims without moving outside of the realm of experience, and into abstraction.

The work that forms the basis of this discussion is a phonographic piece by Jeph Jerman, entitled *Albuquerque Hotel Room*⁸⁷. It must be noted that while this exemplification of the theory outlined in the previous three chapters examines a phonographic work, this should not be understood as an indication of the scope of the theory's applicability – it is not genre specific and may in fact be applicable to works across the broad spectrum of the acousmatic arts (from soundscapes, to electroacoustic works to electronica etc.). Indeed, this work was chosen simply on account of its interesting and complex affective impact (despite its apparent simplicity in terms of structure and “compositional” content) which I believe renders it particularly useful in exemplifying the affective potential of acousmatic spatiality.

By way of beginning the discussion of the work, I would like to quote from Deleuze and Guattari's account of the *refrain*, which I believe provides an apt and informative introduction not only to this particular work, but more broadly to the discussion of affective sonic spatialities in general.

A child in the dark, gripped with fear, comforts himself by singing under his breath. He walks and halts to his song. Lost he takes shelter, or orients himself with his little song as best he can. The song is like a rough sketch of a calming and stabilizing, calm and stable, center in the heart of chaos. Perhaps the child skips as he sings, hastens or slows his pace. But the song itself is already a skip: it jumps from chaos to the beginnings of order in chaos and is in danger of breaking apart at any moment...⁸⁸

Jeph Jerman's *Albuquerque Hotel Room* provides an interesting relation of tension between feelings of space and place. The piece exhibits two distinctive spatial “layers” whose contrasting characteristics form the affective core of the piece. The first of these is a layer of sustained broadband noise which from the beginning opens out a space that is vast and without boundaries. With no distinguishable individual or localisable sounds there is little to orientate myself by, and its

⁸⁷ Jerman, “Albuquerque Hotel Room”.

⁸⁸ Deleuze and Guattari, *A Thousand Plateaus*, 343.

apparent reach to the acoustic horizon gives me no indication of any enclosed spaces, either containing the noise, or as a combination of nested spaces contributing to the overall sonority. It thus has the character of a ubiquitous sound – described in *Sonic Experience* by Augoyard and Torgue as “diffused, unstable, omnidirectional sound... [that] comes from everywhere and nowhere at the same time”⁸⁹. While such ubiquitous sounds are often ignored, being reduced to the status of background noise, it is debatable whether we might consider the opening of Jerman’s work to be “background” sound. While it has the characteristic “noise” constitution of background sound, it is rather more “present” than would allow me to immediately ignore it. Indeed, there is a certain quality to it that encourages me to *listen* to it rather than simply to *hear* it. There are no foreground sounds to situate it *spatially* as a background, and in this way it not only *comes from* everywhere, but it *is* everywhere, occupying the virtual acoustic space to the acoustic horizon, and thus it commands my full attention. Furthermore while it has been described above simply as sustained broadband noise, it is in fact a complex sonority, and my ear is drawn to distant, almost imperceptible changes in it such that it encourages a further intensity in my auditory awareness.

It is important here to note that the underlying motivation behind this awareness is the will to orientate myself, to innately answer those questions: *where aesthetically am I /how do I feel here?* The initial uncertainty involved here, through the non-localisable sound and the vastness of the space it opens up to me, forms the answer to these questions, resulting in a feeling of presence in an environment which is overwhelming insofar as it is incomprehensible. In this vastness, there is a reflection of Deleuze and Guattari’s notion of chaos.

This effect, however, is suddenly broken with the emergence of the second spatial “layer”. At 0:07, an immediately localisable sound appears in proximate space⁹⁰, articulating a relatively small interior space. The sharp contrast here has an immediate affective impact. My focus of attention is directed to this proximate sound, which creates a new spatial boundary. The continuing occurrence of similarly proximate sounds over the next few seconds affirms this new, defined, interior space, and thus, like the child’s song, they serve a territorialising function. I am no longer in a vast, unknown space which defeats my understanding but am situated within an enclosed space, a *center in the heart of chaos*. Indeed the chaos is still there – the broadband noise continues throughout – but now perceived in relation to the stabilising centre its affective impact recedes – it becomes a background space, superseded by the emergence of a potential *place*. Indeed, this new layer of

⁸⁹ Augoyard and Torgue, *Sonic Experience*, 130-131.

⁹⁰ Defined by Denis Smalley as “The area of perspectival space closest to the listener’s vantage point in a particular listening context.” Smalley, “Space-form and the Acousmatic Image,” 56.

sound, which has the character of being caused by human activity⁹¹ within a defined space, certainly evokes a sense of place as Tuan describes it – as “enclosed and humanised space”⁹². (Interestingly, to refer back to Deleuze and Guattari, Tuan also defines space as a “*calm center* of established values”⁹³ (my emphasis)).

Indeed, this process of a sonic territorialisation formed through the proximate sounds of human activity is described in Adam Nicolson’s *Sea Room*, in this context demonstrating the way in which it aids in overcoming the solitude and isolation of island life. Nicolson writes:

“I have spent weeks on the Shiants ... making enough noise working on, mending and setting creels, repairing fences, digging a vegetable patch in one of the old lazybeds, setting up winches on the beach, putting wire netting on the chimneypots to keep the rats from scampering down them, painting the house inside and out – all this, in the end, to keep the silence away.”⁹⁴

The proximate sounds of human activity in Jerman’s work serve this same purpose – in listening to them there is a “[jump] from chaos to the beginnings of order in chaos”. Nonetheless, as Nicolson’s account implies, the transitory nature of these sounds means that the maintaining of a sonic territory requires constant activity in order to overcome the “silence” that Nicolson speaks of, or, in the case of my experience of Jerman’s work, the vast, incomprehensible space articulated by the broadband noise.

In his comparison of space and place, Yi-Fu Tuan notes that “in the solitude of a sheltered place the vastness of space beyond acquires a haunting presence”⁹⁵. Indeed, in *Albuquerque Hotel Room* the continued presence of the initial layer of sound throughout is important in maintaining a relation of tension between chaos and calm – between space and place; between exposure, threat and openness, and security, constraint and enclosure. Thus, like the calm and stable centre established through the child’s song in Deleuze and Guattari’s account, there is a fragility to the centre established in Jerman’s work – it is “in danger of breaking apart at any moment”, and it is at 0:21 that this happens.

At this point, the sounds of foreground human activity have stopped, and my attention is refocused on the broadband noise, which quickly fills the virtual acoustic space once again. After the brief encounter with the suggestion of a “place” defined by the second spatial layer (or at least an enclosed, defined space rather than a vast, expansive one), the disorientation has a stronger affective impact. I am back out in the open, no longer sure of the space in which I briefly orientated

⁹¹ It is important to note however that the sounds are not thus reduced to their source-cause in this listening.

⁹² Tuan, *Space and Place*, 54.

⁹³ Ibid.

⁹⁴ Nicolson, *Sea Room*, 156.

⁹⁵ Tuan, *Space and Place*, 54.

myself, returning to the uncertainty of chaos. This time, however, the uncertainty is formulated in tension with the “affective reverberation” of certainty, of defined, boundedness sensed through the interior, centring space.

At 0:33, there is a brief reiteration of the interior space, through the emergence of sounds whose spatial characteristics are similar enough to those of the proximate sounds preceding them to reveal to me the same space, partially articulated by this sound and partially recollected from before. Thus despite its brevity, the return of this sonic space re-establishes the centre, impacting again on my state through a return to a feeling of sheltered calm – the establishment of a territory.

As a consequence of this territorialisation, this time the return to “chaos” at 0:36 has a different affective impact. The general lack of distinguishable individual sounds within the broadband noise means that I hear it as cohesive – as one continuous, but undulating, complex stream of sound – and as such it is continually present, thus exhibiting a certain temporally defined stability that the second layer of sounds does not. Having established itself thus, over the 40 seconds or so of the work preceding, part of its danger has receded; its unknowns have become intriguing, its intricacies interesting. In fact, I find that the spaciousness of the sound is no longer threatening, daunting, but is instead the spaciousness of potentiality, of freedom. A low frequency rumble emerges and recedes in the space of the broadband noise, drawing me further into an interested enchantment.

As such, the return again to the sense of place articulated through the proximate layer of sound (at 0:56), rather than reiterating the sense of security brought about by the enclosed place, provides instead a distraction from the barely audible intricacies of the space beyond. This is partly because the sound that brings the interior space back into focus this time is a particularly sharp sound which, in my state of “interested enchantment”, I sense as a modification of my space of being similar to Böhme’s “cutting tone” which he refers to as “damaging”, making me, in a sense, recoil. Indeed as Böhme writes – “the “I” does not normally lose itself in the listening act, but *protects* itself by distancing the...sounds, relegating them back to their sources, and thus leaping over the experience of the in-between”⁹⁶(my emphasis).

Despite this, my engagement with the sounds – the in-between experience – is maintained through the continuation of the broadband noise, which has now fully established itself as a space of intrigue. However, it must be noted that the following proximate sounds, which are less intrusive, also have a distracting effect, due to the fact that for each of their short durations, they partially mask the sound of the external space. Indeed, despite the unpredictability of its articulating sounds,

⁹⁶ Böhme, “Acoustic Atmospheres”, 18.

the space articulated through the once welcome proximate sounds begins to exhibit a certain familiarity which, compared to the undefined expanse of the broadband noise, marks a move from a sense of security to a sense of constraint. Indeed *how I feel here* has undergone a transformation, which stems from an underlying tension between space and place.

A similar relation of tension between space and place is discussed by Yi-Fu Tuan in his paper on “Desert and Ice: Ambivalent Aesthetics”. Writing of the explorer’s sentiment for home, he notes that

“home is of course necessary to the adventurer as a secure base and point of departure; in psychological terms, moreover, its very existence as a world of familiarity and routine devoted to nurture and comfort appears to enhance in some individuals a desire for the alienness of inhospitable space”⁹⁷.

Indeed the establishment of that calm and stable centre of the interior space has necessarily shaped my engagement with the space beyond, providing a point of departure, a space in which I am initially able to orientate myself before venturing forth and embracing the spaciousness. Deleuze and Guattari’s account of the refrain is again useful here in conveying this idea. Having established the idea of “draw[ing] a circle around that uncertain and fragile center...[organising] a limited space”⁹⁸ – creating a sense of home – in the second aspect of the refrain, they move onto the third, writing:

“Finally one opens the circle a crack, opens it all the way, lets someone in, calls someone, or else goes out oneself, launches forth. One opens the circle not on the side where the old forces of chaos press against it but in another region, one created by the circle itself...One launches forth, hazards an improvisation. But to improvise is to join with the World, or meld with it.”⁹⁹

This launching forth constitutes, in my experience of Jerman’s work, the expansion of my bodily presence into the depth of the space articulated by the broadband noise – thus I *join with this World, or meld with it*. It is the bodily awareness of and interest in its expanse – an affective involvement, but one created through the revealing of the interior space (*created by the circle itself*). We can see in this an essential relationship between the two spaces articulated in the work – my experience of a developing, contingent and changeable atmosphere requires both spaces – the circle, and the outside. The circle or centre in itself, however, remains fragile – a *potential* place, still uncertain as the sounds come and go.

Indeed, throughout the remainder of the work, in which the mix of sporadic proximate sounds and broadband noise continues, there is a constant fluctuation in my state, reflecting Tuan’s

⁹⁷ Tuan, “Desert and Ice,” 149.

⁹⁸ Deleuze and Guattari, *A Thousand Plateaus*, 343.

⁹⁹ *Ibid.*, 343-344.

comment that “human lives are a dialectical movement between shelter and venture, attachment and freedom.”¹⁰⁰ Indeed, a large part of the complexity of the affective potential of this work is due to the relationship between space and place developed through the spatial aspects of the work. The related feelings of security and exposure that Tuan equates with place and space respectively, and the contrasting feelings of constraint and freedom, are accentuated in Jerman’s work through the contrast between the two constituent spaces, and my contradictory, uncertain and fluctuating response to each space. Importantly, the particular affective nature of this contrast is due to the fact that spaces are “nested” (a term coined by Smalley to describe the embracing of one space within another¹⁰¹), and as such I am simultaneously aware of the two, continuously being maintained in a relation of tension.

Furthermore, it is worth noting that the acousmatic situation has an impact on the way in which I hear these sounds. As I noted previously, in a complex, layered soundscape in the life-world there is a tendency to prioritise in our consciousness sounds that are linked in with our visual perception – whose sources we can see. The acousmatic becomes background noise, through a process of auditory de-sensitisation. However, in listening to Jerman’s work, there is no visually stimulated bias to my listening, and thus the two spatial layers each have an equally important role to play in the affective impact of the work.

Of course, we know from the title of the work, or at least might assume from the title, that the interior space is a hotel room, and the broadband noise is most probably the “urban drone”¹⁰² of Albuquerque – air conditioning, traffic sounds, etc. all merged into a continuous, complex sonority. The above description of the experience, however, has avoided thinking-in this aspect, in order to treat the sound as immediate, without preconceived interpretation, and to avoid having to make the distinction between “the world and its artistic representation”¹⁰³ which becomes an issue in particular in discussions on phonographic material. Indeed, the experience of presence in the environment of the work is *not* here defined as an experience of presence in a hotel room in Albuquerque, and while my auditory perspective is dictated by the sound recordist I am not “stepping into his shoes”. Nonetheless, it is perhaps worth thinking-in the title of the work now, in a moment of *reflection* upon the experience described above. It is, of course, significant that we are dealing with a *hotel* room, when we are considering the notions of orientation and territorialisation.

¹⁰⁰ Tuan, *Space and Place*, 54.

¹⁰¹ Smalley, “Space-form and the Acousmatic Image,” 55.

¹⁰² Augoyard and Torgue note that “the urban drone can...create [a] structure of a permanent framework over which individual sonic activities are superimposed.” Augoyard and Torgue, *Sonic Experience*, 65.

¹⁰³ Montgomery, *Beyond the Soundscape*, 145.

In this work, the fleeting, transitory territory of the hotel room, a *non-place*¹⁰⁴, not a permanent home, is articulated against the unknown environment of an unfamiliar city. In the immediate disorientation we might experience upon arrival in a city that is foreign to us, the hotel provides a centre, and yet like the evanescent sounds that articulate the hotel room space in Jerman's work, it forms only a temporary, transient centre, which is an important factor in shaping how one feels there. Thus the work articulates particularly well the affective spatialities that can contribute to the spatial experience of a hotel room, thus relating the content to the title in a way that avoids the ideas of representation/re-presentation, and which thus does not close the work or relate it purely into visual or object-centred terms.

Albuquerque Hotel Room, then, opens up a world to me, which becomes my affective reality. Despite the relatively simple spatial attributes of this piece in terms of its structure, the complexity of relationships between environment and human states is demonstrated by the unfolding and development of *affective* spatialities over time and in relation to one another, and of course in relation to me, the listener. In treating the sounds as spatial articulators (in general avoiding discussion of their source) we can see the broad applicability of the concept of affective spatialities in different acousmatic art forms. Indeed it is not simply because this is a recording of a "real" environment that it has this affective potential. In recording and manipulating the spatial attributes of sound the acousmatic artist is, as I suggested in the introduction, an *aural architect*, and the listener inhabits, through affective engagement, the world that is brought forth in their experience of the work.

¹⁰⁴ This is Marc Augé's term referring to transient, temporary places of passage, with no real identity or sense of individuality. E.g. Airports, hotel rooms, motorways, supermarkets. See Augé, *Non-Places*.

Conclusion

This paper constitutes an initial exploration into the notion of affective spatialities in the acousmatic arts through investigating the idea that the listener may experience a sense of presence in the environment of the acousmatic work (the virtual acoustic space), a phenomenon which is intrinsically tied up with their awareness of their *state* of being there. This awareness is attributed to atmospheres and affective spatialities, which constitute the relationship between environment and human states.

In developing the concept of affective spatialities in chapter one, an important component of our spatial experience was identified through the notion of aesthetic engagement. This component, which moves beyond geographical, structural, natural scientific and mathematical approaches to space and environment, is typified by Ronald Hepburn's question "where (aesthetically) am I?", and Gernot Böhme's question "how do I feel here?". These two questions epitomise the notion of affective spatialities, encompassing both emotional responses to environment, and more subtle affectivities such as a sense of place, or spaciousness. The inclusion of this idea, then, in a discussion of spatiality in the acousmatic arts, marks a move away from traditional aesthetic theories which require detached contemplation of an aesthetic object, and towards an aesthetics of engagement, in which the subject-object, nature-culture and rationality-feeling dichotomies are challenged.

This notion of engagement prompted a distinction to be made in chapter two, between the idea of the space articulated by the work, which may be referred to in terms of its physical properties and through representational ideas; and the concept of a *world* brought forth in aesthetic experience, which the listener inhabits through affective engagement. The idea of inhabitation, or of presence in the virtual acoustic space, as elucidated in chapter three, becomes the expansion of corporeal space – of bodily presence – into the environment that, as Böhme puts it, constitutes the physical expanse of experiential space which involves me affectively. In exploring this notion of presence in the virtual acoustic space, I hope to have illuminated a way in which we may discuss the phenomenon of "being-in" the environment of the work further¹⁰⁵, which both overcomes the problem of a one-way communication between composer and listener as noted by Andean, and addresses issues raised concerning the notion of presence in relation to electronically mediated environments. The personal listening experience which forms the basis of the discussion in chapter four provides an example of the application of this theory, both demonstrating its value as an approach to listening, and highlighting what it may contribute to the discourse on acousmatic spatiality.

¹⁰⁵ As I noted in *Presence in the Virtual Acoustic Space*, a number of authors have referred to this idea, without elucidating what is meant by it.

Through the process of the exploration summarised above, the theory suggested at the start of this paper has been developed, bringing in to the discussion the work of various theorists and philosophers, thus providing a detailed overview of the claims and concepts of the idea. This has, however, served the purpose of extending the theoretical framework in which the idea was initially developed to include a far wider field of work, thus opening up new areas for research. In particular, the theory requires further investigation in relation to a broader range of acousmatic works, and a further development of the approach to writing about experience would be beneficial in this process. Furthermore, Blesser and Salter's concept of the composer as an *aural architect* considered with regard to the relationship between building and dwelling as suggested by Heidegger, may provide a starting point for research into the role of the composer in this theory, venturing into the difficult territory of discussing "making atmospheres" – a concept which Böhme regards as having a "provocative character" being somewhat paradoxical insofar as making is "to do with something tangible", and atmospheres are "something airy, indefinite."¹⁰⁶

Additionally, the field of environmental aesthetics provides us with a continually developing discourse on the relationships between our changing environments and human states, and the involvement of this area of thought in the discussion of spatiality in the acousmatic arts invites an exploration into ecological questions as explored through creative and listening practices, (as suggested in Böhme's article on *Acoustic Atmospheres*)¹⁰⁷. Indeed the underlying concept of *presence* – of being-in-the-world – addressed in purely auditory terms, and through the notion of affectivity, marks a fundamental contrast to the notion of presence constituted in relation to a Gibsonian concept of engagement through the notion of affordances, which is, of course, developed in his theory of *visual* perception. Stemming from this, the relationship between auditory and visual space also invites further investigation, in particular into areas of reconciliation, (another "in-between" perhaps), as suggested through, for example, the notion of the "sonic image", Smalley's suggestion of transmodal perception¹⁰⁸ in acousmatic experience, and the sonically inspired visual Virtual Reality environments created by Char Davies¹⁰⁹, discussed in depth in Frances Dyson's book *Sounding New Media*.

To conclude, then, this paper is intended to form an introduction to a concept which has its roots in *experience*. In a sense it aims towards an understanding, or conceptualisation, of a particular type

¹⁰⁶ Böhme, "The Art of the Stage Set," 1.

¹⁰⁷ Böhme, "Acoustic Atmospheres", 14, 18.

¹⁰⁸ Smalley, "Space-form and the Acousmatic Image," 39-40.

¹⁰⁹ Dyson quotes Davies as saying, in relation to her work, "Always what was important to me was the notion of being immersed in enveloping space, and the sensation that you're fully enveloped, ... it's not about interactivity but the fact that you are spatially encompassed and spatially surrounded – it's all around – and that's what sound is." Dyson, *Sounding New Media*, 107.

of aesthetic experience, contributing, through this process, to a particular area of discussion of the acousmatic arts, which not only moves away from traditional aesthetic approaches but also adopts a different understanding of our relationship with the world; one which embraces the transitory, ephemeral nature of sound, which considers the nature of Being as opposed to beings¹¹⁰, and which, as Böhme suggests¹¹¹, treats of this Being as inherently spatial.

¹¹⁰ As I noted in *Presence in the Virtual Acoustic Space*, Dyson writes of Heidegger's identification of the "object-centredness of metaphysics with the "monstrous transformation" whereby Being is thought of in terms of "beings" and Becoming is banished to the realm of nothingness... "modern philosophy experiences beings as objects," and "reality becomes objectivity." Modern metaphysics is gripped by representational thinking that cannot, but also prefers not to accommodate sound." Dyson, *Sounding New Media*, 75.

¹¹¹ Böhme, "Atmosphere as the Fundamental Concept," 120.

Bibliography

Andean, James. "Ecological Psychology and the Electroacoustic Concert Context." *Organised Sound* 16, no.2 (2011): 125-133.

Anderson, Ben. "Affective Atmospheres." *Emotion, Space and Society* 2 (2009): 77-81.

Augé, Marc. *Non Places – Introduction to an Anthropology of Supermodernity*. London: Verso, 1995.

Augoyard, Jean-Francois, and Henry Torgue. *Sonic Experience: A Guide to Everyday Sounds*. Translated by Andra McCartney and David Paquette. Montreal and Kingston; London; Ithaca: McGill-Queen's University Press, 2005.

Barrett, Natasha. "Spatio-Musical Composition Strategies", *Organised Sound* 7, no.3, (2002): 313-323.

Berleant, Arnold. "The Aesthetics of Art and Nature." In *Landscape, Natural Beauty and the Arts*, edited by Salim Kemal and Ivan Geskall, 228-243. Cambridge: Cambridge University Press, 1993.

Blessner, Barry, and Linda-Ruth Salter. *Spaces Speak, Are You Listening? Experiencing Aural Architecture*. Cambridge MA: MIT Press, 2007.

Böhme, Gernot. "Acoustic Atmospheres." *Soundscape: The Journal of Acoustic Ecology* 1, no.1 (Spring 2000): 14-18. http://wfae.proscenia.net/journal/scape_1.pdf (accessed 10th August 2011).

Böhme, Gernot. "Aesthetic Knowledge of Nature." *Issues in Contemporary Culture and Aesthetics*, no. 5: 36-45.

Böhme, Gernot. "Atmosphere as the Fundamental Concept of a New Aesthetics." *Thesis Eleven* 36 (1993): 113-126.

Böhme, Gernot. "The Atmosphere of a City." *Issues in Contemporary Culture and Aesthetics*, no.7 (1998): 5-13.

Böhme, Gernot. "The Art of the Stage Set as a Paradigm for an Aesthetics of Atmospheres." <http://www.cresson.archi.fr/PUBLI/pubCOLLOQUE/AMB8-confGBöhme-eng.pdf> (accessed July 13th 2011).

Böhme, Gernot. "The Space of Bodily Presence and Space as a Medium of Representation." In *Transforming Spaces. The Topological Turn in Technology Studies: Online publication of the*

international conference held in Darmstadt, Germany, March 22-24, 2002. <http://www.ifs.tu-darmstadt.de/fileadmin/gradkoll//Publikationen/transformingspaces.html> (accessed 10th August 2011)

Carroll, Noel. "On Being Moved By Nature." In *Landscape, Natural Beauty and the Arts*, edited by Salim Kemal and Ivan Geskall, 244-266. Cambridge: Cambridge University Press, 1993.

Chion, Michel. *Audio-vision: Sound on Screen*. Edited and Translated by Claudia Gorbman. New York: Columbia University Press, 1994.

Cox, Christoph, and Daniel Warner, eds. *Audio Culture: Readings in Modern Music*. New York: Continuum International Publishing Group, 2007.

Davies, Stephen. *Musical Meaning and Expression*. Ithaca, NY; London: Cornell University Press, 1994.

Davis, Erik. "Acoustic Cyberspace: A Talk Delivered at the Xchange Conference, Riga, Latvia, November 1997." <http://www.techgnosis.com/acoustic.html> (accessed 10th August 2011).

Deleuze, Gilles and Félix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia*. Translated by Brian Massumi. London; New York: Continuum, 1987.

Dufrenne, Mikel. *The Phenomenology of Aesthetic Experience*. Edited by James M. Edie. Translated by Edward S. Casey, Albert A. Anderson, Willis Domingo, and Leon Jacobson. Evanston: Northwestern University Press, 1973.

Dyson, Frances. *Sounding New Media: Immersion and Embodiment in the Arts and Culture*. Berkley; Los Angeles; London: University of California Press, 2009.

Gibson, James J.. *The Ecological Approach to Visual Perception*. Hillsdale ; London : Erlbaum, 1986.

Hallowell, A. Irving. *Culture and Experience*. Philadelphia: University of Pennsylvania Press, 1955.

Heidegger, M., "Building, Dwelling, Thinking." In *Poetry, Language, Thought*, translated by Albert Hofstadter. New York: Harper Colophon Books, 1971.

Helmreich, Stefan. "An Anthropologist Underwater: Immersive Soundscapes, Submarine Cyborgs, and Transductive Ethnography." *American Ethnologist* 34, no. 4 (November 2007): 621-641.

Hepburn, Ronald. "Knowing (Aesthetically) Where I Am." <http://www.lancs.ac.uk/depts/philosophy/awaymave/onlineresources/hepburn.pdf> (accessed 10th August 2011).

Hepburn, Ronald. "Trivial and Serious in Aesthetic Appreciation of Nature." In *Landscape, Natural Beauty and the Arts*, edited by Salim Kemal and Ivan Gaskell, 65-80. Cambridge: Cambridge University Press, 1993.

Jager, Bernd. "Theorizing and the Elaboration of Place: Inquiry into Galileo and Freud." In *Duquesne Studies in Phenomenological Psychology Volume 4*, edited by A. Giorgi, A. Barton, and C. Maes. 153-180. Pittsburgh: Duquesne University Press, 1983.

Jerman, Jeph. "Albuquerque Hotel Room." *On Isolation*. Room 40: B000S9DI34. CD. December 15 2006. Track 8.

LaBelle, Brandon. *Acoustic Territories: Sound Culture and Everyday Life*. New York; London: The Continuum International Publishing Group Inc, 2010.

LaBelle, Brandon. *Background Noise: Perspectives on Sound Art*. New York; London: The Continuum International Publishing Group Inc, 2006.

McLuhan, Marshall. "Five Sovereign Fingers Taxed the Breath." In *Explorations in Communication : An Anthology*, edited by Edmund Carpenter and Marshall McLuhan. Boston: Beacon Press, 1960.

Montgomery, Will. "Beyond the Soundscape: Art and Nature in Contemporary Phonography." In *The Ashgate Research Companion to Experimental Music*, edited by James Saunders. 145-161. Farnham, Surrey: Ashgate Publishing Limited, 2009.

Nicolson, Adam. *Sea Room: An Island Life*. London: HarperCollins Publishers, 2002.

Norman, Katharine. "Real-World Music as Composed Listening." In *A Poetry of Reality: Composing with Recorded Sound: Contemporary Music Review* 15, Parts 1-2 (1996).

Oliveros, Pauline. "Acoustic and Virtual Space as a Dynamic Element of Music." In *Women, Art and Technology*, edited by Judy Malloy. 212-223. Cambridge, MA: MIT Press, 2003.

Schafer, R. Murray. "Acoustic Space." *Circuit: Musiques Contemporaines* 17, no. 3 (2007): 83-86.

Schafer, R. Murray. *The Soundscape: Our Sonic Environment and the Tuning of the World*. Rochester, Vermont: Destiny Books, 1994.

Seamon, David. "Concretizing Heidegger's Notion of Dwelling: The Contributions of Thomas Thiis-Evensen and Christopher Alexander." In *Building and Dwelling [Bauen und Wohnen]*, edited by Eduard Führ, 189-202. Munich, Germany: Waxmann Verlag GmbH; New York: Waxmann, 2000. Available at <http://www.arch.ksu.edu/seamon/Heidegger.htm> (accessed 19th August 2011)

Smalley, Denis. "Space-form and the Acousmatic Image." *Organised Sound* 2, no.2 (1997): 35-38.

Toop, David. *Haunted Weather*. London: Serpent's Tail, 2004.

Tuan, Yi-Fu. "Desert and Ice: Ambivalent Aesthetics." In *Landscape, Natural Beauty and the Arts*, edited by Salim Kemal and Ivan Gaskell, 139-157. Cambridge: Cambridge University Press, 1993.

Tuan, Yi-Fu. *Space and Place: The Perspective of Experience*. Minneapolis: University of Minnesota Press, 1977.

Wishart, Trevor. "Sound Symbols and Landscapes." In *The Language of Electroacoustic Music*, edited by Simon Emmerson. 41-60. Hampshire: Macmillan, 1986.

Creative Portfolio

Abstract

This portfolio presents two acousmatic works: *Elastic Geographies* and *As the Sea Haunts the Shore*. The accompanying CD contains: Track 1 - *Elastic Geographies* and Track 2 - *As the Sea Haunts the Shore*. The essay discusses the compositional processes involved in the creation of these two works, highlighting some of the theories that influenced my approach to composition, as well as explaining the initial ideas behind each work.

Contents

<i>Abstract</i>	40
Introduction	42
Commentary	43
Elastic Geographies.....	43
Introduction	43
Discussion	43
As the Sea Haunts the Shore	46
Introduction	46
Discussion	47
Conclusion.....	53
Appendices	55
Appendix 1: Excerpt from “Sea-Sounds”	55
Appendix 2 – Aignish on the Machair.....	56
Bibliography.....	57

Introduction

This portfolio consists of two acousmatic works: *Elastic Geographies* and *As the Sea Haunts the Shore*. These works were produced using Steinberg Cubase software with various VST plug-in effects processors, and the materials were recorded using a Sound Devices 702T field recorder, with various microphones including JrF hydrophones and JrF C-series contact microphones, AKG C411 contact microphones, an ADK CE condenser microphone and an Audio Technica AT825 X/Y Stereo field recording microphone.

In the creation of these pieces my focus was in experimenting with sonic materials and compositional processes in order to create auditory environments that I felt had an affective impact. I was particularly interested in experimenting with the spatial attributes of sounds, and in exploring the concept of *affective spatialities* which forms the basis of the accompanying thesis *Affective Spatialities in the Acousmatic Arts*. In relation to this concept, the aim is for the music to reveal a *world* to the listener, which is inhabited through affective engagement with the auditory environment.

These two works constitute slightly different approaches to this idea, and this essay highlights some of the theories that influenced these approaches, as well as explaining the initial ideas behind each work. The first piece, *Elastic Geographies* was largely constructed through experimentation with technology and compositional ideas, and thus was the result of a learning process. The second piece resulted from that which I had learned compositionally in the development of *Elastic Geographies*, and also from research I had done into the relationship between environment and emotion as explored in Scottish Gaelic song.

Commentary

Elastic Geographies

Introduction

This piece constitutes a constantly evolving auditory environment, exploiting the way in which sound does not simply fill spaces, but can articulate spaces, revealing them to the listener. As such, the environment it articulates, the world it brings forth, is unstable, evolving between spaces of ambiguous character. I was interested in exploring this idea of change and ambiguity as an affective device, in relation to Gernot Böhme's concept of *atmosphere* – the relationship between environmental qualities and human states¹¹². Therefore this notion of instability constitutes the overriding character of this piece, through the changeability of the environment it articulates.

Discussion

Elastic Geographies is constructed from recordings made between November 2010 and March 2011. The recordings utilised were the result of a period of experimentation with technology and recording techniques during which I gathered a large library of sonic materials. The process of recording materials, then, was not guided by intentionality with regard to the composition of this work. Instead the process of creating the work itself was informed and shaped by the processes of improvisation and experimentation that had resulted in the sounds with which I was working. I approached the creation of this work in much the same way as the recording process – as an experiment – and due to my interest in the spatial aspects of acousmatic music, it constituted an experiment in creating, manipulating and articulating virtual acoustic spaces. As such, the process of selecting materials from those gathered was based largely upon the spatial attributes of the sounds, or the potential they offered for spatial, and other forms of processing.

Indeed the piece consists mainly of transformed sounds – sounds that have been processed thus disguising their sources. Therefore despite the fact that it is constructed largely of recorded sounds, as opposed to electronically created ones, the source-causes of the constituent sounds are largely unidentifiable – abstract. This was a deliberate move, made in order to allow the sounds to act as spatial articulators, rather than to serve any representational function, or to indicate the presence of a particular object or objects. Indeed, the consideration of the way in which the sounds articulate the spatial field formed a fundamental part of the compositional process for this work. The transformation processes, which largely consisted of convolution reverberation, filtration, distortion

¹¹² See Böhme, “Atmosphere as the Fundamental Concept”.

and pitch shifting, were utilised not only to disguise the original sources of the sounds, but also to manipulate their spatial attributes in order to articulate the environment I wanted to create.

As I mentioned, this piece presents an unstable, changing environment. I wanted to create contrasts which would constitute an affective shape based on “contrastive and ingressive experience”, as Böhme suggests that “one experiences the specifics of atmospheres most clearly when their characteristics are set apart.”¹¹³ In terms of spatiality, the notions of interior and exterior, spaciousness and crowding, proximity and distance, exposure and enclosure, and surfacing and submersion provide some of the contrasts explored in the work. However, as Yi-Fu Tuan points out, the affective character of these environmental experiences is variable:

“The relationship of environment to feeling seems clear; but in fact, general rules are difficult to formulate. Two factors confuse the issue. One is that the feeling of spaciousness feeds on contrast. For example, a house is a compact and articulated world compared with the valley outside. From inside the house the valley beyond looks broad and lacking in definition, but the valley is itself a well-defined hollow compared with the plain onto which it in turn opens. The second factor is that culture and experience strongly influence the interpretation of environment. Americans have learned to accept the open plains of the West as a symbol of opportunity and freedom, but to the Russian peasants boundless space used to have the opposite meaning. It connoted despair rather than opportunity; it inhibited rather than encouraged action”¹¹⁴

Thus the continual developments of the environment in this work “feed” the feelings associated with the spatiality through the contrasts it articulates, but these spaces/environments have a non-specific affective character. Indeed it was the intention to construct an environment whose affective character was ambiguous as I was interested in the exploring the tension between different responses to the same or similar spatial experience as described by Tuan.

The contrasts, however, are articulated as evolutions of (or a journey through different aspects of) a single environment, rather than movement between entirely different environments. It is an environment that evolves over *time*, changing through sonic *events* rather than distinct spatial transportations. Thus the changes in the environment are generally not sharp, divisive ones, and this serves to contribute to the idea of instability, as opposed to constituting complete displacements or disorientations. As such, a complex and time-consuming part of the creative process was the sculpting of developments between sonorities. I found that the filter was a particularly useful tool in this process, not only helping in creating the subtle emergence of sounds, but also in creating spatial formations. For example, the emergence of the billowing, distorted sound that appears between 2:04 and 2:41 is more effective due to its slow approach, articulated by slowly raising the cut-off frequency on a low-pass filter. The use of a band-pass filter on the granular sound which begins the

¹¹³ Böhme, “Acoustic Atmospheres”, 15.

¹¹⁴ Tuan, *Space and Place*, 55.

work allowed me to give it a sense of movement, approaching and receding, while also spectrally separating it from the low frequency sound which underlines it, creating a sense of depth, both in spectral space (which is often analogised to height) and in the aural depth of field, through the creation of a foreground and background.

Indeed, the alteration of the frequency content serves as a useful tool for providing contrasts between proximate and distal space in particular. For example the intrusion effect, (described by Augoyard and Torgue as “the inopportune presence of a sound or group of sounds inside a protected territory [that] creates a feeling of violation of that space”¹¹⁵) is created by the extremely proximate sound at 3:24-3:25, which suddenly appears, occupying the high-mid frequency range, in contrast to the lower frequency sound preceding.

I also used reverberation to create spatial contrasts. For example, the densely reverberant, empty environment articulated between 6:29 and 7:03 is contrasted with the open, but exterior, non-reverberant and busy environment which it emerges out into at around 7:12. There is no added reverberation at this point, and this is combined with the introduction of high frequencies through the crackling, airy sound that emerges here, to constitute an opening out, an “overture”¹¹⁶ to use Smalley’s term.

As the piece constitutes an ever-changing environment, there is no overall specific shape or structure to the work. This was intentional, in order to maintain a feeling of instability, however I found upon reflection that the piece had a certain rhythm to its changes – an almost regular, perhaps predictable temporal structure – something which I believe has a negative effect on the notion of instability that is the underlying idea behind this work. This was as a result of two factors: firstly I had concentrated more on the spatial structure of this work, without considering in detail its temporality, and secondly, constructing this work through a process of experimentation meant that it developed throughout this process, without an overview of the piece being considered from the start.

Overall, during the course of creating this work, I developed my knowledge of technical and compositional processes, exploring in particular the idea of articulating spaces with sound, and the affective ambiguities of contrasting spaces. This provided a foundation from which I could approach the composition of the second work – *As the Sea Haunts the Shore*.

¹¹⁵ Augoyard and Torgue, *Sonic Experience*, 65.

¹¹⁶ Smalley, “Space-form”, 49.

As the Sea Haunts the Shore

Introduction

In her article on “The Sea as an Emotional Landscape in Scottish Gaelic Song” Màiri Sine Chaimbeul writes that the sea is “an ever-present and ever-changing element in the lives of the Gaels of the Hebrides and the western seaboard of mainland Scotland. The life of the Islander is encircled by the sea, the ear of the young opening, and the ear of the aged closing, to its roar.”¹¹⁷

Indeed, the *sounds* of the sea are commonly referenced in Scottish Gaelic song and poetry, reflecting the affective impact of the sea’s “eternal roar”. Kenneth Macleod writes of the importance of the sounds of the sea in his introduction to the song “Sea-Sounds”, published in Marjory Kennedy-Fraser’s *Songs of the Hebrides*¹¹⁸. A large excerpt of this appears in Appendix 1. In this essay Macleod highlights a strong emotional connection to these sounds, which suggests that the sea is not just simply ever-present, but constitutes a strong affective component of the lives of the Islanders.

The sense of longing for the sea, as described in the song that Macleod quotes from (“Deep the longing that has seized me”), demonstrates the way in which the sound of the sea in particular brings forth a sense of home – a sense of place. This is one of the characteristics of the “emotional landscape” of the sea. However, as Chaimbeul and Macleod both highlight, the sea plays a variety of roles in the emotional lives of the Islanders. Emotional contrasts abound in the songs, highlighting a complexity to the relationship between the environment and the people who live(d) there. Despite constituting an integral part of the attachment to homeland, the sea is, in a sense, an alien environment – it is uninhabitable, dangerous, and its depths, at the time when many of these songs were written, were completely unknown. Indeed, as Chaimbeul notes, this produces a particular attitude towards the sea – “a recognition of its inherent dangers mixed with an irresistible attraction as a scenario for heroic deeds; a worthy opponent as it were”¹¹⁹. Furthermore, Macleod, in his essay on “The Sea-sorrow”, writes of women grieving the loss of their loved ones at sea, imagining a “cold” and “gloomy” “Land-under-waves”¹²⁰, where the spirits of the drowned reside. The idea of “an island in the sea, its location not specified, but suggesting an uninhabited, desolate place far out to sea, where the bodies of the drowned will not be found”¹²¹ is also described by Chaimbeul as appearing in a number of lamenting songs for the drowned, and these places of folklore, imagined by the grieving women as cold and desolate, contribute to the emotional impact of the poetry.

¹¹⁷ Chaimbeul, “The Sea as an Emotional Landscape,” 57.

¹¹⁸ Kennedy-Fraser, *Songs of the Hebrides*, 124.

¹¹⁹ Chaimbeul, “The Sea as an Emotional Landscape,” 57.

¹²⁰ Kennedy-Fraser, *Songs of the Hebrides*, 114.

¹²¹ Chaimbeul, “The Sea as an Emotional Landscape,” 58.

Thus through examining the Gaelic poetry and song we gain an insight into the complex emotional pull that the sea, its sounds, and its “eternal presence” have on the Islanders who engage with it. Chaimbeul summarises:

“The representation of the sea in Gaelic song reflects the close love/hate relationship of the people with its elemental forces, their need to engage with the sea in spite of its inherent dangers, its deep connection with home and loved ones, and its ability to snatch people untimely from this life. Loved ones lost at sea were mourned by those on land more acutely because of the lack of a body to bury with due ceremony and a belief that the person is lost, body and soul”¹²².

In the process of creating *As the Sea Haunts the Shore* I wanted to explore this complex “emotional landscape” of the sea, as communicated through Scottish Gaelic songs. The diverse and ambiguous nature of the emotional response to this environment – as well as the significance of sound in the evidence of these responses – meant that these songs and poems provided an interesting resource for consideration in the compositional process.

Discussion

The basic concept behind the creation of this piece had already been formulated before I began recording the materials, and thus this part of the creative process was different to the procedure of collecting the material for *Elastic Geographies*. Indeed there was a certain amount of intentionality involved, in particular in gathering the sound recordings of the sea.

In looking to capture something of the “roar” mentioned in so many songs and poems, I chose a location which looked out onto open sea, and recorded on a day on which the conditions were windy and at a time when the tide was coming in. I was also aiming to capture as much movement as possible, avoiding the broad “white noise” soundscape of the ocean from a distance. This meant getting close to the waves as they broke, whilst maintaining a perspective that allowed movement across the stereo field. However, despite this intentionality, it was necessary to retain an open mind as to the specific nature of the sounds I was going to record, and to allow the unpredictable particularities and intricacies of the sounds of the sea to guide my process. Indeed in listening intently to the sounds I was recording I began to hear more and more detail in the sounds of the waves – in particular the delicate hissing sound of the bubbles popping on the sand after the waves had retreated and the gurgling sound of the backwash – and through this process of listening I became more aware of the *sounds* (plural) of the sea. Indeed, while we often talk of the sound of the sea in the singular, when we engage in *listening* to the sea, as is suggested in Macleod’s essay title, *Sea-Sounds*, the plural form of the word is more appropriate.

¹²² Ibid., 66.

Something of this idea of listening, rather than hearing, is inherent in the references to the sounds of the sea in Gaelic/Hebridean songs. The process of engagement required for listening, not hearing in a passive sense, creates a sense of intimacy with sound, and Macleod suggests (quoting the “old Gaelic by-word”) that through its “voice” “the sea invites acquaintance”. This “acquaintance” underlies the emotional connection with the sea, and sound plays a significant role in this engagement, constituting the “sea-voices” that “charm” the islanders in Macleod’s account.¹²³

Indeed, in the Gaelic songs and poems a certain emotional tone becomes an intrinsic feature of the references to the sea – as Chaimbeul notes “there is an immediacy and emotional strength ... produc[ing] a starkly clear ... mood in many of these songs”¹²⁴. Interestingly, it is suggested by Forrester (quoted in Toop) that the idea of listening, as opposed to hearing, blurs the lines between “inner” and “outer” experience of sound¹²⁵, and in his book *Sea Room*, Adam Nicolson (owner of the Shiant Islands) writes of the “permeability of the skin, the flippability of inner and outer” as a “true description...of island experience”¹²⁶. Therefore we might suggest that the “island experience” is affective experience through an engagement with the environment – which includes *listening* to it as opposed to simply hearing it.

As well as capturing the familiar sounds of the sea, I also wanted to capture the sounds of the waves from a different perspective. For this I utilised hydrophones, which enabled me to record some more unfamiliar sounds – for example the bubbling sounds from the approaching waves, the crashing as the water washed over the hydrophones, and the dense scraping sounds as the backwash dragged them across the sand. I also utilised the hydrophones in the recording of other material used in the piece, finding them particularly useful for recording resonant metal containers. In filling the metal containers with water and suspending the hydrophone(s) in it, I was able to capture the resonant sound as if by a contact microphone but without dampening the resonance of the container too much. Indeed this was particularly useful in recording a singing bowl for the “drone” sound I wanted for the piece, as I was looking for the immediacy of a contact microphone recording but required the bowl to be able to resonate properly.

Other materials were created by moving contact microphones across a stone floor in a figure of eight motion to create an intensely proximate surging sound, which, once compressed and distorted, provided me with aggressive noise, with a wave-like shape, and a broad frequency content that lent itself particularly well to filtering. The effects processing in this piece largely consists of combinations

¹²³ Kennedy-Fraser, *Songs of the Hebrides*, 124.

¹²⁴ Chaimbeul, “The Sea as an Emotional Landscape”, 65.

¹²⁵ Toop, *Haunted Weather*, 98.

¹²⁶ Nicolson, *Sea Room*, 140.

of convolution reverberation, filtration, compression and distortion. As well as this, many of the materials were pitch shifted.

The piece begins, however, with an unprocessed recording of the waves. For a performance of an extended version of this work it would be intended that the audience enter the performance space to recordings of the sea, which would continue until the piece began. In this version, the sea sounds continue for around fifty seconds, with the aim of allowing this auditory environment to be fully established. It is hoped that this will encourage the listener to shift from Katharine Norman's *referential listening* – on its own resulting in a source-bonding/representational understanding – to combine this with *reflective listening*, constituting an interested enchantment, which, as Norman writes, allows us to “hear music in the sea”¹²⁷. Indeed, it is worth noting that the sea sounds are not intended to merely serve a representational function, but rather, through the acousmatic listening situation, encourage affective engagement.

However, this is not to say that this engagement becomes detached from the knowledge that we are listening to the sounds of the sea. Dufrenne provides us with an interesting way of thinking about this: He writes of the relationship between the “represented” and “form” (described as “the soul of the work”¹²⁸ which “unif[ies] the sensuous”¹²⁹) stating that “what is represented is taken into the form rather than the form’s proceeding from it”¹³⁰. Thus the recognition of the sea sounds forms an intrinsic part of the “soul” of the work – its affective impact. Indeed Norman writes that in the experience of real-world sounds, “reflective listening, as with other perceptual interpretations, doesn’t in reality achieve complete estrangement of memory and imagination” noting that the two listening modes “nourish” each other providing a “multi-faceted and richer understanding of a source”¹³¹.

Importantly, for my purposes, the sounds of the waves open up a space that is expansive, open and exposed. This spatiality forms a contrast with the initial “submersion” occurring at 0:50, which makes use of the hydrophone recordings. The idea that submersion is akin to enclosure stems from our visual experience underwater, in which we cannot see very far (certainly in comparison to the image of the sea above the surface which can stretch to the horizon). However, sound travels around five times further in water than in air, and thus our potential sonic space is in fact expanded through submersion. Thus, following the initial low rumble which continues out of the tail end of the

¹²⁷ Norman, “Real-world Music,” 12.

¹²⁸ Dufrenne, *The Phenomenology of Aesthetic Experience*, 144.

¹²⁹ *Ibid.*, 142.

¹³⁰ *Ibid.*

¹³¹ Norman, “Real-world Music,” 14-15.

crashing submersion sounds, there is the opening of a new sound-world – the Land-under-the-waves if you like – and this is slowly revealed through increasingly distal sounds. The sources of these sounds are unidentifiable, indistinct, and serve to create a sense of unknown depth, an openness within the expanse of the sea.

Out of this evolves an enclosing, more threatening sound, which approaches the listener across both sides of the stereo field. This sound – a compressed and distorted contact microphone recording – cuts through the other sounds, and, joined by other evolving, distorted sonorities, begins to form an enclosure, masking the distal sounds. This was achieved through slowly raising the cut-off frequency on a low-pass filter, and out of the high end of the distorted sound the hissing of the waves appears again, spreading across the stereo field. This combination presents the “roaring” of the waves that I wished to create.

At 2:58 another sound can be heard distantly. This is the sound of a fiddle playing a Hebridean song – Aignish on the Machair (see appendix 2). The song, whose lyrics constitute a request to be buried beside the sea at Aignish, is sung to the melody of an old highland air “long known in the north and west”, and it is this melody, notated in appendix 2, that the fiddle plays here.

The fiddle is processed through a low pass filter in order to create a sense of distance, and it is also routed through two real-time pitch processors, one shifting it down an octave and one back up, which creates an unpredictable phasing effect that contributes to the idea of it being heard through submersion and surfacing. The final processing on the fiddle is convolution reverberation. However the sound with which it is convolved is not an impulse response, but instead a sound I had recorded scraping a stick along the metal grill on top of a radiator. The envelope of this sound is completely different from the usual room-based impulse responses, and therefore this contributes to the strange spatiality, constituting a sort of delayed, reversed reverberation. This plays havoc with the amplitude of the processed sound, as it appears to pulse unpredictably, allowing it to occasionally peak out of the roaring sound, while being masked by it at other times. I was particularly influenced in the creation of this section by the idea, expressed in the lament *Ailein Dunn*, that for those drowned at sea, their “fiddle music is the roar of the sea”¹³².

Furthermore, the fiddle sound is processed to be ethereal, evanescent, distant – phantom-like. The melodies of Scottish Gaelic songs, in particular those of a lamenting or contemplative quality, are often described as *haunting*. In dealing with death and spirits whilst maintaining a sense of home-ness – an expression of the Gaelic culture, folklore and homeland – the poems which are sung

¹³² Chaimbeul, “The Sea as an Emotional Landscape,” 60.

to these melodies are very well suited to a melody described as haunting. Indeed, the word “haunting” is defined as a continual return, as describing something that remains in the consciousness, and as ghostly, or to do with ghosts, as well as being defined as evocative or melancholy. Furthermore, a root of the word is the old Norse “heimta” - to lead home. Thus I would argue that there is perhaps not a more fitting word to describe the nature of many of these songs, and therefore I wanted to extend this notion of a “haunting” melody to the way in which the sound of the melody occupied the virtual acoustic space.

This ghostly quality of the fiddle sound gives great depth to the sonic space, and while the sound itself is distanced, its melody brings forth the idea of sentiment for homeland, through its cultural references. Indeed, the inclusion of the traditional melody in the work provides the only specific reference to Gaelic culture, and to the history upon which this work is based. The melody does, however, appear twice in the work and the second time (beginning at 5:04) it is slightly clearer, and more prominent in the mix.

Between the two appearances of the fiddle, the drone (a pitch-shifted singing bowl recording) becomes the predominant sound, providing a stable centre that contrasts with the “roar” of the waves that continued through the duration of the melody. The pitch shifting process (done without time correction) stretched out the occasional ringing sounds of the wooden mallet scraping against the metal, providing an interesting, complex sonority. It is also important to note that the sounds of the waves do not disappear here, but are instead routed through a low-pass filter, thus remaining a part of the auditory environment, but situated in the background. For just under a minute other metallic, possibly “drip-like” sounds delineate an interior space, creating a further sense of distance from the waves, but these slowly recede, leaving the distant (filtered) sounds of the waves combined with the drone, as a calm, quiet, open space.

The threat, however, is never far away, and a distant roar (filtered, distorted, compressed contact microphone recording) appears at 4:47 in order to herald the reiteration of the melody. As this recedes, the drone note is changed to a D (in order to suit the melody which is in D dorian mode), and this destabilises the environment created by the original drone. Indeed, Chris Watson writes of “a layer, a reference, an atmosphere which we can rest our ears upon ... [writing that] these are usually harmonically complex and with a significant, noise free, low level, low frequency content.”¹³³ The drone provides such a layer in this piece, and thus this change has an affective impact. However, it is replaced with a similarly stable sound, and this sound becomes a new layer, a new auditory reference. It becomes particularly well established at 5:23 when the foreground,

¹³³ Toop, *Haunted Weather*, 53.

disturbing sounds recede, leaving the fiddle melody and drone accompanied by the distant sounds of the sea – a layer of calm again. Watson continues, however, writing that “other single sounds can impinge upon this layer, but if the dynamics are too great i.e. loud, the effect is cancelled.”¹³⁴ Indeed the fiddle and the distant waves impinge upon the layer, but it is not until the roaring, distorted sound enters again at 5:34 that the reference point of the drone is threatened. This roaring sound constitutes an invasion of the virtual acoustic space, filling proximate space and masking the distant sounds of the sea and drone. The fiddle, however, grows louder with the billowing distorted sound, fighting for space, keeping the melody audible until it finishes.

As the distorted sound disappears, and the melody ends for the second time (at 6:03), the unprocessed sounds of the waves take over, supported for a while by the drone, which slowly recedes until the sea sounds are all that remain. In a performance (of an extended version)¹³⁵, from this point (7:00) onwards the audience could leave whenever they wished, walking away from the continuing sound of the sea. For this recorded version I have left 10 minutes of sea sounds at the end, in order for the listener to be able to decide when to stop it. This was done because I did not want to create a specific end – a return to silence – for the work, in order to maintain the idea expressed by Chaimbeul to conclude her article:

“In an ever-changing world, assailed by fickle fate, the sea is a constant unchanging presence representing home, both temporal and eternal.”¹³⁶

¹³⁴ Ibid.

¹³⁵ It is my intention to extend this work, through conducting further research into the Scottish Gaelic sea songs and the mythology associated with them, exploring different “sound marks” (see Schafer, *The Soundscape*, 10.) of island life, and investigating different recording methods both above and under water.

¹³⁶ Chaimbeul, “The Sea as an Emotional Landscape”, 79.

Conclusion

The two works that constitute this creative portfolio both explore the relationship between environment and human states, taking as a basis Gernot Böhme's notion of atmosphere. *Elastic Geographies* is constructed of transformed recorded sounds, whose specific source-causes are largely unidentifiable. The piece is about ambiguity – the ambiguity of the spaces articulated, the ambiguity of the relationship between environment and feeling as described by Tuan, and the underlying ambiguity of unidentifiable sound-sources. It is also about contrast, exploiting the contrasting emotional character of the same environmental qualities in different experiences, people and situations; and creating contrasts in the environment, thus making the experience of atmospheres more potent. The environment is created entirely through the spatial attributes of the processed sounds, rather than through associative or representational spatiality, as the decision was made to utilise abstract, unidentifiable sounds. In this work I wanted to create an auditory environment which would be experienced as, and aurally inhabited as, an environment, rather than being experienced as simply representative of somewhere, and the notion of *affective spatiality* was integral to this idea.

Through the experimental process of creating this work I gained a better understanding of the processes involved in recording different types of sonic materials, in manipulating source materials to articulate sonic environments, in editing audio and in sculpting developments from one sonority to another. Having developed my knowledge of the technical processes involved in acousmatic composition, I was able to approach the second work, *As the Sea Haunts the Shore*, from a different angle.

As the Sea Haunts the Shore was developed from an idea that came from research into the emotional responses to the sea explored in Scottish Gaelic song. In reading of this complex “emotional landscape” in the writing of Màiri Sine Chaimbeul and Kenneth Macleod, I wanted to explore this concept by creating an auditory environment that I hope will reveal something of this emotional world to the listener, through their affective engagement with the environment articulated. Through the process of recording materials I also became more aware of the intricacies of the sounds of the sea, and I utilised this knowledge in the creation of the work. The development of my knowledge of the sonic “sculpting” process in the creation of *Elastic Geographies* was also invaluable in the composition of this piece. I also felt that I was able to utilise the technology, in particular the effects processes, in a more transparent way, partly through minimal usage due to the fact that the materials I used were recorded specifically for this work, involving a certain amount of intentionality, and also due to the fact that I had more experience in using the software.

This is particularly important for my work, because the intention is that these works reveal a world to the listener, in which they may experience a sense of presence, overcoming the detachment of electronic mediation. Indeed in this idea, any encouragement of “technological listening” (defined by Smalley as occurring “when the listener ‘perceives’ the technology or technique behind the music rather than the music itself, perhaps to such an extent that true musical meaning is blocked”¹³⁷), would provide a problem through highlighting the electronic mediation. Thus I am aiming in my work to create sonic environments which instead encourage a listening that stems from “interested enchantment”, a process which I am continually learning about through developing my compositional process and encountering works by other artists which give me, as a listener, the experience of presence in the virtual acoustic space.

¹³⁷ Smalley, “Spectromorphology: Explaining Sound-Shapes,” 109.

Appendices

Appendix 1: Excerpt from “Sea-Sounds”¹³⁸

The sounds of the western sea are aye such as can be “understanded” of the folk. They foretell good weather and bad, birth and death in the township, the drowning of dear ones on far-away shores. In the storm they voice the majesty of the King of the Elements, and in the quiet evening they fill one with a longing which is hope born of pains. Perhaps other seas have voices for other folk, but the western sea alone can speak in the Gaelic tongue and reach the Gaelic heart. To an Islesman the German Ocean, for instance, seems cold and dumb, a mere mass of water seasoned with salt; it has no mermaids and no second-sight, and if it has seals, they are not the children of the king of Lochlann. To only one sea does the old Gaelic by-word apply:

Dh’ iarr a’ mhuir a bhi ‘gha tadhal.

The sea invites acquaintance.

And if the sea-sounds are sweet to the Islesman at home, they are sweeter still when by faith he hears them in the heart of the mainland, with the unfeeling mountains closing him in. “Columba must have seen a vision of angels to-night,” said a man of the glens to one of the Iona monks, in the course of a missionary journey on the mainland; “there is the joy of heaven in his face.” The master overheard the remark. “Angel nor saint have I seen,” was his reply, “but I have heard the roar of the western sea, and the isle of my heart is in the midst of it.” Centuries after, a daughter of Macneill of Barra, home-yearning in a glen far away from the isles of the sea, heard the same eternal roar:

‘S trom an ionndrainn th’ air mo shiubhal,

Cha tog fidheall e no cannt;

Gàir na mara ’na mo chluasaibh,

Dh’ fhàg sid luaineach mi sa’ ghleann;

Fuaim an taibh ’gam shior-éigheach:

Tiugainn, m’ eudail, gu d’ thir-dhàimh.

Deep the longing that has seized me,

Song nor fiddle lifts it off,

In my ear the ocean sounding

Sets me roving from the glen,

And sea-voices ever call me:

Come, O love, to thy homeland.

Centuries come and centuries go, but the sea-voices never lose their old charm. A few years ago a young Skyeman working in Glengarry succeeded, by sleight of heart, in glorifying a very tiny waterfall into a mighty sea. “I sit in the heather and close my eyes,” he said, “and methinks the waterfall is the western sea – and, O man of my heart, my heaven and my folk are in that music.” More wonderful still was the “gift” of the Lews servant girl in Glasgow, who could hear twelve different sea-sounds in the roar of the electric cars and the street traffic...

¹³⁸ Macleod, in Kennedy-Fraser, *Songs of the Hebrides*, 124.

Appendix 2 – Aignish on the Machair

Words by Agnes Mure Mackenzie (Stornoway, Lewis) to Highland Air first noted by Henry White but long known in the north and west. (Copied from Kennedy-Fraser, *Songs of the Hebrides* Volume 3.)



When day and night are over,
 And the world is done with me,
 Oh carry me west and lay me
 In Aignish, Aignish by the sea.

And never heed me lying
 Among the ancient dead,
 Beside the white sea breakers
 And sand-drift overhead

The grey gulls are wheeling ever,
 And the wide arch of sky,
 Oh Aignish, Aignish on the Machair,
 And quiet, quiet there to lie.
 And quiet, quiet there to lie.

Bibliography

Augoyard, Jean-Francois, and Henry Torgue. *Sonic Experience: A Guide to Everyday Sounds*. Translated by Andra McCartney and David Paquette. Montreal and Kingston; London; Ithaca: McGill-Queen's University Press, 2005.

Böhme, Gernot. "Acoustic Atmospheres." *Soundscape: The Journal of Acoustic Ecology* 1, no.1 (Spring 2000): 14-18. http://wfae.proscenia.net/journal/scape_1.pdf (accessed 10th August 2011).

Böhme, Gernot. "Atmosphere as the Fundamental Concept of a New Aesthetics." *Thesis Eleven* 36 (1993): 113-126.

Böhme, Gernot. "The Art of the Stage Set as a Paradigm for an Aesthetics of Atmospheres." <http://www.cresson.archi.fr/PUBLI/pubCOLLOQUE/AMB8-confGBöhme-eng.pdf> (accessed July 13th 2011).

Chaimbeul, Màiri Sine. "The Sea as an Emotional Landscape in Scottish Gaelic Song." *Proceedings of the Harvard Celtic Colloquium* 22 (2002): 56-79.

Dufrenne, Mikel. *The Phenomenology of Aesthetic Experience*. Edited by James M. Edie. Translated by Edward S. Casey, Albert A. Anderson, Willis Domingo, and Leon Jacobson. Evanston: Northwestern University Press, 1973.

Dyson, Frances. *Sounding New Media: Immersion and Embodiment in the Arts and Culture*. Berkley; Los Angeles; London: University of California Press, 2009.

Kennedy-Fraser, Marjory. *Songs of the Hebrides and Other Celtic Songs from the Highlands of Scotland*. Volumes 1,2 and 3. Edited by Kenneth Macleod. London: Boosey and Co. 1909.

Nicolson, Adam. *Sea Room: An Island Life*. London: HarperCollins Publishers, 2002.

Norman, Katharine, "Real-World Music as Composed Listening." In *A Poetry of Reality: Composing with Recorded Sound: Contemporary Music Review* 15, Parts 1-2 (1996).

Oliveros, Pauline. "Acoustic and Virtual Space as a Dynamic Element of Music." In *Women, Art and Technology*, edited by Judy Malloy. 212-223. Cambridge, MA: MIT Press, 2003.

Schafer, R. Murray. *The Soundscape: Our Sonic Environment and the Tuning of the World*. Rochester, Vermont: Destiny Books, 1994.

Smalley, Denis. "Space-form and the Acousmatic Image." *Organised Sound* 12, no.1 (2007): 35-38.

Smalley, Denis. "Spectromorphology: Explaining Sound-Shapes." *Organised Sound* 2, no.2 (1997): 107-126.

Toop, David. *Haunted Weather*. London: Serpent's Tail, 2004.

Tuan, Yi-Fu. *Space and Place: The Perspective of Experience*. Minneapolis: University of Minnesota Press, 1977.