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Sound design for the contemporary novel
applying the poetics of John Cage to the act of reading

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Sound Design for the Contemporary Novel:
Applying the Poetics of John Cage to the Act of Reading

by

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Abstract: This thesis investigates the relationship between sound and written text. The subject is explored through practice, theory, and reflection. These research areas are preceded by an introduction to the phenomenon of the 'book with a soundtrack' as it has been set up within the field of literature – including an overview of pertinent discussions on the future of the novel in the digital age. The research practice is a physical/digital hybrid work entitled *64'53"; or, World of Storms* that uses open source technology to assemble and combine a collection of writings and field recordings, making available the possibility for a chance poetics between sound and words to be discovered by the reader. The work follows a methodology of an experiment that has been developed from the interdisciplinary and collaborative work of John Cage and the Merce Cunningham Dance Company during their activities of counter-cultural artistic experimentation in 1950s, 60s, and 70s America. The thesis demonstrates that the adopted methodology represents new opportunities for the contemporary creative writer. Chapter One draws upon theory from Multimodal Social Semiotics, Frame Analysis, Reader-Response Theory, and Attentional Phenomenology in order to validate and extend Cage's claim that 'there is no such thing as silence' during the act of reading. The thesis proceeds to define ambient sound as a present and dynamic aspect of any reading event, and one that can perform in dialogue with the graphical text at the point of reader response. Chapter Two reflects upon the formal presentation of the work, the inclusion of field recordings as part of the novel, and the spatial arrangement of the writings, which are discussed in relation to works by John Cage, Marc Saporta, Robert Grenier, and others. The conclusion drawn from the research emphasises the use of field recording as a contemporary writerly technique within creative writing practices, the act of reading as one process within the wider dynamic of attention, and the new perceptual models between graphical text and its ambient or environmental soundtrack that can be discovered through instances of frame awareness.

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Acknowledgments

Introduction

This thesis is intended as a companion work and critical commentary to the practice-as-research carried out in *64'53"; or, World of Storms* – an experiential novel composed of sound and graphical text (see: Appendix B, Figure B.6-B.11). The formal presentation of the research practice is a digital/physical hybrid work, reflective of the digital/physical territory of the contemporary moment. The novel incorporates a loose leaf text, as well as a programmed piece of open source technology in the form of a Raspberry Pi Zero single-board computer, both of which are contained and designed within a repurposed box of Amazon 'C1' packaging. When the work is opened, the reader flicks the 'start' switch to begin the performance, which lasts sixty-four minutes and fifty-three seconds. During this time the reader will encounter a collection of field recordings – of varying volumes – that are played at random from the inbuilt speaker and surface transducer. The reader will also define the order of the written text by shuffling the loose pages, which have had their internal layout determined by means of chance operations. Through strategies of radical formalism and the attempted disruption of habitual modes of perception, the novel explores a tripartite relationship between writing, field recording, and ambient sound during the act of reading as a means of uncovering a new consideration of poetics in relation to novelistic texts.

64'53"; or, World of Storms has taken as its precedent a set of avant-garde artists who are more routinely situated within the contexts of music, sound studies, Modern dance, and performance practices, but whose work I am suggesting deserves revisiting within the context of contemporary literature, and the multimodal space offered to literature by the digital landscape. Specifically, I have been interested in the work of John Cage, as well as the collective and collaborative activities that were developed within early

formations of the Merce Cunningham Dance Company in 1940s and 1950s America, where the de-centralised focalisation and the concurrent performativity of autonomous visual and aural stimuli made available the possibility of a chance poetics to be discovered by an audience. Here, my consideration towards a chance poetics being 'discovered' is intended to sit in dialogue with Cage's notion of 'response ability' (Cage, *Silence* 10), which emphasises unique, reflective, and contemplative responses to observations made primarily through the eyes and the ears – it implies a processual activity, and a form of embodied, perceptive, creative practice in its own right.

This practice-as-research enquiry has found a particular resonance with Cage's instructions for the reading of his kōan texts in *Silence: Lectures and Writings* (1961), where the short extracts of expository prose are suggested to be read while 'responding at the same time to environmental events and sounds' (Cage, *Silence* 261). The work also finds a resonance with the choreography of Merce Cunningham through the multiple focal points that are encouraged during the reading process. Here, the nonlinearity of the John Cage/Merce Cunningham aesthetic – which has been described by Roger Copeland as having 'more in common with the sort of complex systems that function in weather forecasting or predictions about global economy' (Copeland, *Merce Cunningham: The Modernizing of Modern Dance* 12) – aligns well with what I observe to be the parallelism and disjunctive negotiation of digital and physical space that has become habitual in the contemporary moment, impacting on our approaches toward the act of reading. On this subject, Matt Hayler notes how '[a] printed book's materiality certainly doesn't actively promote nonlinear cognitive work, but the multiple reading panes of internet browser tabs, or the parallel processing of a tablet or mobile phone that allows rapid switching between tasks may enact or perform sympathetically with such a way of thinking' (Hayler

39). Here, Hayler speculates how 'reading which combines the hypertextual with the linear [may be] the form most suited to our [present] natures (Hayler 39). *64'53"; or, World of Storms* has sought to contribute to this conversation through the use of a new formal approach to novel writing.

In this critical commentary I will argue that the model of the Cage/Cunningham aesthetic, where multiple autonomous forms occur within the same space and time, can provide an unexplored strategy for new multimodal creative reading and writing practices. With respect to the aural element specifically, John Cage's ideas and practice have been of particular importance to this project, as it is through a Cagean practice of attentive listening within the 'stage space' of the act of reading that a chance poetics between words seen and sounds heard are able to manifest themselves. Cage's 'silent piece', *4'33"* (1952), where the musician is instructed to remain by their instrument without playing it for the duration of four minutes and thirty-three seconds – allowing the ambient noises of the environment to enter into the performance – represents the foundation upon which much of this thesis is built. The progression of this piece from its original score version (see: Daniels and Arns 88-103), to the graph score version (see: Daniels and Arns 116-126), and the 'tacet' version entitled *0'00"* (see: Daniels and Arns 128-129, 142-143) have also resonated with the project. It has been of benefit for the practice-as-research process to observe how the original version of *4'33"* has evolved in terms of its form and distribution, as well as how this change in form has led to new interpretations of 'silence' and new approaches towards listening practices. Here, the wider problem of drawing a distinction between the roles of the audience/listener and performer in a post-Cagean practice has opened up an important conversation for the project of *64'53"; or, World of Storms*. Liz Kotz notes how Cage's 'expanded field of sound … implied not only new

materials and new structuring properties but a shift from the intentions of the composer toward the perceptual capacities of the listener' (Kotz 108). Joan Retallack describes how, 'because of [Cage's] work we are able to hear noise as music. We are also able to hear silence as sound and, more generally, as those presences (natural and cultural) we have not been attending to' (Retallack 184). Will Montgomery, in his comments on Michael Pisaro's treatment of *4'33"* as an 'event' (Pisaro, "Wandelweiser")[1], also writes of how Cage's seminal work exists, 'not [as] a "museum piece" but one that [has] opened a range of possibilities that are still being explored' (Montgomery 88). *64'53"; or, World of Storms* intends to further these possibilities, through a special focus on the novel and its soundtrack.

The research practice has therefore also developed from the more immediate discourse surrounding the novel's position in the digital age. China Miéville's keynote speech entitled 'The Future of the Novel', which he delivered at the 2012 Edinburgh World Writers' Conference, was one initial starting point. Although the science fiction writer's comments signalled an openness to the multiplicity of the novel in the internet age – when he speculated that the open digital text and the 'remixed' novel could become a celebrated and common occurrence – his thesis was largely constrained to the possibilities of the novel as a commodity, as well as an endorsement of genre as the antidote to mediocre 'literary' fiction and the dominance of 'lyrical realism' within novelistic prose. Miéville acknowledged experimental British writers such as Christine Brooke-Rose and Ann Quin, but he also praised the tenacity of 'traditional narrative-arc-shaped fiction' (Miéville, "The Future"). His comments on formal explorations through digital technology were

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[1] Michael Pisaro's 2009 blogpost on the Wandelweiser Group's website describes *4'33"* as an 'unfinished work' that has allowed for compositions with combinations of sound and silence to continually emerge: http://erstwords.blogspot.com/2009/09/wandelweiser.html

also at times dismissive. For Miéville, the hypertext novel had 'a few interesting experiments', while enhanced e-books 'with soundtrack and animation' were described as 'a banal abomination'. Will Self, another contemporary figure of British literature, has commented in a recent interview on how he believes the novel is 'absolutely doomed to become a marginal cultural form' (Self, "The Novel"). Elsewhere, the *Phone* (2018) author refers to his own observations related to the social and cultural changes in attentional engagement with literature since the dawn of the internet age, as well as the work of neuroscientist Susan Greenfield, and her claims that our use of digital technology is profoundly altering the structure of our brains (see: Self, "Are Humans"). Although Self questions the conclusions drawn from Greenfield's studies, his views settle on the standpoint that as a result of the ubiquity of digital devices, and the current two-way communicative and social function of our media, the need for a deep, solitary engagement with literary texts will become, or has already become, culturally irrelevant.

The poet Kenneth Goldsmith takes a more positive stance on the above issues. He notes not only the 'great wealth of concentration, focus, and engagement' (Goldsmith, *Wasting Time on the Internet* 4) that is evident in the use of digital devices, but also the effortless negotiations of space that take place as we shift between digital and physical interactions in contemporary society. This deft transference between arenas is demonstrative of the possibilities that arise as a result of the 'dynamic tension' present through the continual and varied transformations described by P. Sven Arvidson in his phenomenological model of the 'Sphere of Attention' (Arvidson 1-2). When applied to the concentrated act of reading, this model highlights how reading graphical text can be seen to take place within the much larger, dynamic process that includes the 'theme', 'context', and 'margin' of the reader, who exists as an embodied 'sphere'. In addition to current

technological developments, establishing a connection between focussed thematic attention and marginal attention during the act of reading represents a new approach within the discourse surrounding the future of the novel.

The end-game diagnostics discussed by Miéville and Self have many historical precedents when it comes to concepts of art and technological resistance. Often these arguments signal the presence of transitional territory where new techniques and practices are available to be explored. Marshall Berman recounts Charles Baudelaire's polemic against photography, which, as a product of technological progress and its ability to show 'truth', was described by the romantic poet as 'art's mortal enemy' during his 1859 Parisian salon. In this instance, Berman notes how the anger toward new technology was also directed onto those whose perceptions were altered as a result of the technology itself. For Baudelaire, '[e]ven worse than the photographers … are the modern painters who are influenced by photography', resulting in practices wherein the artist would begin '"painting not what he dreams, but what he sees"' (Berman 140). Similarly, Grant Taylor notes the resentment that was held for early computerised artistic practices in the late 1960s and 1970s, which were reproached on account of their 'mechanical sterility', and judged to have had 'no claims to the status of art, especially on aesthetic grounds' (Taylor 18-19). Among several quotable passages on the subject, Marshall McLuhan describes how each generation tend to view present circumstance through 'the rear-view mirror', that is, through the mechanics of older technologies and their related perceptions, resulting in 'innumerable confusions and profound feelings of despair … during periods of technological transition' (McLuhan 8).

Avant-garde aesthetics have often responded to these cultural moments of transition through techniques of disjunction, which have a historical pertinence to the aims of this research enquiry. Krzysztof Ziarek describes the avant-garde movements at the beginning of the twentieth century as a 'response to the crisis of the humanistic concept of experience, a reaction which leads to a reappraisal of the very nature of poetry and technology … a redefinition of experience in the context of everydayness' (Ziarek 4). For the contextualisation of this study, I have been interested in how literature has previously responded, and is currently responding, to such transitional territories and reappraisals – the avant-garde responses through works of prose literature that emerged during the era when television and mass media were establishing their profound effects on everyday life was one such moment of transition. This timespan coincided with many of the collaborations of Cage and Cunningham, and it extends into the period when computer technology was beginning to reach out beyond specialised contexts. Formations of groups like the OuLiPo contributed important experimental works, such as Georges Perec's lippogrammatic novel *La Disparition* (1969) (see: Gilbert Adair's translation *A Void)* – a volume that explicitly 'play[s] with the reader's expectations' through the omission of the letter *e* throughout the text (James 154). Here, Perec's writing pushed the boundaries of literature through a processual and constraint-based methodology that shared many principles with early computer programming approaches. The less cohesive group that made up the British avant-garde of prose writers during this era, which included Ann Quin, Christine Brooke-Rose, and B.S. Johnson, whose work involved fragmentation as well as physical disruptions of text, offered other interesting formal responses. These generations of writers built upon earlier efforts established by the French *Nouveau Roman* movement (the writings of Nathalie Sarraute, Alain Robbe-Grillet and Marc Saporta, among others) that had previously sought to find new ways of reinventing the novel's

narrative form – novels that would 'construct a world both more solid and more immediate … [where] gestures and objects will be *there* before being something' (Robbe-Grillet, *For a New Novel* 21, italics added).

In the contemporary moment, Mark Weiser's predictions of ubiquitous and 'calm' computing – digital technologies so transparent they would permeate 'everyday life until they are indistinguishable from it'– are arguably now closer than ever to an accepted reality in Western society (Weiser 94). A response to the 'everydayness' of life through literature therefore encourages not only a formal consideration of the new technologies themselves, but of the specific perceptions that relate to these technologies, as well as the methods of participation used by readers to engage with graphical text of all kinds. Marjorie Perloff supports this approach within the context of poetry practices, commenting on how writing should be '*of its time*' (Perloff, *Poetics in a New Key* 177). She writes of how '[a] poem (or fiction) has to be "innovative" for a reason. There has to be motive for doing things in "new" ways' (Perloff, *Poetics in a New Key* 104). When questioned on the current climate of avant-garde poetics, Perloff comments on how she feels 'we are currently witnessing an increasing emphasis on sound', as well as how work can be produced 'by foregrounding various soundings, in relation to musical values – say those of Cage or Satie' (Perloff, *Poetics in a New Key* 35). These observations are extended by Stephen Benson and Will Montgomery when they describe the recent 'acoustic turn' that has taken place in relation to field recording practices and the array of publications that have taken sound, recording, and listening as their subjects in the decades following the 1990s (Benson and Montgomery 14). Collections such as *In the Field* (2011) and *On Listening* (2011) each edited by Cathy Lane and Angus Carlyle, as well as the writings of Salomé Voegelin, David Toop, David Hendy, Brandon LaBelle,

and Hillel Schwartz – among many others – have provided key insights. In direct relation to this study, experimental poetic texts as well as commercial narrative fiction have also explored the specific multimodal situation of the act of reading in relation to sound and music through various formal gestures.

Early instances of designed 'books with soundtracks' such as Michael Nesmith's *The Prison* (1974) – a folk-rock LP accompanied by a short story printed in the liner notes of the record sleeve – represent the first conscious efforts to offer readers the opportunity to combine the practices of musical listening with the visual practice of reading narrative text[2]. More recent examples such as Tim Winton's *Dirt Music* (2002), Michael Smith's *Unreal City* (2013), and Laura Barnett's *Greatest Hits* (2017), have each been released with the aim of encouraging a relationship between novelistic prose and a specifically designed musical soundtrack, which is either intended as a reference point for the reader – and engaged with diegetically in the narrative of the text, as in the case of *Dirt Music* – or designed as ambient listening material, intended to be played in the background during the act of silent reading. Arguably however, these forms have long been preceded by the visual text and intertitles of early silent film, which, when displayed in their original settings together with the performances of live musicians, formed a text/music dynamic that represented an 'essential standard part of film narrative' (MacDonald 1). The use of subtitles in foreign language films denotes another occasion for reading graphical text in an environment of designed sound. Other notable contemporary practices include the South Korean group *Young-Hae Chang Heavy Industries* who employ text-based

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[2] The research will not centre on the practice of listening to audiobooks. Here I want to emphasise the difference between the visual display of words that are silently read during the act of reading, and the spoken word which is heard during the act of listening alongside other aural activity.

animation with synchronised musical soundtracks as their mode of artistic practice. Lisa Robertson's use of field recordings from the locations of Eugene Atget's photography in *Nilling* (2012) is worth a particular mention – Robertson's recordings are paired to the physical text by means of web links, and are designed as companion paratexts to her discursive writing about the locations, and the processes of making her 30-second 'sound exposures'. Other poetic texts that involve multimodal approaches, such as Jonathan Skinner's, *Directions for the Ear* (2000) – released on cassette, and consisting of forty field recordings and forty nine-line poems displayed on index cards – have been of interest to this project[3]. At the more commercial end of the scale is *Booktrack*, an app for mobile devices that provides soundtracks to digital texts through the inclusion of music as well as sound effects. The *Booktrack* app has been designed to recognise descriptions of sound within text and to play corresponding sound effects illustratively: i.e. if a text describes a knock on the door, or a plane passing overhead, the text would trigger a sound effect representative of the description.

In recent years some novelists – including high profile figures such as Stephen King – have also taken to social media to publish Spotify playlists of songs by other artists and musicians whose arrangements they have chosen as 'mixtapes' of listening material intended to complement, or to provide a mood or atmosphere for their fiction. There also exists the social and cultural phenomenon of readers selecting their own audio material during the activity of reading texts – an online forum curated by Marta Bausells on *The Guardian* website asked its users in 2016 for comments on the topic, *The Best Music to*

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[3] Another set of formal examples worth citing are the limited edition releases by the publisher *Texte und Töne*. The second edition of *The Edge Is Where The Centre Is* (2015) – a collection of essays and texts edited by Gareth Evans, William Fowler and Sukhdev Sandhu on David Rudkin's *Penda's Fen* – is accompanied by a 'soundsmear' flexi-disc vinyl, containing recordings and interviews. The flexi-disc is designed to be unfolded and played on a record player by the reader.

Listen to While Reading – or Is It Sacrilege? with opinions polarised between those who preferred 'silence' while they read, to those who were open to listening to instrumental or classical music. In addition, an extensive library of Youtube videos, promoted as 'concentration aids' for studying and reading, make use of binaural beats and isochronic tones to create listening environments designed for use alongside independent practices of reading graphical texts. Lately, Spotify has been regularly featuring playlists such as 'Music for Concentration' on its homepage – this playlist had 643,633 followers at the time of writing – while 'Focus' is now listed as a genre in its music directory[4].

64'53"; or, World of Storms has a different emphasis to these contemporary examples of the 'book with a soundtrack' and other related 'musical' listening practices taking place during the act of reading. The research practice concerns itself not with composed music as an accompaniment to a written text, but instead with the idea of sound becoming an equal autonomous element during the reading event. The work adopts an approach which resonates with examples of Cage and Cunningham's collaborations, as it seeks to introduce Cage's expanded notion of 'music' – as inclusive of all sound – to these emerging practices of listening during the act of reading. Here, the tripartite use of field recording, writing, and the intended inclusion of ambient sound explores a new consideration of poetics based on a readerly response to the incidental occurrences of all sounds within the same time and space where the act of reading takes place.

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[4] Similarly, the recent trend for reading "in-situ" promoted by author Robert Macfarlane after receiving a message on Twitter from a reader who was reading *Mountains of the Mind* (2004) on the slopes of Glas Bheinn, Assynt, is an interesting social development regarding the act of reading with pertinence to the present study. After receiving this message Macfarlane asked the question to his followers about the relationship between place and text, and he received over 400 wide-ranging responses from readers describing their experiences of reading books in the locations of their setting (see: Macfarlane "Books on Location: Robert Macfarlane on Putting 'in-Situ' Reading on the Map").

64'53"; or, World of Storms therefore considers three main questions as it adds to the conversation of the 'book with a soundtrack': the use of audio field recording as a contemporary writerly technique, an exploration of reading as an activity that takes place within the wider and dynamic processes of attention, and an examination of the availability of alternative perceptions relating to the ambient or environmental soundtrack that is present during all experiential encounters with graphical text. The work takes John Cage's famous declaration that 'there is no such thing as silence' (Cage, *Silence* 94), and it extends this message, focusing it in a way that allows the act of silent reading to be considered as a further site *for* creative and attentive listening, allowing the forms and sensations of sound and graphical text to be combined by the reader in unique ways. The work is intended to form its own probabilistic system, affording the reader freedom in their 'response ability' throughout the durational encounter, and allowing the new knowledge put forward in the work to emerge through its experiential engagement.

In alignment with pertinent volumes that consider sound within the context of poetry, such as Marjorie Perloff and Craig Dworkin's *The Sound of Poetry / The Poetry of Sound* (2009), Steve McCaffery's *Prior to Meaning* (2001), and Charles Bernstein's *Close Listening: Poetry and the Performed Word* (1998), this research seeks to explore a line of enquiry into the relationship between sound and writing, and specifically the multimodal spaces where new considerations of poetics can emerge through the act of reading/listening. Following Liz Kotz's earlier comments on Cage's expanded field of music and the perceptual capacities of the listener, Craig Dworkin notes how '"Music," in [an] expanded field, may no longer be especially useful for defining poetry … [however], it may be a productive tool for understanding poetry and for thinking in new ways about what poetry might aspire to do' (Dworkin, *Introduction* 16). Within this

conversation, my approach in *64'53"; or, World of Storms* has sought to assemble a 'poetic' novel that is not based on a composed 'lyrical' use of language, but rather on a formal experiment where the reader is invited to respond to a modular, multimodal, durational, narratively indeterminate work.

Existing critical approaches that consider sound and fiction have focused predominantly on textual form, musicality of language, and sound and music representation. Works such as *Sound and Aural Media in Postmodern Literature: Novel Listening* (2013) by Justin St. Clair address textual responses to the changing sonic environments brought about by sound recording technology and its influence on writing techniques and narrative. Erich Hertz and Jeffrey Roessner's collection of essays, *Write in Tune: Contemporary Music in Fiction* (2014), focuses on the cultural influences and implications of authors deciding to reference composed music as a component of a work of fiction. This collection describes how writers are recognising the power of music to evoke cultural 'times and spaces', and, through their selection of certain songs as listening material, deploy these songs 'to explore various articulations of personal identity in relation to cultural systems' (Hertz and Roessner 3). Stephen Benson's monograph *Literary Music* (2016) addresses the areas between music, listening, and literature from a musicology perspective, centring on the referencing of musical events and musical works within literature, and arguing that the use of textual description represents an alternative recording strategy for the presence of music – as well as a lasting document that a close listening practice has taken place. Daniela Cascella's textual explorations into the relationship between writing, listening, and reading in *En Abîme: Listening, Reading, Writing: An Archival Fiction* (2012) and *F.M.R.L: Footnotes, Mirages, Refrains and Leftovers of Writing Sound* (2015) each contain a collection of pertinent accounts of the author's literary listening practices which

aligns well with the topic of this research. *Writing the Field Recording: Sound, Word, Environment* (2018) edited by Stephen Benson and Will Montgomery provides the most up to date thinking and commentary on this interdisciplinary topic. Sound, writing, listening, documentation, and poetics are discussed from a variety of perspectives by theorists, practitioners, poets, and sound artists. The collection uses John Berger's essay "Field*"* (1973) to facilitate a discussion of the affinities between field recording practice and literature. Both the research practice of this project and the present critical text seek to add to these emerging discussions, particularly with regard to the topics of framing and attention, and the treatment of the reading event as an additional occasion for listening and 'field thinking' (Benson and Montgomery 12).

This commentary will discuss the interdisciplinary critical approach connected to my research process, as well as the development and construction of the practice itself. Chapter One will reflect on the resonances this practice-as-research enquiry has made in relation to existing artworks and theoretical frameworks, including the 'experimental' conditions utilised by Cage in *4'33"*, the kōan texts, and in the collaborations with the Merce Cunningham Dance Company. These topics will be examined initially through the lenses of Multimodal Social Semiotics (Kress and Van Leeuwen 2001) and Frame Analysis (Goffman 1974), where I will discuss the treatment of ambient sound as a semiotic resource in Cage's practice – one that is made available to an audience through formal innovation and a process of frame awareness. The discussion will then turn to the act of reading, and the organising principles that can be used to position a text as an 'event' that occurs within space and time. Lastly, P. Sven Arvidson's adaptation of Aron Gurwitsch's phenomenological model of the 'Field of Consciousness' into the 'Sphere of Attention' will be introduced to provide an apt illustration of the potentials of adopting a

Cagean listening practice during the act of silent reading in order to discover a new consideration of poetics between the written word and its aural environment. Chapter Two of this commentary will then explore how I have built upon, connected, and extended these frameworks through my research practice, providing a substantial insight into my practice-as-research enquiry and the new knowledge it seeks to put forward. I will also emphasise why the 'experimental' methods used in *64'53"; or, World of Storms* can be seen to be a productive formal strategy for making available alternative perceptual models for the reader. Douglas Kahn, in *Noise Water Meat* (1999) notes how '[n]one of the arts is entirely mute' (Kahn 2), and this thesis is seeking to stress the context of literature with regard to this comment – the research seeks to highlight how all graphical text has a soundtrack that can be listened to during the act of reading.

The appearance of the research practice also indicates a necessary conversation about technology and commoditisation, and an additional line of questioning may seek to understand why existing platforms for digital writing were not utilised within this project. My position here is that although I acknowledge how forms such as app and web-based designs for the text could have been equally interesting approaches for exploring the topic of reading and listening, the use of existing platforms also represented a limitation for the conceptual aims of the work. *64'53"; or, World of Storms* has sought to represent the transitional territory of the contemporary moment – a territory where the reading of many forms of graphical text in multimodal environments on digital devices is widespread, yet a complex relationship with the act of reading in the context of reading fiction remains in place, as suggested by the decline in e-book sales in favour of paperback versions in recent years (see Fruhlinger, "Are e-books finally over?"). *64'53"; or, World of Storms* seeks to engage with the perceptual spaces available to literature because of this

transitional territory, rather than representing an exploration of novel writing practices through the use of existing handheld digital devices. Other research taking place within the Digital Humanities is dealing with the use of portable digital devices more directly: larger scale initiatives such as *Ambient Literature* – an AHRC funded project started in 2015 and brought about through a partnership with a technical development partner, *Calvium Ltd.* – are currently exploring the digital futures of the book by developing IOS and Android multimedia apps that are incorporating elements of augmented reality such as texts that are activated by geo-location on mobile devices.

The research-practice undertaken through this study in contrast has maintained a cautionary stance in relation to app-based forms – the current unavailability of the app version of Marc Saporta's *Composition No.1* for I-pad, which was published in 2011[5] and was considered at the time to be an 'updated' version of the innovative loose leaf text, exemplifies this point well, underlining the relatively short shelf-life of these forms, as well as their continued dependencies on the platforms on which they are sold as products. Here, Saporta's text has likely been affected by one of Apple's IOS upgrading processes since the work's publication[6]. Jørgen Bruhn notes a similar instance with the app version of Jennifer Egan's *A Visit from the Goon Squad* (2010), which appeared as one of the 'post-texts' of Egan's original novel alongside a powerpoint version, an enhanced e-book, and an audiobook version. As Bruhn notes 'the fact that the IOS *Goon Squad* app is now more or less impossible to use because it uses an outdated operating system is, in itself, a

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[5] At the time of writing, the itunes link (itunes.apple.com/gb/app/composition-no.1/id449507414?mt=8) for the novel app displayed the following error message: 'The item you've requested is not currently available in the UK Store'.

[6] It has been estimated that approximately 187,000 apps and games have been rendered obsolete by the iOS11 update in 2017: https://www.theguardian.com/technology/2017/apr/03/ios-11-apple-latest-update-older-apps-stop-working

telling example of the technical possibilities, but also restraints, of … digital solutions' (Bruhn 116).

The element of digital technology that I have made use of – the open source Raspberry Pi Zero single board computer – has been deemed to be an important aspect of the project on account of how it presents alternative possibilities outside of commercial enterprises, such as those of Apple, Amazon, and Google. Unlike the cited IOS examples above, *64'53"; or, World of Storms* does not require updating, and is available to be reproduced and customised by following the building process described in Appendix B of this thesis – a gesture in line with the utopian spirit of sharing and adaptation that exists within online open source communities. This approach resonates further with John Cage's interest in technology as a means of generating an 'openess' of the mind as a result of the availability of new possibilities (see: Kostelanetz 266), rather than of the use of new technology according to its intended purpose. David Grubbs describes Cage's DIY aesthetics and his 'counterintuitive use of recording technology within live performance' (Grubbs 76), as well as Cage's disdain for recorded music (see: Grubbs 10-11) as evidence of Cage's consideration of the use of new technology as an exploratory and performative activity.

Finally, as a piece of practice-as-research, *64'53"; or, World of Storms* has maintained a close relationship to the approach described by Robin Nelson in *Practice as Research in the Arts* (2013), where Nelson discusses the initiative of practice-as-research as a model and as a methodological framework for conducting research through practice within the academy. This methodology centres on the process of practice as a means of discovering new knowledge using methods that are indigenous to the practitioner. Emphasis is placed

on the 'knowing how' (Nelson 40) of the practice enquiry within the practical 'doing-thinking' process (Nelson, 22), and how tacit new knowledge that is discovered by the practitioner-researcher can be articulated, evidenced, and shared effectively through the practice itself, the documentation of process insights, and the finding of resonances within theoretical frameworks and other works. This idea of the 'resonance' is particularly pertinent within the interdisciplinary enquiry where connections between traditionally separate fields can be discovered through the process of practice. Throughout this commentary I aim to convey the resonances that have been discovered through this process of 'doing-thinking' where the setting up of experimental conditions has been the means by which new insights have been made. With respect to Cage's work specifically, I acknowledge that where my practice builds upon, extends and has shared certain Cagean ideas and approaches, the connection remains one of a close resonance, and of relating these resonances within the new territory of a novel writing practice, rather than of a direct application of a strict Cagean method within the text.

A useful grounding point within my approach and process can be found in Nelson's comments that describe how '[t]heory … is not prior to practice, functioning to inform it, but theory and practice are rather "imbricated within each other" in praxis' (Nelson 62). While I acknowledge that it may be challenging to define the practice as a 'self-evident' (Nelson 27) piece of research in itself, I maintain that the new knowledge and ideas that the work seeks to communicate are best demonstrated through a participation with the work as it is considered as praxis. Here, it is hoped that the reader will have experienced the multimodal text of *64'53"; or, World of Storms* prior to the reading of this written commentary, and, given the emphasis on the chance occurrences and the unique nature of each reading event as a result of the sounds in the environment, it is also encouraged

that the reader will have engaged with the novel on more than one occasion, and within more than one location. This suggestion is the recommended approach for discovering the substantial new insights that the work seeks to communicate.

Chapter One: Applying the Poetics of John Cage to the Act of Reading

This chapter sets out to discuss the theoretical frameworks that have resonated with the development of the research practice of *64'53"; or, World of Storms*. Cage's experimental methods will be initially assessed as a productive means of breaking with habitual modes of perception through processes of frame awareness, and the chapter will accentuate why Cage's work – particularly *4'33"* and the instructions for the reading of his kōan texts – have been foundational for this project. The thesis will then attempt to expand and extend Cage's conceptual thinking into the new territories outlined in the introduction, examining a series of approaches and models which will help translate the Cagean practice of attentive listening into and within the new context of the act of reading. These approaches will contribute to the contemporary debate surrounding the future of the novel, and will provide new options for discussing listening practices, reading, and the attentional processes that combine these activities in a variety of contexts. The above topics will be discussed with reference to theory from Multimodal Social Semiotics, Frame Analysis, Reader Response Theory, and Attentional Phenomenology. Here, P. Sven Arvidson's phenomenological model of the 'Sphere of Attention' will illustrate and qualify the connections between ambient sound as it exists as part of marginal consciousness, and the phenomenological transformations encouraged by the research practice of *64'53"; or World of Storms* – the possibility for marginal events to become thematic for the reader is considered to be an ongoing and dynamic process during any engagement with the experimental conditions of the text.

At the heart of John Cage's poetics, as they have been interpreted in this study, is the idea of the 'experiment' as a productive method for altering perceptual responses in an audience. On this subject Cage writes of how, '[t]he word "experimental" is apt,

providing it is understood not as descriptive of an act to be later judged in terms of success and failure, but simply as of an act the outcome of which is unknown' (Cage, *Silence* 13). Hannah B Higgins and Douglas Kahn, with reference to the above quotation, write that '[k]ey to the term *Experimentalism*, as understood by Cage, was the unpredictability of outcome, which could be based in new technology or virtually any other process that removed the author's choice from the composition process' (Higgins and Kahn 3). Eva Díaz also notes how '[f]or Cage, the coupling of organized processes with aleatory (chance-generated) results made it possible to transcend predictable habits of composition and recital' (Díaz 56).

Cage implemented his experimentalism through the use of several strategies of organised disruption. Within musical composition these strategies included the invention of the prepared piano, when he lodged various items between the piano strings in order to create an unpredictable percussive ensemble when the piano was played, (see: Cage, *Empty Words* 7), the adoption of the *I-Ching* as a compositional tool (from the 1950s onwards), which allowed Cage to create work that was determined not through an expression of personal taste but as a result of 'chance operations', and through the use of indeterminacy within musical scores, which '[integrated] elements of chance into the moment of performance itself' (Piekut 21).

When Cage premiered *4'33"*, it was the ambient and environmental sounds, as well as the sounds made by the audience themselves, that provided the musical performance within this duration of time. *4'33"* demonstrates the above notion of Cage's experimental method on account of both the unplanned incidental occurrences that take place during the performance (within space), as well as the explicit outlining of the experiment's

relationship with duration. Conceptually however, what resulted from this particular experiment went much further:

> To Cage [*4'33"*] seemed, at least from what he wrote about it, to have been an act of *framing*, of enclosing environmental and unintended sounds in a moment of attention in order to open the mind to the fact that all sounds are music. It begged for a new approach to listening, perhaps even a new understanding of music itself, a blurring of the conventional boundaries between art and life (Gann 11).

Kyle Gann's above comments outline how it is through the principles of the experiment – through the production of an event with an unknown outcome – that the audience is able to encounter the phenomenon of environmental and ambient sound within an entirely new context. These sounds are framed through the duration of the piece, as well as through the social and cultural expectations of a 'conventional' musical performance, which allows for the perceptual shift to occur. Peter Yates explains how '[o]ne of Cage's purposes is to break up our habitual patterns of receiving esthetic experience' (Yates 97), while Cage himself writes of the 'response ability' of an individual, that is put to use as a result of their participation in a work that contains a multiplicity of possibilities (Cage, *Silence* 10-11). Elaborating on this strategy, Cage, speaking with Daniel Charles, comments on how he sought to invite a 'conversation', rather than attempt to 'communicate' a defined outcome – to provide an occasion or arena where an audience can undergo an experiential encounter, a lived space and time where 'anything at all' can take place.

It is that "anything at all" which allows access to what I call *openness*. To the process. To the circus situation. In that situation, objects surge forth. But the fact that it is a conversation, not communication, means that we are deterred from talking *about* them. What is said is not this or that object … [i]t is the process (Cage, *For the Birds* 148).

In support of this statement, Eva Díaz suggests how Cage's experimental chance protocol could lead to 'spectatorial empowerment', and how 'working "experimentally" offers models to test and to organize forms of collective agency' (Díaz 98).

Within the context of text, Cage's experimentalism mirrored many of his approaches within musical composition. Here, Cage made use of experimental methods involving chance, indeterminacy, and the use of innovative form in order to create works that could provide an occasion for his reader or listener to undergo new experiential responses through a participation in unfamiliar processes that departed from habitual interactions, and which often delineated from the solely representational use of language. *Roaratorio: An Irish Circus on Finnegans Wake* (1979), for example, involved a 'painstaking examination' of James Joyce's text in order to create the mesostic poetry that is voiced throughout the hörspiel (Kostelanetz 149). In comments made to Paul Hersh in 1982, Cage describes the process for the text score _*,* _ ___ *Circus On* ____ (1979) and the approach he undertook with *Roaratorio* and the specific relationship to sound, place, and writing within the project:

What I suggest people do is write through a book in order to reduce its length to a reasonable musical length. In the case of Roaratorio it's one hour, from *Finnegans Wake,* which is 626 pages to begin with, and becomes in my writing

of mesostics on Joyce's name, something like 41 pages, and those 41 pages can

be read comfortably in the space of an hour. The translation can also be

identified by page and line, so that it's like a ruler going through the book. I can

go through the book and find out where I hear something, for instance: if the

writer says someone laughed or a dog barked I can jot that down and I can

identify that by page and line and I can then insert a barking dog or a crying

child at the point that it belongs in relation to the ruler that I've already written.

And if places are mentioned in the book, I can go to those places and make

recordings and put them where they belong in relation to the ruler, and

eventually I have a piece of music (Kostelanetz 149).

Here, we see evidence of Cage's concern with sound during the act of reading – an

existing work of writing becomes the source material for a new musical compositional

process. Stephen Benson notes how Cage's proposal 'is for the making of a new piece

from a performance of all the sounds in a chosen literary work, to the accompaniment of

a verbal text extracted from the source through a series of processual operations – not a

straightforward acoustic conversion of a novel's signified aurality, but certainly an

artfully disordered execution of description's signifiers' (Benson 74). Furthermore,

Cage's use of unconventional layout (see: Cage, *Empty Words* 65-77), chance-determined

ordering and typeface (see: Cage, *M* 35), use of silence, spatial notation, and concurrent

sound and voiced events (e.g. *Indeterminacy* (1959) and *Lecture on the Weather* (1976))

point toward the formal and poetic use of text-as-material, distinctly reflective of the

cultural moment in which he inhabited. Marjorie Perloff writes of how 'the importance

of Cage for postmodern poetics cannot be overestimated, for it was Cage who understood,

at least as early as the fifties, that from now on poetry would have to position itself, not

vis-à-vis the landscape or the city or this or that political event, but in relation to the media

that, like it or not, occupy an increasingly large part of our verbal, visual, and acoustic

space' (Perloff, *Radical Artifice* xiii). In recognising the multimodality of the everyday, and by producing texts that were reflective of this experience through the use of innovative form, Cage's writings challenged the dominant poetic conventions of the time, and ensured that his work maintains a lasting influence on many contemporary artistic practices such as sampling, digital and aleatory writing, performance art, and conceptual poetry (see: Jaeger 6 and Epstein 237).

Although many of the above formal strategies are pertinent to the present discussion in terms of their disjunctive function, which facilitates the breaking of habitual reading processes, this chapter will focus on the comments made by Cage in *Silence: Lectures and Writings*, when he makes explicit reference to sound and noise during the act of reading graphical text silently. In his remarks on the transcribed versions of his short kōan stories, Cage writes:

> Some stories have been omitted since their substance forms part of other writings in this volume. Many of those that remain are to be found below. Others are scattered through the book, playing the function that odd bits of information play at the ends of columns in a small-town newspaper. I suggest that they be read in the manner and in the situations that one reads newspapers – even the metropolitan ones – when he does so purposelessly: that is, jumping here and there and responding at the same time to environmental events and sounds (Cage, *Silence* 261).

Despite the casual, off-hand tone in which he offers these suggestions, Cage's comments here deserve a thorough analysis in the context of this research. Where the 'purposeless' reading strategy will be discussed later in relation to the indeterminate, off-beat logic of

the kōan form, what is of particular interest to this study is Cage's reference to the happenstance events and sounds that occur externally to the presented text, and specifically his treatment of these sounds as relevant and equal to the experience of reading the visual graphical text in front of him. Despite the now dated model of a small-town newspaper, Cage's comments position the act of reading not as the engagement with a text-object, but as an encounter with an event in space and time – as a single occurrence or activity that takes place among many other activities within the wider and dynamic process of attention. These comments are of great importance for this study because it is the concurrency between the visual medium of graphical text and the aural medium of the sound events – explored through the methodology of the experiment – that will be fundamental to the questions, issues, and discoveries that this practice-as-research enquiry seeks to uncover.

Cage's other activities where he actively sought to combine words and sound tended to focus on the voice. In works such as *Roaratorio, Indeterminacy,* and his many 'Lecture Poems', such as *Lecture on the Weather* and *Lecture on Nothing* (1949), the spoken word was Cage's preferred form of presentation, with the visual element of graphical text often existing as a secondary, transcribed record, or as a "text-score" for work intended to be performed. Although a thorough consideration of sound during the act of reading silently may appear to be a surprising omission from Cage's central interests, it is also reflective of the times in which he was working, and the forms of media that surrounded him, most notably radio. In the contemporary moment, the tendency for dual or parallel screen use as a result of the ubiquity of mobile devices, and the intermittent reading of visual graphical text in the same space and time as when concurrent and disjunctive visual and sound events take place, is perhaps now more central to Western society's cultural habits

– these habits are evident in the development of the 'crisis of attention' discourse that has appeared in response to our engagements with the digital (see: Epstein 42 and Solnit "Diary").

The present study focuses on the consideration of the act of reading silently and the availability of a chance poetics in the interaction between graphical text and the sonic environment. It offers a consideration of how this multimodal and dynamic activity can be viewed as a defined practice in itself, and a new approach to readership. Furthermore, building on the ideas and discoveries put forward in the research practice of *64'53"; or, World of Storms*, and supported by the frameworks discussed in this commentary, this thesis supports the potential for new forms of writing to emerge that make use of field recording or ambient sound as active elements within works. It is here where Cage's other collaborative activities provide a more thorough conceptual framework that is of relevance: in particular Cage's collaborations with the Merce Cunningham Dance Company. David Vaughan writes of the 'simultaneity' of dance and sound within the Cage/Cunningham aesthetic, where 'sound and movement … [proceeded] independently of one another' (Vaughan 331), bound only by an arbitrary duration within a designated space. As will be discussed in more depth in Chapter Two, the processes of attending to the 'simultaneity' of autonomous dance and sound under these circumstances, and the chance poetics that manifest between these two forms, provides a pertinent analogy for the ideas put forward within the research practice of *64'53"; or, World of Storms*, and its position in relation to the new spaces and perceptions available to literature in the present moment.

Reading Multimodally

Cage's above comments on 'responding at the same time to environmental events and sounds' can be interpreted as an example of reading multimodally – of encountering graphical text, ambient sound, and other events within the same space and time, and treating them as an ensemble of modes, as available resources that Cage, in this instance, can select or combine as he responds. And while the contemporary moment demonstrates that there is a familiarity with strategies of multimodal reading in other contexts, ambient and environmental sound remain habitually treated as irrelevant and unrelated to the act of reading works of graphical text. Here, the various studies on *Irrelevant Sound Effect* and its effect on concentration levels, memory, and learning, demonstrate the negativity with which ambient sound is often treated within the context of the act of reading (see: Savage et al. "Working Memory", Beaman "The Irrelevant Sound Phenomenon Revisited", and Perham & Vizard "Can Preference for Background Music Mediate the Irrelevant Sound Effect?"). Therefore, the production of an experimental situation whereupon a reader may be given the opportunity to respond to recorded, as well as ambient and environmental sounds as an active and equal part of the text event, relies upon both the treatment of ambient sound as a resource within a work, and on the framing of this resource as *relevant* to the reader using other modes within the ensemble[7]. Once a process of frame awareness occurs, the ambient noises taking place during the act of reading have the potential to be seen in a more positive light, generating a creative reading-listening practice, and offering new possibilities for the creation of new works.

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[7] Here, I am using the term 'relevant' in line with Arvidson's model, which will be described in detail later in the chapter.

This possibility can be approached in the first instance through the framework of Multimodal Social Semiotics. Although Cage has insisted on the model of a 'conversation' rather than 'communication' in the creation of a work, in the context of Multimodal Social Semiotics, the production of an experiment wherein an unknown outcome takes place is still considered a communicative act. Cage is the *rhetor, designer,* and *producer* who presents a complex *message* to an audience – even if this *message* is an invitation to engage with non-intentional occurrences or processes. Here, Gunter Kress offers the following description to illustrate the foundational relationship between two parties with respect to the process of communication. And as suggested above, it is also useful to note at this point that the rhetor, designer, and producer to which Kress refers are very often the same person.

> Communication is joint and reciprocal *work.* The sign-complex which is sketched by the *rhetor* on the basis of a preceding analysis is elaborated in detail by the *designer* and is then given material form by a *producer.* The sign-complex is presented to the audience as a (complex) *message.* Ideally, members of the audience shape the *message* as a *prompt* and each transforms that *prompt* into the new inner sign in the light of *interest* and the semiotic (and wider social, cultural, aesthetic and ethical) resources which each brings to an interaction.

> …The *rhetor* has achieved nothing if members of the audience do not attend to and engage with the *message* meant as a *prompt* for them. Communication rests on both phases: the initial work of the *rhetor* and the subsequent engagement and interpretative work of the audience, seen as interpreters (Kress 44).

Building on this semiotic model, Carey Jewitt et al. note how the aim of Social Semiotics is to 'understand the social dimensions of meaning, its production, interpretation,

circulation as well as its implications' (Jewitt et al. 58). It sets out to reveal how processes of meaning making (semiosis) shape individuals and societies, based on the assumption that meanings derive from social action and interaction using semiotic resources as tools – here, there is a particular emphasis on the agency of the sign-maker, and the agency of the audience, seen as interpreters. Pertinent to the presented research practice, and with respect to multimodality, in the past twenty years the leading scholars of social semiotics have questioned the linguistic assumption that speech – and by extension written language – is always the dominant mode of communication. As a result, focus has shifted onto the social and cultural dimensions of other, sometimes socially and culturally peripheral (or at least undocumented) means by which interaction occurs between an agency and an audience within a variety of circumstances.

Taking the experience of using the average website as an initial example of the multiplicity of elements involved in shaping interpretive meaning, it is to be expected that a web user when visiting websites may encounter a combination of graphical text, images, moving images, music, sound effects, as well as further aspects such as layout, font, bolding, colour etc. in titles, headings, text bodies, and menu bars. Other variables such as choice of browser, choice of operating system, as well as the device being used to access the website will also alter the makeup of the appearance and overall experience. The combination of all of these components gives the web page its multimodality – it is made up of different modes which are experienced together. The user may also encounter personalised advertisements, as images, graphical text, sounds, moving images, or animation, that may be entirely unrelated to the content of the webpage itself, but are nonetheless part of the experience of browsing. Each mode functions as part of an overall impression, and the combinations and juxtapositions that form between these modes have

the potential to communicate something greater than the sum of their parts, depending on how they are, or are not, processed or interpreted. This processing or interpretative model can also be viewed as one that is dynamic, with the relationship between modes changing continually. Add to this the fact that web users often navigate through websites using non-linear paths, and there is the potential for a wealth of resources to be encountered in a number of different ways.

Kress and van Leeuwen note that prior to the introduction of mass media, magazines, comic books, cinema, and the internet etc., in Western culture there had been a distinct preference for monomodality. They note how the most highly-valued genres of writing (literary novels, academic treatises, official documents etc.) were published and distributed without illustration, and had graphically uniform, dense pages of graphical text. Paintings, similarly, used the same support (canvas) and the same medium (oils), while during concert performances, musicians dressed identically, with only soloists and conductors allowed to exercise the slight freedom of bodily expression[8]. Kress and van Leeuwen advance this point, stating that, as a result, 'the specialised theoretical and critical disciplines which developed to speak of these arts became equally monomodal: one language to speak about language (linguistics), another to speak about art (art history), yet another to speak about music (musicology)' (Kress and van Leeuwen 1). And despite the shift away from monomodality through new formal models, interdisciplinarity, and intermediality in artistic practices during the 20th and early 21st century, and despite the multimodal environments in which graphical text is encountered on digital devices during the everyday, monomodality in the form of printed text remains the dominant lens through which both poetry and prose practices are seen to function, and

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[8] Paraphrased from *Multimodal Discourse* (Kress & van Leeuwen 1).

the focal point through which graphical text is engaged during the act of reading in most works of literature.

As the practice enquiry of this thesis has found a resonance with the interpretation that Cage included ambient and environmental sound as a musical element in his written kōan stories, and as this research intends to build upon this interpretation, a consideration of ambient sound as a *mode* in its own right is necessary to move the aims of this study forward. This consideration is practical, especially in response to presumptions that an agency cannot 'produce' ambient sound themselves, in the same way as they would produce speech, writing, sketches etc. – at least on a superficial level. The approach relies on the choice and selection of resources, of decision-making based on interest, social and cultural factors, and of response at the point of audience engagement, rather than of certain modes being more expressive than others. The selection of happenstance ambient sound as a semiotic resource has many similarities, for example, with the selection of pigment in paint or other materials in visual art – here colour is not produced by the agency, but rather used as a resource which can vary in its semantic, social, cultural, aesthetic and ethical uses and connotations depending on the interest of the sign-maker and the interest of the audience. Brandon LaBelle writes of the 'philosophical and methodological split' (Labelle 24) between Cage's approach toward sound-as-material, and Pierre Schaeffer's use of everyday sounds in the construction of his 'Musique Concrète' works. Where Cage emphasises the source of sound itself and a sensitivity to listen to these sounds, Schaeffer employs techniques in order to abstract sounds from their original source, 'beyond or in spite of material reference' (LaBelle 25). In this example, the resource of sound and noise has similarities for both Cage and Schaeffer, but the use

of these resources differs greatly according to each artist's respective interest and the 'message' they each wish to communicate.

In producing situations where an audience can respond to the available resources that are presented (or simply present), Cage's attempts to communicate his interest to his audience occur just as any other sign-maker's would – based on his position in the world and on the ideas he wished to represent. Cage wished to convey the existence of an available, often ignored resource, as a form of music. Building on the interest of the sign-maker, it is here where the idea of 'representation' becomes pertinent – how the message is shaped as a prompt for the production of an inner sign in the audience, as well as the surprising degree of flexibility that is afforded at the interpretation stage when multiple or indeterminate possibilities are available. Gunter Kress, in the following passage, cites a personal and elucidating example. This long description is useful to illustrate the process itself, and will be adapted thereafter to outline Cage's approach toward the 'representation' and inclusion of ambient and environmental sounds within his practice. Kress writes:

> A three-year-old sitting on his father's lap (mine as it happened), draws a series of circles, seven to be exact. At the end he says: 'This is a car' … How is, or could this be 'a car'? While drawing, he had said 'Here's a wheel … Here's another wheel … That's a funny wheel … This is a car.' For him the criterial feature of *car* was its 'wheel-ness'; it had (many) wheels. Two steps are involved in the making of this sign. At the first step, 'wheels' the *signified*, are represented by circles, as apt *signifiers*. At the second step, the signified 'car' is represented by the apt *signifier* of '(arrangement of) seven circles'. …

To see how or why wheels could be the criterial feature for 'car', we have to adopt the point of view, literally, physiologically, psychologically, culturally, semiotically, of the three-year-old. If we imagine him looking at the family car (a 1982 VW Golf, with predominantly bulky wheels, especially at the eye-level of a three-year-old) we might conclude that the sign-maker's position in the world, literally, physically, but also psychically, affectively, might well lead him to see 'car' in that way. His *interest* arises out of his (physical, affective, cultural, social) position in the world at that moment, vis-à-vis the object to be represented. His sign reflects his 'position'. Generalizing, we can say the *interest* at the moment of sign-making arises out of the sign-maker's position in the world; it shapes *attention*; that *frames* a part of the world and acts as a *principle for the selection of apt signifiers.*

Clearly, the child's *interest* is partial: there is more to a car than wheels, even for a three-year-old. Theoretically, we have a choice: we can trust this as an instance of childish representation and dismiss it; or we can take it as a central feature about representation in all instances. That is the route I have taken: all representation is always partial. What the sign-maker takes as *criterial* determines what she or he will represent about that entity (Kress 70).

In this last paragraph, Kress strikes upon the importance of the 'interpretative work' involved in his role as the audience/interpreter for his son's drawing. And, a significant part of the interpretative work in this instance is the realisation that all representation is always partial. To some (perhaps most) audiences, the representation in the above example may not be clear at first sight, especially as the message formed by the boy is being conveyed using unconventional signifiers. The same can be true of Cage's work with regard to the criterial features he considers to be the musical element. In order to

demonstrate Kress's remarks in a Cagean context more fully, the above example can be re-contextualised:

For example, if we refer to the 15 page original blank score version of Cage's work, segmented in three movements, and marked '"1/2" = 1 sec"' (Daniels and Arns 89) to denote the time signature[9], for Cage, the criterial feature of 'music' is that it includes all sound, and sound is something that is constant, something that will take place even in apparent silence. 'Silence' is 'music' because silence will always contain sound, and all sound is music to Cage. As with Kress's example, two steps are involved in the making of Cage's sign. At the first step, 'silence' the *signified*, is represented by an absence of musical notation, as apt *signifiers*. At the second step, the signified 'music' is represented by the apt *signifier* of '(arrangement of) several silences'.

And to see how or why silence could be the criterial feature for 'music', one can adopt the point of view, literally, physiologically, psychologically, culturally, semiotically, of John Cage. One might start by recalling Cage's stories of sitting inside the anechoic chamber, listening to the low thrum of his blood moving through his body and the hiss of his nerve cells communicating (and possibly, as Douglas Kahn suggests, the third sound of his discursive thoughts asking the questions, 'Hmmm, wonder what that low-pitched sound is? What's that high-pitched sound?' (Kahn 190), and it may be concluded that the sign-maker's position in the world, literally, physically, but also psychically, affectively, could lead him to see 'silence' and 'music' in this way. Cage's interest arises out of his (physical, affective, cultural, social) position in the world at that moment, vis-à-vis the

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[9] This format is based on David Tudor's first reconstruction of the piece following the loss of the original work.

object to be represented. Cage's sign reflects his 'position'. Cage's interest at the moment of sign-making arises out of his position in the world – it shapes attention, it frames a part of the world and acts as a principle for the selection of apt signifiers.

The example also demonstrates why *4'33"* had originally divided opinion. In *No Such Thing as Silence: John Cage's 4'33"* (2010) Kyle Gann explores the argument of how some believed Cage to be a charlatan, 'lazy' and that *4'33"* was a hoax (see: Gann 14-18). If a critic did not, or was unable to adopt the point-of-view of Cage, they would ignore and dismiss the rigour with which the idea was conceived and produced, and they would choose instead to judge the work with an expectation of 'music' in mind, while witnessing with disappointment or anger, the 'music' made by Cage. Their emphasis would be on an interpretation using existing models, frameworks and impressions – for example, melody or harmony as the criterial feature of music. This is not to suggest that their view may be 'wrong', but simply that the communicative act has failed. Here, the use of the Multimodal Social Semiotic framework has been raised in this discussion not in an attempt to extract the 'meaning' from Cage's work, or to position it within a rigid semiotic system, but rather to highlight the processes of these communicative structures, and to remark on the availability of alternative interpretations to experiential events based on one's position in the world – it is the flexibility and the potential for reorganisation of what one may find 'meaningful' that is of interest to this study.

To develop the comparison of the above examples further, it is useful to note that in Kress's example the representation by the sign maker has also been communicated multimodally. The representation contains the mode of image through illustration, and the mode of speech – at the end of the creative process, as well as during it. It would also

be assumed that the three-year-old boy would have altered his facial expressions, his body language (through gesture), as well as the intonation in his speech. This combination provides an ensemble of modes representative of the sign maker's world view at that point in time. The two framed modes of the account however – speech and image – are both necessary for the representation to be communicated. If one or the other were removed, the sign maker's representation of 'car' would be incomplete, rather than partial, and the interpretative work by his father, would be more likely to fail.

In the performance of *4'33"* itself, the representation of Cage-as-sign-maker's world view is also communicated multimodally. The ensemble of modes consists of: the mode of gesture (the performer sitting or standing beside a resting instrument) to signal, according to social and cultural conventions that a performance is about to take place, and the mode of ambient sound present in the room. Without the performative gesture and duration of *4'33",* or without the ambient sound itself, Cage's representation of 'music' would be incomplete, rather than partial; and the message – shaped via a series of prompts into an inner sign by the audience – would likewise be unsuccessful. Under this treatment, ambient sound, as an available resource that is present everywhere at all times, but one that is most of the time socially and culturally peripheral, is dependent on the selection of other, surrounding modes in order to 'frame' the resource as relevant to the interest of the audience.

Framing

Cage's representation of the mode of music in *4'33"* relies on a re-framing of the social and cultural conventions of what we consider as music, emphasising audience response within the reorganisation being put forward. Here, Cage presents a multimodal ensemble

which functions as a comment upon, and a paradigm shift within the mode of music – an instance of frame awareness. Andrew Epstein notes how *4'33"* compels audiences 'to attend to ambient noises of daily experience and to recognise the "music" that surrounds us at each moment' (Epstein 8). It is because of framing – through duration, and through performative gesture – that the audience at first responds as they would do habitually, were they about to hear any other musical composition – their expectation of the mode of 'music' guides them to listen, and it frames the sounds which may go otherwise unnoticed.

Speaking on a more general semiotic level, frames and the means of framing are essential to meaning-making (and the processing of dynamic systems) in all modes. The frame provides and marks the spatial and/or temporal extension and limits of a text or other semiotic entity – it names the formal semiotic resources that separate one semiotic entity from its environment, its 'pre-frame' (in the case of temporal events), or from other semiotic entities. Drawing on Goffman and Bateson, Kress writes of how the frame provides '*unity, relation* and *coherence* to what is *framed,* for all elements inside the *frame'* (Kress 149).

Goffman writes of how activities are framed in particular ways in order to provide a main focus. However, occurring simultaneously in the same locale are other activities which are 'segregated from what officially dominates, and will be treated, when treated at all, as something apart' (Goffman 201). As will be discussed in the following sections, this comment resonates with Arvidson's model of the 'Sphere of Attention', where circumstances taking place within the sphere may or may not allow for marginal activities to undergo transformations in order to become contextual or thematic, or whether they

remain in the margin and are organised as related but not relevant (residing in the 'halo') or not related and irrelevant (residing in the 'horizon'[10]). Goffman writes of activities being selected as a main 'story line' of attention, while dissattended events occur along simultaneous 'channels' and 'flows' which may interrupt the main activity, but will be in most circumstances considered 'other' to the frame in focus: 'During the occurrence of any activity framed in a particular way one is likely to find another flow of other activity that is systematically disattended and treated as out of frame, something not to be given any concern or attention' (Goffman 210). Goffman goes on to state that these other events are themselves framed to be disattended, or to be considered irrelevant to the main action.

Kress comments on how treating speech and writing as modes is to accept that modes consist of bundles of diverse features. Writing, he states, (in English, as in many other languages), 'has words, clauses, sentences, organized through *grammar* and *syntax*. It has graphical resources such as font, size, bolding, spacing, colour' (Kress 79). These things shape the orthography itself – marks on the page/screen that the intended readers recognise as letters from a written alphabet. Kress continues to explain how '[t]o *frame* its units, [writing] has syntactic, textual and social-semiotic resources (e.g. *sentence, paragraph, textual block, genre*). In *writing* the *frames* use graphic resources such as *punctuation marks,* visual means such as space between words or around paragraphs and increasingly, "blocks" of writing, often in different colours, on surfaces such as *pages* or *screens* or others' (Kress 79). These resources have specific forms in different cultures.

Especially at the processing or interpretative stage when dealing with modes and their frames, Kress, using an example in speech this time, goes on to outline how we can ask

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[10] Both terms 'halo' and 'horizon' will be defined and discussed later in the chapter.

questions such as, "'What features are *inside* and which are *outside* a mode and why?'" (Kress 86). And, giving a more specific example, Kress asks, "'why is facial expression not part of *speech*?'" (Kress 86). In using frames, and holding onto expectations for certain frames, it may be concluded that speech is framed as a mode to include everything 'inside the barrier of lips and nose' as well as everything that 'makes use of the physical *material of sound*' (Kress 86). A 'sarcastic curl of the lips', Kress notes during this instance, is not within the frame of speech. When the features of this expression are assessed, 'the first criterion is indecisive on the matter [that of the sarcastic curl of the lips being inside the barrier of the lips and nose], the second makes it clear: a curl of the lip is not sound' (Kress 86-87). This instance provides an example of an occurrence when a monomodal interpretation can differ greatly from an interpretation that makes use of all of the available multimodal resources.

Although this analysis may make framing appear like a rigid system, frames should rather be considered relatively fluid, dependent on a variety of social and cultural factors, and continually subject to small changes, as well as dramatic shifts. Goffman describes how shifts in frames can occur by design as well as by accident, and that the shifting of frames can be an exploitative action in order to change organisational premises for certain activities:

> In the interests of satire or humor, subordinate channels can themselves become the focus of attention, part of the main story line … These facts should alert us to the expectation that framing does not so much introduce restrictions on what can be meaningful as it does open up variability. Differently put, persons seem to have a very fundamental capacity to accept changes in organizational premises which, once made, render a whole strip of activity different from what it is modelled on

and yet somehow meaningful, in the sense that these systematic differences can be corrected for and kept from disorganizing perception, while at the same time involvement in the story line is maintained (Goffman 237-238).

Social and cultural factors 'fix' these frames in place, providing a set of expectations when both monomodal and multimodal forms of communication and representation are engaged with. Kress states that:

> [O]nce a particular means of 'fixing meaning' has become habitual – whether in *image* and formal accounts of 'proportions' as in the *genre* of pie charts, or in *writing* as actions and events in *genres* such as *diary* or *recount* – it is likely that the world represented through these *modes* and *genres* comes, ever more, to be seen like this 'naturally'. *Modal fixing* provides the material from which text, ontology and 'knowledge' can be shaped via framings of different kinds; the frame of *genre* being one such. That then provides a 'take' on the world which comes to organize and shape our encounters and engagements with that world (Kress 95).

4'33" represents an apt example of a promotion of frame awareness through a strategy of disjunction, re-organising and destabilising how the listener can think of the mode of music. Similarly, if the activities of Erik Satie and Marcel Duchamp – two major influences on Cage's work – are examined, analogous approaches in their respective artistic practices can be observed, both of which rely on a disjunctive re-framing of social and cultural norms on a conceptual and formal level: Satie's *musique d'ameublement*, which set out to include the din of the room, sought to re-frame the convention that music should dominate thematic attention during a performance. The humorous episode of Satie shouting at his audience to ignore his music as it was being performed emphasises this point well, illustrating how sometimes re-organising premises are not always

successful[11]. In this anecdote, the attending audience had been so accustomed – through dominant social and cultural expectations – into treating music as thematic or central, and reacting conventionally upon perceiving it, that it seemed completely unnatural for them to do anything other than to stop their conversations and listen.

Duchamp's *Fountain* (1917) – exhibited under the guise of R. Mutt – re-framed what an audience had once thought of as art, through the placement of an everyday object (a urinal) within the frame of a gallery exhibition. As Ades, Cox and Hopkins note, 'Mr Mutt did three things: he chose the object, gave it a new title (by calling it *Fountain* it becomes a type of decorative, monumental object, and moreover, the direction of flow is theoretically reversed in that a fountain projects, while a urinal receives, liquid) and a new point of view … by tilting it on to its back. The complete alteration of its circumstances – removal of its utilitarian function – gives it, as the editorial says, 'a new thought', a new identity' (Ades et al. 128). One could also say a number of new frames.

In works such as *4'33"*, and within the Cage/Cunningham collaborations, the use of experimental conditions in order to re-frame the habitual receiving of aesthetic experience can be seen as a productive means of making available new perceptual responses for an audience. With regard to the act of reading, if the suggestions in the introductory chapter are to be developed, a similar process of frame awareness must take place within the context of literature, wherein the reader may become attentive to the environmental sounds that occur during the act of reading, and may begin to treat the activity of reading as a multimodal ensemble within space and time, inclusive of both the visual element

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[11] The story, which is also retold by Cage, took place at the Gallery Barbazanges, where Satie 'invited guests to "walk about, eat, drink" though they remained seated. Milhaud recounts: 'It was no use Satie shouting "Talk, for heaven's sake! Move around! Don't Listen!" They kept quiet. They Listened. The whole thing went wrong' (Satie and Volta 177).

within the mode of graphical text as well as the aural element within the mode of ambient sound.

The following sections will build upon the observations that have been made through the discourse of Multimodal Social Semiotics and Frame Analysis with respect to Cagean experimentalism and the extended context of the act of reading that this research is seeking to explore. The discussion will consider the experiential event of the act of reading as it occurs in space and time, when the encounter with textual strategies can be thought of in terms of their temporal characteristics and effects, and how the 'response ability' of the reader can be considered within the wider terms of attentional processes. These considerations will converge with the discussion of P. Sven Arvidson's model of the 'Sphere of Attention'. Here, the simultaneity of attending to both sound and graphical text within the same space and time – and the chance poetics that manifests itself as a result of the framed experimental conditions – can be explained through the dynamic tension of transformations within the sphere's simultaneous thematic, contextual, and marginal processes. In order to bridge the current position of the discussion toward Arvidson's model, a consideration of the temporal properties of text will now be examined.

The Encounter with Text

The above observations on multimodal reading practices make it clear that there is no single approach towards the act of reading. And although Cage's 'purposeless' model of reading a small-town newspaper now requires updating for the contemporary moment, the strategy of 'jumping here and there' has arguably only developed in line with technology and with the use of digital devices, albeit with a continued emphasis on the

visual. Here, Kress refers to the changed relationship of 'reading paths' on screen compared to reading on the page, explaining how the screen has been naturalised as a 'spatially organized site of display', and how the mode of writing is organised on websites by 'the demands of the spatial logic' (Kress 170), occurring alongside the perception of other modes. The type of disjunctive reading path that forms under these circumstances is now habitual for those who have grown up with this type of technology, demonstrating effectively the possibilities for new forms of reading to develop according to the use of available resources. However, it is the second aspect to which Cage refers, that of 'responding at the same time to the environmental events and sounds' that remains the focus of this study – of taking into account the mode of ambient sound in particular, and responding to the resulting chance poetics that occur between the visual element of graphical text, and the aural element of sound.

In the example model of the newspaper, Cage's interest in listening to the sounds around him is a significant aspect in the communicative structure, shaping his role as an interpreter during the experience of reading. The journalists and editors at the printing press have made no conscious effort to create a message as a prompt for the inclusion of the mode of ambient sound in their publications, yet Cage's interest guides him to listen to ambient sound and to believe it as an equal part of the experience as he reads what he considers to be pieces of odd and inconsequential information. Where most attending subjects would ignore the mode of ambient sound, or rather, they would attempt to frame the graphical text alone within thematic attention, Cage listens concurrently. The complete ensemble that takes place in his mind, the encounter with the text, is an assemblage of the information printed on the pages in front of him, and the real life events, particularly sound, occurring around him. For Cage, the 'purposeless' aspect of reading

refers both to the inconsequence or insignificance of the fragmentary textual materials being communicated, as well as to the consideration that the attending reader's engagement with the text-object is de-centralised with regard to the experiential event – it is not a negative occurrence for the experience if the act of reading is interrupted by sound, or if sound temporarily becomes the main concern or focus for the reader – replacing the graphical text as thematic. Instead, under these circumstances, the act of reading follows the logic of a durational event.

Reader-Response theory has previously sought to deal with the intangible area of interaction between text and reader, and with what happens during the process of interaction. Emerging in the 1960s partly as a reaction to the functionalist and fixed textual interpretative models promoted by New Criticism, these audience-centred ideas coincided with a time when Cage and Cunningham were active in their counter-cultural activities. Most notably for the present study it is within Reader-Response criticism that one can find existing writings that refer to the temporality of the act of reading, and the thought that literature (and by extension all text) can be considered as an event, experience, or encounter. Wolfgang Iser's contribution to this field is pertinent here. His work centred on ideas of readers as co-creators, 'supplying that portion of [text] which is not written but only implied', and filling in areas of indeterminacy in their own ways (Tompkins xv). Iser notes how under these terms, 'text and reader thus merge into a single situation, the division between subject and object no longer applies, and it therefore follows that meaning is no longer an object to be defined, but is an effect to be experienced' (Iser 9-10). What this comment signals with regard to the communication processes discussed above, is that graphical text, as an apt signifier for the sign-maker's interest, is not a static fixture, but a process that unfolds as the act of reading takes place.

Furthermore – to apply Goffman's comments – it is a framed process, and one of many processes taking place concurrently within the same locale.

To speak of the *effect* of a text – and specifically to consider the effect as a response to a text that can change according to each individual and upon each reading – is an approach that allows for and invites the reader to form alternative strategies for processing and interpretation. Parallels can be seen here within the development of conceptual poetry practices. Craig Dworkin notes how the appropriational strategies in the works discussed in his monograph, *Reading the Illegible* (2003) – and within the presentation of Dworkin's own argument – rely on certain paragrammatic 'misreadings' at the point of reader response. Dworkin calls upon Leon Roudiez's definition of the paragrammatic reading as 'any reading that challenges the normative referential grammar of a text by forming "networks of signification not accessible through conventional reading habits"' (Dworkin, *Reading* xx). Elsewhere, Dworkin writes of 'paragrammatic *détournement'* (Dworkin, *Reading* 130), and the 'forward and backward skimming and skipping, the waxing and waning of attention, the assumption and guesswork of unread or half-read words' that is actually to some extent present in conventional reading practices, though not commonly framed for discussion (Dworkin, *Reading* 108).

In transferring the emphasis from the text-object onto the text event, a Cagean reading practice emerges as an approach or strategy for the engagement of graphical text within a space and time, extending beyond its role as an interpretative habit exclusive to Cage as an individual. This practice can be characterised by a sensitivity to all occurrences within the duration of the reading event, a consideration of all available modes – including ambient sound – as resources, as well as a participatory attentive response towards the happenstance events which occur between text and sound. This participation allows for

the possibility for an observation of a multimodal chance poetics to take place. And just as *4'33"* developed from an interpretive model (Cage's interest in all sound as music) into a practice of attentive listening that can be adopted and extended by others, a Cagean reading practice, with a similar emphasis on response, can also offer an alternative 'reading path' for those open to the alternative resources that are available during the reading event.

In the transcribed versions of Cage's kōan texts, the process of frame awareness does not occur as successfully as in *4'33"*, with Cage instead relying on textual instruction in order to convey the strategy for interpretation. Here, his instructions can be easily ignored due to the persistence of the existing conventions that have determined normative engagements with graphical text. In the original text of *Indeterminacy* however, when Cage read his stories aloud within a temporal framework and a performance space – allowing one minute for each story, regardless of their textual length, and with accompaniment from *Concert for Piano and Orchestra* (1958) and electronic tracks from *Fontana Mix* (1958) – the included unassimilated noises were 'allowed to come between the speaker and the listener like sounds of traffic through an open window' (Yates 98-99). Framed as a performance, the effects of this experience are immediate and direct, with the listener – as a sphere of attention – undergoing dynamic and radical transformations as the sounds, music, and voice interact in unexpected ways through the principles of a chance poetics.

An additional point can be made here with regard to Cage's employment of indeterminate, sometimes illogical or inconsequential textual strategies *within* his writings, and the effect this produces under the terms of a temporal or durational situation. The kōan texts

represent short segments of life writing and recounted anecdotes, which offer humorous, pithy, and insignificant pieces of information to the reader of *Silence: Lectures and Writings*. Examples include:

> One Sunday morning, Mother said to Dad, "Let's go to church." Dad said, "O.K." When they drove up in front, Dad showed no sign of getting out of the car. Mother said, "Aren't you coming in?" Dad said, "No, I'll wait for you here" (Cage, *Silence* 85).

and

> One day I went to the dentist. Over the radio they said it was the hottest day of the year. However, I was wearing a jacket, because going to a doctor has always struck me as a somewhat formal occasion. In the midst of his work, Dr. Heyman stopped and said, "Why don't you take your jacket off?" I said, "I have a hole in my shirt and that's why I have my jacket on." He said, "Well, I have a hole in my sock, and, if you like, I'll take my shoes off." (Cage, *Silence* 95)

The lack of urgency, the off-beat logic, the incongruous events, and the confusing and/or dissatisfying conclusions that make up the collection of these writings, point back to Cage's interest in presenting a conversation and a process rather than a fixed message or object of communication. It is the confrontation between logical analysis and illogical text, and the play between voice and sound as they occur in space and time – and the responses they produce – that is the interest to be conveyed, just as it is the aim in the transcribed version of the stories to interpenetrate the collection of larger essays in the written volume. Here, Stanley Fish's assertion of text as event, and his focus on a sentence-by-sentence function within a work – particularly when dealing with indeterminate sentences – applies directly to Cage's kōan texts, as well as to works such as *Empty Words* (1979) when logical sense and the referential function of language is

replaced by the soundings of words and syllables. Fish's approach is in some respects an extension of Iser's, although his focus addresses the moment-by-moment process of reading, centring on the 'decisions, revisions, anticipations, reversals, and recoveries that the reader performs as he negotiates the text sentence by sentence and phrase by phrase' (Tompkins xvi). Fish writes of how texts that, either through contradiction or unconventional syntax don't seem to 'mean' anything, place an emphasis on the temporal journey that the reader undertakes as they read, and he discerns the developing cognitive responses of the reader, effectively guided by instructional text on the page. Commenting on the negative assertion in a line of *Paradise Lost* – 'Nor did they not perceive the evil plight (I, 335)' (Fish 72) – Fish writes:

> [T]he experience [of reading] is a temporal one, and in the course of it the two negatives combine, not to produce an affirmative, but to prevent the reader from making the simple (declarative) sense which would be the goal of logical analysis. To clean the line up is to take away from it its most predominant and important effect – the suspension of the reader between the alternatives its syntax momentarily offers (Fish 73).

In terms of the wider argument that this commentary seeks to put forward, and in relation to the aim of producing a new formal model for the experience of reading – one where the attentional activity and reader response is open to a multimodal processing of the chance poetics that occur between graphical text and ambient sound – the temporal hesitancy described here can be seen to provide another means by which the function of conventional graphical text becomes destabilised within the reading event, widening the embodied focus, rather than narrowing it. As will be discussed in the following chapter, fragmentation, narrative indeterminacy, and spatial indeterminacy within the text of the

research practice of *64'53"; or, World of Storms* have been used as an additional means of promoting frame awareness, and encouraging radical transformations within the attending subject.

The Act of Reading and P. Sven Arvidson's Sphere of Attention

P. Sven Arvidson's interpretation of Aron Gurwitsch's phenomenological enquiry of attention translates the principles of Gurwitsch's 'Field of Consciousness' into the more expansive and dynamic model of the 'Sphere of Attention' (Figure 1.1). The sphere is a highly pertinent model to reference when speaking about the perceptual processes that take place during processes of frame awareness and in the recognition of the availability of a chance poetics that can occur between graphical text and ambient sound.

(Figure 1.1: *The Sphere of Attention[12]*)

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[12] (see: Arvidson 10)

A great deal of substance within Cage's work is tied to the idea of attention. Cage writes of 'New Music: new listening. Not an attempt to understand something that is being said … just an *attention* to the activity of sounds' (Cage, *Silence* 10, italics added). It is the attention to the unnoticed-yet-present sound that guides Cage's listening process in a variety of circumstances, and it is through attending to aural environments in ways that 'let sounds be themselves' (Cage, *Silence* 10) that enables Cage to respond through a new mode of perception. For Cage, this particular process of attending is the central feature in any engagement with art (or an engagement with life in general), and one that can be seen to be dynamic.

Through the use of an experimental method, Cage's compositions and writings seek to provide systems, or occasions that encourage anti-habitual attentional transformations in his audience: the aim is to give his audience the freedom to experience new attentional shifts, rather than produce work that has been composed according to taste or choice, and which would direct the attending subject in a much narrower, crafted, and familiar sense. Likewise, the simultaneous presence of autonomous aural and visual events staged within the Merce Cunningham Dance Company created a de-centralised approach to the focus on stage, allowing attending audience members to select their own interest from the offered arena. The participation from an audience to process what is seen and heard is therefore one that allows individuals in the audience, as embodied spheres of attention, to be responsive, dynamic, creative, and expansive in nature, rather than focused in a specific direction. It is towards these ends that the altering of perceptions becomes a possibility.

With reference to the above diagram, Arvidson describes the sphere as follows:

The three dimensions are theme, thematic context, and margin. Each is deep, not flat, and each names a function or process involved in human attending. Content in the thematic context can be more relevant (near) or less relevant (remote) to the theme. Content in the margin can be related to the theme (halo) but not relevant to it, or not related (horizon). The attending subject is the sphere of attention in these three dimensions. The sphere of attention is not an object for a subject. We do not have a sphere of attention, we live it in these three dimensions all the time, even in the special case of reflection or self-attention (Arvidson 10).

Regarding attentional activity itself, Arvidson moves away from figure and ground metaphors, or analogies that suggest attentional focus functions like a 'spotlight'. The sphere by contrast provides a much more comprehensive working structure that is capable of carrying the weight of dynamic attentional shifts in consciousness between all sections of the sphere as they occur simultaneously. And for this study it can provide a register to speak about attention as a dynamic process with regard to the act of reading as it occurs in space and time. The definitions provided by Arvidson are also useful to state simply at this point:

The *theme* is the focus of attention. It presents more or less unitary content, centrally consolidated and segregated from the background. The theme is attended to within a thematic context and emerges from it. The presentation of content in the thematic *context* … is consciousness of whatever is materially relevant for the theme. In the *margin*, we are present peripherally to the streaming in attending, embodied existence, and the environing world, and these orders of existence are ever-present (Arvidson 1-2).

The sphere caters for the assessment of events that occur outside of the main focus, or theme of attention, and positions them within precise terminology, distinguishing aptly between contextual activity and marginal activity, and with regard to relevance and irrelevance. The sphere is a flexible model in this sense, capable of handling the dynamic nature of attentional processes during the act of reading as they progress through space and time. Here, the notion of being 'present peripherally' to the environing world is of particular interest, especially when positioned within the context of the above discussion on Cage's 'purposeless' strategy of reading.

While Arvidson's primary aim has been to highlight how phenomenology and psychology can learn from each other's investigations – if only they spoke the same language with regard to the terms of attention and attending – as a model, the sphere of attention undoubtedly also has interesting implications for arts and humanities research and practice, as demonstrated through applications such as George Home-Cook's *Theatre and Aural Attention: Stretching Ourselves* (2015).

George Home-Cook's use of the sphere of attention model helps provide an investigation into aural attention during performances of theatre and radio drama. Home-Cook posits that attending within the theatre, and specifically attending to sound within the theatre, represents an embodied act or practice for the audience member. His enquiry uses phenomenological accounts as a working method in order to explore the hypothesis that, 'listening is, in every sense, an act: listening is not only something that we do, but is inherently theatrical. As a specialised mode of attention, listening both manipulates and is manipulated by the phenomenon of sound, in a dynamic dance from and through which experience is born' (Home-Cook 9). Home-Cook also claims that, 'to be in sound is not

to be straightforwardly, spherically and passively 'immersed', but rather [it] consists of an ongoing, dynamic and intersensorial bodily engagement with the affordances of a given environment (Home-Cook 3).

Much of the enquiry of *Stretching Ourselves* therefore centres on exploding the myth of a dichotomy between listening and hearing, as well as exploring the areas between designed sound and distracting noise during the process of attending at the point of audience engagement. Here, Home-Cook explores the departure points between presented material and the perception of material as a varying and dynamic engagement with a work, which is of relevance to the new context of the act of reading put forward in this study. He writes of the distinctions between intended and attended theatrical sound, arguing that 'perception, like theatre, is always inherently unfinished, ephemeral and in process' (Home-Cook 7).

These concerns highlight the similar method in Home-Cook's treatment of 'response ability' that has been discussed above with respect to Cage. It can also be observed that the dynamic practice of engaging in the act of reading, while concurrently listening, can draw much from what Home-Cook writes about audience perceptions within the theatre in this respect. Similarities can be observed through Home-Cook's citing of the emergence of theatrical *Reception Studies* and *Spectator Studies*, albeit through his ultimate rejection of their strictly semiotic approach, and their focus on 'how "meaning", whether social, cultural, dramaturgical or otherwise, is manifestly produced by and within theatrical performance' (Home-Cook 12) – a standpoint that aligns with the earlier use of the Multimodal Social Semiotic framework in this study as a means of conveying the

presentation of a process, and the potential for reframing within such processes, rather than a sequencing of how a defined meaning is transmitted.

Another pertinent aspect is that in attending to theatre, and in attending to sound within the theatre, Home-Cook considers these actions as a practice in its own right. Here Home-Cook claims that:

> The practice of attending (theatre), like acting, also provides us with knowledge
> *in* as well as of performance. Generally speaking, practice-based research tends to
> be processual in nature: that is, it tends to allow the topic, theme or aims of any
> given project to *emerge* through and *in* practice. Similarly, far from beginning my
> research with a series of well-chosen case studies, which might have enabled me
> to 'prove', a priori, a pre-given theory concerning theatre and aural attention, I
> have sought, instead, to investigate what arises from and in the process of attending
> theatre (Home-Cook 15).

Home-Cook's work as a practitioner is not one that sees him produce new sound-focused theatre pieces for example, but rather it is through the documentation of the phenomenological account of his methodology that his practice is evidenced as a particular perception as it is experienced by an individual. This approach relates to Salomé Voegelin's comments on '[l]istening as an aesthetic practice' as a means of becoming 'designers of [one's] own environment' (Voegelin 12), as well as Daniela Cascella's approach to 'Writing Sound' – cited in the introduction – where similar strategies can be observed through the provision of a phenomenological account of writing-listening practices as responses to particular environments. This statement also resonates with the active, participatory role described above in a Cagean reading of a text.

Regarding this study's consideration of the act of reading, the claims set out in the introduction rest upon the fact that an engagement with a written text does not occur in a vacuum – sound is an ever present feature during all acts of reading graphical text. And while the sphere may engage more thematically with textual material when it is presented to the reader, other (sound) events are taking place within the same time and space, and are not only present within the material world, but are also present within the sphere, albeit marginally, often within the 'horizon'.

Central to attentional response during a Cagean practice of listening during the act of reading is the idea of 'transformations' in the Sphere. Arvidson identifies ten transformations within four broader types in his study: Contextual Shifts (consisting of 'Enlargement', 'Contraction', 'Elucidation', 'Obscuration', and 'Context Replacement'), Simple Thematic Shifts, Radical Thematic Shifts (consisting of 'Restructuring', 'Singling out', and 'Synthesis'), and Margin to Theme Capture. Generally speaking, although there is always thematic attention, contextual consciousness and marginal consciousness, the shape of the relationship between these areas in the sphere is essentially dynamic with regard to transformations – there is not a uniform manner in which the sphere transforms, and the shifts can occur within each of the sections as well as between them. Arvidson writes of the 'marvellously complex reorganisations' that take place in the sphere of attention, transformations that happen with 'incredible rapidity, usually easily and seamlessly' (Arvidson 54). Arvidson also states that there are certain organisational principles that apply to the theme which are distinct from those that apply to thematic context, and again those that apply to the margin. He explains that the terms such as 'thematic attention', 'contextual consciousness' and 'marginal consciousness' are 'generic ways of referring to how items or content in each dimension of the sphere are

processed' (Arvidson 57). He also emphasises the point that attentional transformations occur in all likelihood beyond the ten initial transformations outlined in the studied volume.

Although, both Gurwitsch and Arvidson suggest slightly different operations may be at work concerning how consciousness and attention function within imaginary processes, such as those encountered when the sphere is engaged in reading a novel, a poem, or a play for example (see: Zaner 377-380 and Arvidson 163), on the formal level that this study is most interested in, that which concerns the act of reading itself, rather than solely the content of a text, an application of the process of the sphere as a dynamic tension can still offer a useful distinction between a Cagean reading of a text and a standard method of reading that is based on conventional communicative function alone. For example, it could be observed that if an attending subject engages in the act of reading, this process suggests that initially the theme is the act of reading itself, although this theme may swiftly change and become a thematic context: i.e. the reader engages with the text and attends thematically to the fact that the reading of graphical text is about to occur, then, as the text is deciphered, the words and the semantics involved become thematic, while the material text and the act of reading itself becomes the context for the theme being attended.

As a process, the material text and the act of reading may then move to the margin (halo) within the subject as the information in the graphical text establishes its own set of theme and thematic contextual relationships, part of what Gurwitsch refers to as a 'quasi-world' (Zaner 378). But just as the environing world is an ever-present event in the margin of the sphere of attention in normal circumstances, the fact that what is being perceived

within the text occurs as a result of a particular act that is establishing the mode of perception during the act of reading, this perception is also something that exists as an awareness in the margin – one that may be considered at times related but not relevant. Even if the content of the text maintains the thematic and contextual attention of the reader, it is a convincing argument that it would be near impossible for the attending subject to lose *all* awareness that they are engaging with a text through the act of reading. This consideration raises the subject of how relations between marginal activity and the theme and context of the sphere are afforded by the attending subject during the act of reading.

On a formal level, engaging in the act of reading itself involves several transformations in the sphere, as outlined briefly above. In Arvidson's terms, the process may initially involve Singling Out as a radical thematic shift transformation, where the current theme is replaced by an aspect or constituent of the theme. Arvidson illustrates this process in the following example:

> Considering the two long rows of flowering impatiens in the garden, I can focus
> on the right row and make it my theme instead of the two rows as a whole. I can
> further single out the third impatiens plant in that row. Again, I can single out in
> thematic attention the new bloom on the left side of that particular plant. Each of
> these transformations, of course, could occur without my "willing it." In any case,
> we will see later that "willing it" simply means preparing the sphere of attention
> to allow the content to become thematic. What was a constituent (the right row) in
> the theme of the rows of impatiens has now become the theme itself. I stress that
> this attentional shift includes the replacement of one theme by another. That is, the
> new theme, the right row of plants, has a radically different appearance from

before (when it was just a constituent), and has radically different relation from before to the other row (Arvidson 74).

When a conventional book of prose is encountered, the graphical text initially represents a constitute of the theme (the theme being the book or screen itself), before a process of Singling Out occurs and the graphical text becomes thematic, and the act of reading in itself begins to reside in the context and perhaps eventually the margin (halo) of the sphere. The dynamic movements and transformations that occur within the sphere at this point happen through an engagement with the textual material in the quasi-world of the imagination, with the environing world and the act of reading remaining in the margin of the sphere and considered for most of the time, not related and irrelevant, and related and irrelevant, respectively.

Developing on from the initial comments made in the introductory chapter, when responding to the act of reading in the manner described as Cagean, this thesis stems from a standpoint that attentional activity operates within a formally different dynamic structure to that of habitual reading processes. This structure involves Singling Out, but also 'Synthesis' with respect to the activity of reading – the transformation of a theme into a constituent of a new theme, something that Arvidson refers to as a 'functional complement' of Singling Out. A Cagean reading would involve a process of Singling Out of the graphical text within a work, maybe even words within a text, but the engagement would not centre thematically on the text alone, instead it would remain de-centralised, frequently undergoing a process of Synthesis to return the attending subject, as a sphere of attention, to an awareness of the act of reading itself, as well as to the act of reading's relationship to the environing world.

The environing world and particularly the aural events within the environing world are central to this Cagean reading practice. Given that the environing world is usually an aspect that resides in the margin of the sphere of attention, and is most of the time considered irrelevant and not related to the theme, a responsive reading in a Cagean manner will take another of Arvidson's terms as a more central practice within the attentional process – that of 'Margin to Theme Capture' (or Margin to Theme Succession of Content), with a particular focus on the relevance that this activity is afforded by the attending subject. Arvidson uses the example of an aeroplane passing overhead as a typical example of Margin to Theme Capture. In this case, something irrelevant and unrelated to the current theme forces its way into the aural consciousness of the attending subject. Importantly, here the attending subject has the choice whether or not this new activity becomes a source for thematic attention. Arvidson writes:

> The margin in the sphere of attention is all that is co-present with the theme and thematic context, but is not materially relevant to them, not even as context. Anything could be added to the margin without affecting the unity by relevancy between theme and context. For example, as I watch the dog in the garden, in the context of the dog minding his boundaries, an airplane aurally appears on the scene, the gentle roar of the jet engines grows and then fades, and a whirling breeze shakes the hedge near the dog. As I am marginally conscious of the plane and the shaking hedge, which is to say, as they are presented as irrelevant to the thematic dog, their presence does not enter into the gestalt relation in the sphere of attention between the dog and his boundaries. Although the plane and the shaking hedge could become thematic themselves, this would take a substantial transformation in the sphere of attention (a margin to theme succession of content), so that the dog and its thematic context was replaced with new content and relations. In short, the gestalt-connection of unity by relevancy puts marginal content outside the focus

and its context, which is to say, marginal items are presented as peripheral to the theme, not relevant to it (Arvidson 7).

For Cage, the acceptance of this kind of activity, and the consequential thematic attention paid to the activity that moves from the margin into the theme, is perhaps the central aspect of the responsive practice which makes available the consequent possibility of the perception of a chance poetics that has been under discussion in this chapter. In an anecdote about one of Daisetz Suzuki's lectures, Cage uses a complementary example to the one above to illustrate the acceptance strategy of relevance that manifests as part of his general practice. Cage provides this example in his lecture on 'Composition as Process' which relates to his *Music of Changes* (1951). The lecture was originally performed with *Music of Changes* playing at corresponding passages in the text. The music was not superimposed over the text, but would be heard, 'only in the interruptions of the speech – which, like the lengths of the paragraphs themselves, were the result of chance operations' (Cage, *Silence* 18).

> That reminds me: Several years ago I was present at a lecture given by Dr. Daisetz Teitaro Suzuki. He spoke quietly when he spoke. Sometimes, as I was telling a friend yesterday evening, an airplane would pass overhead. The lecture was at Columbia University and the campus is directly in line with the departure from La Guardia of planes bound for the west. When the weather was good, the windows were open: a plane passing above drowned out Dr. Daisetz Teitaro Suzuki. Nevertheless, he never raised his voice, never paused, and never informed his listeners of what they missed of the lecture, and no one ever asked him what he had said while the airplanes passed above (Cage, *Silence* 32).

In taking the environing world and its contents as equal to any other activity that occurs within the sphere, and the ability to readily accept any activity through Margin to Theme Capture as potentially relevant and thematic, is an approach which is reflective of Cage's engagement with Zen Buddhism. This engagement with Zen effectively alters the dynamic nature of Cage as a sphere of attention, opening up new possibilities for him to experience the world around him, changing his perceptions and contributing significantly to his overall aesthetic in artistic practice, not least those witnessed during *4'33"* and those suggested for the reader in the transcribed versions of his kōan texts. Relevant here too is what Arvidson writes about contextual shifts in the sphere, as well as what has just been outlined regarding radical transformations such as Margin to Theme Capture. In this context he suggests that the contextual shift transformation of 'Elucidation' may be consistent with practices related to mindfulness-awareness. Here, drawing on the writings of Jeremy Hayward, he writes:

> It is possible that elucidation is one of the essential attentional shifts involved in the Buddhist practice of mindfulness-awareness since this practice seems to involve some clearing up of the context with respect to what is momentarily given as theme, as well as precise attention to the theme … Discussing the method of *shamatha-vipashyana* meditation, Jeremy Hayward (1998, 612) exclaims that "Mindfulness is just paying attention." He goes on to say that mindfulness-awareness is the kind of attention that air traffic controllers need. "They need to be able to pay very incrementally precise attention to their own screen and the planes that they are directly responsible for – mindfulness. But as well they need to have a constant sense of the broad picture of the airspace altogether – awareness" … And the more clarified such awareness becomes, in the practice of mindfulness awareness, the more elucidated is the context of attention (Arvidson 64).

What can be stressed at this point – and perhaps expanding the analogy that Haywood writes of – is the fact that Elucidation of the environing world (rather than just a given context within a task, such as air traffic control) is only possible when these conventionally marginal activities are allowed to freely enter all aspects of the sphere, and can be seen as relevant to the attending subject. In a more pertinent example (also cited by Arvidson), Natalie Depraz writes of the capacity of having a 'quality of mindfulness' during the act of reading. She comments on how:

> [I]f I am capable of having a "quality of mindfulness" with regard to a text that I am reading, of being present to myself at the same time as I am attentive to my reading, and if a person drops a glass behind me, this does not make me start, for my attention is not only focalized on the reading but embraces, with a certain panoramic vision, all of the space that surrounds me (Depraz 217).

The ability for a reader, as a sphere of attention, to listen to their surroundings while reading graphical text – and to engage in the creative practice of responding to the chance poetics that occur between these autonomous elements – is an alternative reading practice that includes the acceptance of periodic and unpredictable dynamic Margin to Theme Capture events. It is toward these ends that through a durational occasion, the practice of *64'53"; or, World of Storms* seeks to provide a platform for this alternative reading strategy to emerge.

A final note can be made too regarding existing examples of 'books with soundtracks', as well as the social and cultural practices when readers have selected their own 'soundtracks' for reading graphical texts described in the introduction. The adoption of a Cagean reading practice can be seen to equally differ from these practices as well. In the

instances of a 'concentration aid' soundtrack being selected by a reader for example, the strategy remains on keeping thematic attention on the graphical text and the quasi-world that it depicts, while masking the 'irrelevant' unrelated marginal activities occurring by chance in the horizon of the sphere. Cage's approach, in contrast, which has been adapted and extended in *64'53"; or, World of Storms*, is one of opening up and expanding the sphere in order for the attending subject to discover new possibilities, rather than conditioning the sphere to attend to a limited set of events.

Chapter Two: A Critical Commentary of *64'53"; or, World of Storms*

Where the previous chapter used theory from Multimodal Social Semiotics, Frame Analysis, Reader-Response Theory and Phenomenology to support a discussion of the Cagean practice of attentive and creative listening during the act of reading, this chapter will examine more directly the practice-as-research developed through *64'53"; or, World of Storms* that has resonated with, extends, and remains intimately connected to these ideas. As with the above discussion, the following section of the thesis has been divided into a number of partitioned sections, each one intended to critically assess a specific aspect of the work within the context of the research aims outlined in the introduction.

64'53"; or, World of Storms is a work of experimental writing that explores the chance poetics between sound and writing. When the 'box' is opened, the reader presses a switch to begin the performance, which lasts 64 minutes and 53 seconds. The first part of the title therefore refers to the work's duration, while the second title is a reference to the project's interest in a formal model that resembles the probabilistic systems contained within weather. Here, 'storms' are thought of in terms of their disruptive output, and this reference was considered suitable for the work on account of the disjunctive effects on normative reading practices that take place. During an engagement with the work the reader will encounter a collection of field recordings that will play in a random order from the inbuilt speaker and surface transducer. The reader will also define the order of the written text by shuffling the loose pages, which have had their internal layout arranged into a number of columned structures by means of chance operations. As will be explained in the following section, these column structures, and the variety of ways in which a reader can engage visually with the work, is a technique that takes its influence from the de-centralised use of space and the concurrent performativity exhibited within

the Cage/Cunningham aesthetic. The work also extends the formal loose leaf 'book in a box' model previously used by B.S. Johnson and Marc Saporta in their experimental works of prose, and delivers the novel as a customised and repurposed box of Amazon 'C1' packaging, acknowledging the fact that the 'book in a box' is actually a standard model in the dominant consumer market of physical editions purchased online.

As these disjunctive strategies problematise habitual reading processes, the reader, as a sphere of attention, may begin to relate the 'internal' element of graphical text, conventionally thematic within the sphere during the act of reading, to the 'external' aural elements of the work. Due to the varying volumes of the field recordings that are presented, the 'external' element of ambient sound is additionally framed to enter the theme of the attending subject. The work is disjunctive in the sense that it allows for frequent and ongoing radical perceptive shifts to occur throughout the duration of the piece (Singling-Out and Synthesis transformations), as well as a series of 'Margin to Theme Succession of Content' transformations (Arvidson 57). Through the processes of frame awareness that result, the reader can then become sensitive to the fact that all written text involves a 'soundtrack' of some kind, and that a shift in perceptive considerations – such as those made available through a participation in *64'53"; or, World of Storms* – can uncover a set of chance poetics whereby graphical text and sound perform together within the same space and time. At the centre of the work is Cage's notion of an 'experiment', the creation of a set of durational circumstances whereupon unforeseen events can take place – the ongoing issues, questions, and discoveries that arise during each participation with the work are representative of the new knowledge put forward in this research enquiry.

Under three main section headings, 'Writing', 'Sound', and 'The Text Event', I will discuss the construction and function of *64'53"; or, World of Storms*. The first section will consider the writing in terms of its formal presentation, the use of narrative indeterminacy, chance-organised layout, and the durational constraints that have been suggested. The second section will centre on the aural elements of the work. I will explore the use of field recording as a writerly technique, and I will discuss the framing of – and inclusion of – ambient and environmental sound as a necessary component of *64'53"; or, World of Storms*. The third section of the chapter will focus on the ensemble of elements in the work as they each occupy their own performative space during the reading event. Here, I will outline how the disjunctive aesthetic – analogous to the performances of the Merce Cunningham Dance Company – allows for new perceptual considerations to occur.

WRITING

The written element of *64'53"; or, World of Storms* has undergone three stages in its development before the final presentation of the work. The first two stages will be addressed presently, while the third will be attended to later in the section on 'The Text Event'. The three stages are:

1. The creation of an indeterminate narrative in the form of a 64-page loose leaf work of prose which functions as a reservoir or source text.

2. The organisation of the source text into twelve versions of each page of the work based on alternative column structures of display – a selection of which has been made according to chance operations for the prototype text.

3. The presentation of the writing inside a customised box of Amazon 'C1' packaging, where the work is designed to be attended to within the same space and time as the autonomous elements of recorded and ambient sound.

In the construction of *64'53"; or, World of Storms,* as a text analogous to the collaborative work of John Cage and Merce Cunningham, both Cunningham's choreography and Cage's formal approaches to writing have provided the stimulus for the work's formation. And although the title of this thesis suggests a centring of Cage's ideas on creative writing and reading practices – and this aspect is important regarding the final assembled text, and the particular focus on sound throughout – the first section of this chapter will deal with the visual element of words within the work. Here, Cunningham's choreography and his approach towards the presentation of movement has also been a strong influence on the presentation of the written element.

In my reading of the work of Merce Cunningham, in examples such as *Suite for Five* (1956), I noted how the sparse piano and percussive sounds – mixed with the thuds and squeaks of the dancers' feet on the floor – created a multimodal space for an attending subject to respond dynamically. I was especially interested in how, as a result of the music and dance not following any straightforward or recognisable narrative or pattern, that the work did not prioritise one mode over the other. At times the music was seemingly at odds with the choreography, at other times the music found a poetic resonance with the visual movements. Where some sections, such as the rotation of the dancer in the fourth act, seemed like an obvious analogy for the passage of time, I read most other movements as a collection of incidents, and I experienced my attending processes operating extremely dynamically and with a multimodal approach, thematically focused at times on the sound element, at others on the visual element, and occasionally on the chance poetics occurring

during incidents when the music and choreography found a playful resonance together. This multimodal change in focus could be accommodated in the sphere of attention through radical Singling-out Synthesis, and Margin to Theme Capture transformations, processes that were rendered even more complex by the use of a side-by-side, two channel display of the piece in the Charles Atlas video version (Atlas, "Suite for Five"). As a viewer I was invited to select points of interest from a modular set of possibilities. I also noted how these multimodal shifts were made possible through an absence of simple transformations in the sphere, of a removal of familiar and socially constructed relationships between music and dance – in Arvidson's terms, less of a reliance on 'serial-shifting' patterns that are typical of melodic music, or a narratively driven story (see Arvidson 70).

In other works, such as *Points in Space* (1886) accompanied by Cage's 'Voiceless Essay' – which used state-of-the-art computer synthesis software of its day to pick only the sounds of the consonants from Cage's speech – I noted the differing colours of the costumes of the clustered dancers to be another dynamic feature in my experience of watching the work alongside the strange tide-like presence of Cage's voice. Jill Johnson notes how 'Cunningham's movement is a series of isolated actions, and the connection is simply that of sequence or juxtaposition or whatever the observer wishes to make out of it' (J.Johnson 78), while Douglas Copeland writes more generally of how 'in Cunningham's work, movement and sound existed independently of one another; choreography and music were both performed in the same space and time, but without affecting (or even acknowledging) one another' (Copeland, "Merce Cunningham and the Politics of Perception" 310). Elsewhere Copeland also notes the 'shared sensibility' (Copeland, *Merce Cunningham: The Modernizing of Modern Dance* 7) between

movement and sound in the formation of the Cunningham dance pieces. This shared sensibility of composition and arrangement within a multimodal ensemble represents a strategy that I've sought to translate into the field of literature. And, as I will explain with regard to the formative writing practices that took place within the project, Cunningham's use of de-centred space, and his egalitarian treatment of bodies and objects within his choreography emphasises the importance of how the visual and aural elements are able to share equal status during the reading event. I concluded that this equal status required similar approaches in terms of composition.

My intentions at the beginning of this project centred on producing a volume of prose that would resemble in most respects a response to the existing examples of the 'books with soundtracks' that have been produced by other authors. I planned to undertake an approach that would have departed from these examples through the inclusion of field recording rather than composed music within the audio element of the work – the focus was very much on sound alone, and of adding sound to words. At this point, the writing was still envisaged to resemble a novel in the realist tradition, and it would have perhaps dealt with the topic of sound and listening through its plot. Furthermore, it was intended to be read in a linear manner. As the project developed, and as disjunction and fragmentation manifested themselves as a productive means of forming new perceptions during the act of reading – in Arvidson's terms, the disjunctive or fragmentary narratives that were created were perceived to produce more frequent contextual shift transformations in the sphere (both in the 'quasi-world' of the fiction, and with regards to the act of reading more generally). For this reason, the approaches toward a conventional narrative and layout were abandoned in favour of those that mirrored many of Cunningham's strategies within Modern dance choreography. Johnson's comments are

helpful again when she explains that, 'in [Cunningham's] simultaneous vision there is no central focus, except where the observer, if not basking in the total effect, concentrates at any moment. The values become equalized; there are no climaxes or resolutions, which means that there is no necessary beginning or ending … [Cunningham] considers one beginning as good as another' (J.Johnson 77). A production of equalised values within the visual written work – not only narratively, but formally and spatially – therefore became an important feature of the research practice. Here, Copeland also refers to the 'perceptual training' that the audience undergoes in witnessing the disjunctive autonomous visual and aural elements as they perform within the same time and space (Copeland, "Merce Cunningham and the Politics of Perception" 322). This strategy was something I sought to translate to literature in order to engage with the wider conceptual aims of the work – relating focused thematic attention to marginal consciousness during the act of reading, and the discourse relating to the future of the novel in the digital age.

The pilot project connected to *64'53"; or, World of Storms,* undertaken at the preliminary stage of this research, involved the pairing of several pieces of original fiction with short collections of field recordings and soundwalk recordings, using various formal approaches[13]. What was evident during these early manifestations was that the fragmentation of narrative text made for a more dynamic attentional process compared to the comparatively linear works I had written. Based on my earlier observations, these linear texts tended to obstruct a dynamic or active listening process – I would either find the listening experience more interesting than the linear text, or I would try to follow along with the narrative graphical text at the expense of the aural element. My experience

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[13] Formal approaches included the use of CDs and printed text, a video work comprised of a single shot of a blank page, with text displayed as subtitles together with a soundtrack of chance organised field recordings, and the use of Soundcloud links to recordings in the body of the text – an approach later explored further through the use of QR codes within my *SurreySoundscapes* (2016-2017) project.

was that there was still an inequality between the two forms. In Arvidson's terms, radical transformations in the sphere and the inclusion of marginal sound activities as *relevant* were limited by the linearity of habitual reading processes, which held thematic attention and meant that the sphere would operate within the quasi-world created by the monomodal resource of the graphical text. As a practising reader-listener, it became clear to me that retaining a conventional approach to linear text composition would result in the written work being considered habitually – as monomodal at the end of the communicative structure – while the reading event, as it takes place in space and time, would remain treated as external to the quasi-world of the narrative, rather than the written text functioning in dialogue with the sound elements and the environing world in the margin of the sphere of attention. Cage's comments on a 'purposeless' reading strategy – whereupon through reading odd and inconsequential pieces of information one could then 'respond at the same time to environmental events and sounds' – seemed to support these observations, leading me to rethink my approach and to consider chance organising principles and indeterminacy within the formal presentation of the writing, as well as within the sound element of the work. From here, the methodology of the textual composition was undertaken with the aim of seeking a wider attentional experience for the reader, where attending subjects could experience more frequent, radical contextual shifts, as well as frequent Margin to Theme Succession of Content transformations within the sphere, extending beyond the written text itself, and into the surrounding space and time of the text event.

The source text I set out to create with *64'53"; or, World of Storms* is a challenge to the 'interiority' of textual events that separate them from the environing world during the reading event. The matured work therefore represents an exercise in resistance for a

narrative to maintain the focus of thematic attention. Here, I have adopted what Leonard B. Meyer terms an 'anti-teleological' aesthetic (Meyer 72), which he cites as being characteristic of the work of Cage and Cunningham – as well as a feature of the work of writers such as Alain Robbe-Grillet, and the later prose of Samuel Beckett[14] (see: Meyer 76) – as a productive means of de-centring narrative convention. Building on these strategies, I have also sought to develop approaches beyond a de-centring of textual narrative, and into a de-centring of graphical text within the reading event as it takes place within space and time – what I have been interested in is a dynamic exchange between text and sound through radical transformations in the sphere of attention.

The parent text of the work depicts a series of descriptive passages centring on a group of characters who remain in an interior location. Redundancies of expression are frequent occurrences within the prose, as is the pedantic and clunky phrasing within the descriptions of their surroundings – e.g. 'the room that is used for everything that the other rooms are not used for'. There are also no notable conflicts or resolutions between the characters, with little exposition given for their circumstance. For example:

> Back to those rumours then, says Michael, the ones they talk about up on the hill. Is it true what they say do you think. About the rumours. What do you think. The old man smiles. I do think so, he says, but I haven't seen, and I have seen a lot you understand. But who would know. On other matters, I think. I think this here has something to do with it.
>
> The beetles scuttle and crawl in the terrarium, and the old man reaches in to dig the deepest part of the farm and he gathers the tiny worms and some of the soil with the long spoon. He transfers them, the tiny worms, to the small dish and

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[14] I'm thinking here of the descriptions of Mr Knott's routines and house of residence in *Watt* (1953).

he separates the tiny worms from the soil as best he can. Michael hands the old

man the small box with the oats and the skins of the root vegetables and he watches

the process as the tiny worms are transferred.

It must be enormous, if it is true, and it must be a secretive thing too, says

the old man. Makes you wonder. I do have several questions in fact, but no one

speaks of these things too often. The tiny worms vibrate en masse. The old man

returns the crumbs of soil to the terrarium and he watches the tiny worms again

before he closes the lid on the box. One day we may find out, or you may find out,

or the girls will find out. Or equally, continues the old man, none of us may find

out, and somewhere someone may find out. Likewise, nobody may ever find out

and the whole thing is forgotten. It's funny to think of it like that, of it being

forgotten. Now, this, now.

(Appendix A 151)

And

When Maggie was here, things were different, says the old man. This is her I think.

We had different habits, all of us, and a different way, don't you think. I think so

anyway, I don't know about you, he says. But it seems like that to me. Very much

so. And it is Lisa who replies first, saying that she thinks some things have

changed, but other things have not, and some things are surely better, while other

things have been made worse. When Maggie was here. When Maggie was here.

(Appendix A 183)

Here, as in several instances throughout the text, when a question is asked or a query is

made by one of the characters, no straight answers are given, and the conversations never

reach a satisfying conclusion. Additionally, the demonstrative 'this' which appears in the

above passages as well as elsewhere in the text, exposes the limitations for the reader if

they are to focus on the graphical text alone: 'I think this here has something to do with it. … Now, this, now', and 'This is her I think'. In these cases, the referent for 'this' is not disclosed. Stanley Fish, writing about a similar case of 'that', comments on how '"[t]hat" is a demonstrative, a word that points *out*, and as one takes it *in*, a sense of its referent (yet unidentified) is established. Whatever "that" is, it is outside. … In terms of the reader's response, "that" generates an expectation that impels him forward, the expectation of finding out *what* "that" is' (Fish 76). Here, I would connect 'impels forward', with Arvidson's terms of Synthesis and Margin to Theme Succession of Content – of looking expansively and dynamically outwards, beyond the graphical text as thematic and onto the multimodal aspects present within the sphere during the reading event.

Although certain personality traits and fixed values relating to the characters' situation may become evident as the reader progresses through the text, aside from memory and imagination, the characters each remain physically within an interior space at all times. However, it is suggested that 'events', which may normally occur at the centre of a novelistic narrative, remain at all times beyond the graphical text. This 'interiority' is therefore intended to perform alongside the 'external' sound and the concurrent environmental events taking place during the act of reading.

Cage's *Lecture on the Weather* is an important precedent here. Marjorie Perloff describes the performance lecture as an example of a work were 'the audience … finds itself, not passively attending … but participating in an environment' (Perloff, *Radical Artifice* 24-25). Joan Retallack, writing about the same work, notes the 'permeable boundaries – between inside and outside the piece itself – that characterize all of Cage's compositions'

(Retallack 202-203). Furthermore, Perloff notes that 'given the basic time-space constraints and the specific verbal, aural, and visual procedures designed by Cage for the *Lecture* (the "inside" of the piece), any number of other "weather conditions" (the "outside") are obviously possible … [t]he performance, accordingly is not *about* weather; it *is* weather.' (Perloff, *Radical Artifice* 25).

The question of the overall 'text' in *64'53"; or, World of Storms* is therefore intended to be a formally shifting one. Craig Dworkin's recalls Gérard Genette's use of the term paratext as 'those documents just across the threshold of the work proper: gallery wall labels, catalogue essays, artist interviews, et cetera' (Dworkin "No Medium" 23), noting the potential for conceptual exploration through a blurring of these boundaries. Dworkin also suggests that in cases such as Tom Friedman's *1000 Hours of Staring* (1992-1997), this schema is limited by the dynamic and indeterminate nature of the work. As an alternative, the poet refers to Derrida's concept of the *parergon* where 'something at first glance appears to be an external supplement to the work, but that in fact participates as a necessary and essential part of the work itself' (Dworkin, *No Medium* 23). The latter concept seems a more appropriate model for *64'53"; or, World of Storms* where the relationship between modes – and between the perceived *ergon* and *parergon* – is frequently changing according to the dynamic sphere that is the attending subject.

Returning to the structure of *64'53"; or, World of Storms*, it has been important for the work to follow the three stages outlined above, and, in addressing more fully the decision to compose a source or parent text as the first step, Cunningham's work especially interested me here because certain visual elements of the conventionally embodied syntax of dance are retained and questioned formally in much of his choreography – including

versions of gestures taken from classical forms such as ballet, as well as those taken from everyday life (combing one's hair, for example). At times the embodied syntax of classical dance has been the starting point for an exploration of radical, physically demanding movements, before being combined with other forms in innovative ways. Cunningham elaborates on this process when he speaks about the composition of his piece entitled *Torse* (1976):

> In classical ballet there are certain positions that you do – *épaulements* – which have to do with twisting the shoulders, with or against the leg action. But all of my work comes from the trunk, from the waist, nearest the hip, and you tilt it or you twist it in every direction … I have eight directions that I use, to open up the space all the way round. My feeling was that the '*épaulements*' come from the fact that on a proscenium stage you are moving to and from the public and the *épaulements* were done in order to give a sculptural effect. When the movements were fast as with Balanchine, they couldn't do the *épaulements* so clearly any more. The Torso was even less mobile. I thought that it was basically true that the body could not move while the legs were moving rapidly. So I worked at it and … I used the idea of the leg's direction at varying speeds, at varying tempos, in various kinds of phrases …That's what the material of *Torse* is (Cunningham and Lesschaeve 62-63).

With regard to the creation of a text that would explore and challenge themes of interiority, and, which, under the 'stage space' of the reading environment, would resist thematic or centralised focus during the act of reading, a similar approach has been taken in the written element of *64'53"; or, World of Storms*. Just as Cunningham's work sought to open up the focal reach of the audience, which had previously been limited by the demands of the proscenium stage, the narrative and presentation of my writing has sought to remove these familiarising focal points for the reader in a similar fashion. My decision

to begin with an original, composed work of prose, to treat it as a material, and to question the form and presentation through an exploration of some of its limits – to explore the page as a unit, movement, or phrase, to arrange the work unconventionally in terms of layout, and to combine the written form with other autonomous events as a means of de-centring the text during the reading event – adopts a similar approach to the description of Cunningham's method above. The following subsections will look more closely at physical form and its relationship to narrative indeterminacy, the visual aspect of unconventional layout within the work, and the durational parameters suggested for the engagement with the text.

Form and Narrative Indeterminacy

Despite the overall text event of *64'53"; or, World of Storms* exploring a shifting dynamic between the 'interior' text as it is read and the 'exterior' events and sounds that perform and occur within the same space and time, the initial written parent or source text still holds true to certain conventions of narrative on account of the retention of syntax, as well as the consistency of character names and the named objects and interior environments within the written passages. And since this commentary is dealing with the entire process of the construction of the text, it is important to clearly identify each process at each level of the work in order to gain a better understanding of how each employed method of disruption alters habitual reading processes during the text event. Furthermore, given the fact that the layout of the prototype text will be determined according to chance operations, there still exists the possibility for several of the page-units to be displayed as continuous prose in a single text column that can be read in a reasonably conventional manner during the reading event. The page-unit and narrative

indeterminacy therefore provide the foundations for further explorations of disruption to take place.

The question of form is central here. Following the observations made regarding the productivity of disjunction and fragmentation within the narratives of the pilot project, and, having been understood in Arvidson's terms as an effective means of allowing the sphere of attention to perform more frequent radical transformations during the act of reading, I aimed to produce a novel that would make active participation within the text – as well as the disruption of habitual reading processes as a result of such participation – to be an inevitable occurrence during any engagement with the work. Here, the loose leaf form was an obvious choice of physical disruption with historic avant-garde precedent in the work of Marcel Duchamp, Marc Saporta and B.S. Johnson.

The decision to use a loose leaf format, and to also consider the page itself as a unit or movement in the work may be best explained by outlining the opportunities that the unbound text format offers conceptually within a work of fiction. Aside from connotations of an unfinished manuscript, formally speaking, the individual pages of *64'53"; or, World of Storms* invite a particular indeterminate, performative gesture and response in the reader that is not possible in a bound codex. Through deciding the order in which the text is read by shuffling the pages, the reader becomes physically involved in completing the creative act, contributing to the element of chance in the work, and expanding their responsive actions as a sphere of attention.

In terms of similar conceptual applications, the use of loose leaf works in artistic practice begins with Marcel Duchamp's *The Box of 1914* (1914), and continues in differing

regards in literary practice with Marc Saporta's novel *Composition No.1* (1962), B.S. Johnson's novel *The Unfortunates* (1969), Robert Grenier's poem *Sentences* (1978) as well as Jonathan Skinner's *Directions for the Ear* (2000). In each instance, and with varying degrees, the formal model of the loose leaf work invites participation from the reader to complete the creative act in an unconventional manner. And in each case, the loose leaf form has a special relationship with the conceptual use of boxes.

For Duchamp, the use of a box to contain loose fragments in *The Box of 1914*, and later in *The Green Box* (1934) (see: Hamilton's Typographic version, 1976, or Kenneth Goldsmith's forthcoming bootleg reproductions), which accompanied *Large Glass* (1926), was a method of containing an element of the work that had to be plundered both as a means of experiencing, and as a rejection of conventional understanding associated with the presented visual art. Duchamp claimed that *The Bride Stripped Bare by her Bachelors, Even*, 'must not be "looked at" in the aesthetic sense of the word. One must consult the book, and see the two together. The conjunction of the two things entirely removes the retinal aspect that I don't like' (Cabanne 43). Here, the conjunction of glass and text was meant to challenge the visual approach to painting, 'the habit of looking unaccompanied by thought' (Ades et al. 88).

Duchamp's loose leaf fragments of text in *The Green Box* serves as an example of the formal model I have wished to adopt in *64'53"; or, World of Storms*. Dawn Ades notes here that the selection of notes included in the *The Green Box*'s actual published form never reached the '"definitive" state implied by the word "book"' (Ades 88). Instead the box preserves the jottings, scraps, fragments and sketches, meticulously cut to size and presented in loose leaf form, avoiding any indication of a predetermined order. Ades also

comments on how, in a selection of Duchamp's posthumously published notes, there are indications for a book that would go with the glass, 'that would be circular in form (on spiral binding for example): "make a round book i.e. without beginning or end", or that might follow an order by starting pages with the same word' (Ades 88-89). Furthermore, Ades adds that the loose leaf structure used in *The Green Box* recalls Stéphane Mallarmé's idea of 'a book that would be the "Orphic" explanation of the world, taking the form of a loose-leaf album of some 960 pages, which would be recited or performed at regular intervals, while the leaves would be shuffled as part of the ritual' (Ades 89).

The box, however, has practical applications that support its conceptual ones. Within the context of literature, this practicality has been utilised by Saporta, B.S. Johnson, Grenier, as well as in the recent poetry of Anne Carson, in *Nox* (2009) and to a lesser extent, *Float* (2016). Each of these works use the box as a container for writings of unconventional form – loose leaf format, loose chapbooks/chapters, and the one long accordion-fold page in the case of Carson's *Nox*. Here the work of each of these authors provides a good comparison on both functional and conceptual levels to the aims of this project. Whereas in conventional books the binding often defines the writing's order and its 'completeness', the box offers an alternative for the presentation of work, and the opportunity to explore formally ideas that cannot be conveyed using textual elements alone[15]. In using this model, I am suggesting that the incompleteness inherently conveyed by the loose form represents a further opportunity to look beyond the interiority of the printed material, to expand the stage space of the reading event, and to prepare the sphere of attention to undergo frequent radical transformations.

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[15] I especially like the use of the single long page in Carson's work as an apt metaphor for the process of grief – like pulling a loose thread on a jumper, once the page is opened it flows continuously until the end of the work, formally conveying the intensity and monotony of the grieving mind.

With the use of a boxed text in *64'53"; or, World of Storms*, I also wanted to connect the writing with the wider question of how we read and consume printed writing in contemporary society, and to acknowledge how experimental forms of writing are often limited by the novel's position as a product (see: Silliman 14-15). The use of a piece of repurposed Amazon packaging as the housing for the work was considered an effective way to draw attention to some of these aspects, while additionally blurring the boundaries of where (or when) a work begins in dialogue with the environing world, since many works of literature that are purchased online are 'boxed' in this manner. As the owner of Abebooks and The Book Depository, as well as shipping books directly, and providing a platform for independent sellers and print on demand services (not to mention its dominance of the e-book market), Amazon, as a global corporation, is likely to have a central role in any future of the novel in the decades to come.[16]

I felt that these factors, connected to the current social and cultural moment, deserved recognition within the form of the work, and I aimed to provide this recognition in a playful manner. Cage, speaking of Robert Rauschenberg's work (Rauschenberg was another key collaborator during the early years of the Merce Cunningham Dance Company), comments on how, 'as the paintings changed the printed material became as much a part of a subject as the paint … causing changes in focus: A third palette' (Cage, *Silence* 99). Although this 'third palette' as a presentational method is considered a secondary concern when positioned alongside the central aim of the project in its exploration of sound during the act of reading, the material box that contains the written

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[16] Latest market stats from Amazon: https://www.thebookseller.com/news/amazon-book-sales-45-616171

work nonetheless highlights an otherwise unnoticed *parergon* analogous to how the work draws attention to the sonic aspect of the act of reading.

In returning to the parent text itself, and the unbound form specifically, Marc Saporta's *Composition No.1* (1962) uses unbound single-page chapters to allow the narrative sequences to be determined by the reader. This work has been an influential model on *64'53"; or, World of Storms.* One might assume at first glance that in *Composition No.1* there is no narrative structure in place at all, given the freedom afforded to the reader (compared to a standard bound codex that is read in a linear manner), however, each page unit has been composed according to a set of textual rules that encourages indeterminacies and enigmas, and distorts causality and the sense of chronological time. These strategies allow for the text to be entered and exited through any one of these page units, in a manner reflective of Johnson's earlier comments on Cunningham's work where 'one beginning is as good as another' (J.Johnson 77).

The function of indeterminacy *within* the loose leaf format is important in this regard – how the formal model connects to the textual, and how both aspects are supportive of the other. Emma Kafalenos makes use of narratological terminology in her examination of *Composition No.1*, using the terms *fabula* and *Sjužet* as follows:

> As I am defining it, *fabula* is an abstraction of the events in a narrative, ordered in chronological and causal sequence, and conceived ontologically as unexpressed in any medium. *Sjužet* is a manifestation of *fabula* (in words-or images or gestures), incorporating perspective (focalization and voice) as well as temporal manipulations of sequence, duration, and frequency (Kafalenos 380).

Kafalenos notes how, in *Composition No.1*, 'although the sequence in which *fabula* is revealed depends upon *sjužet* sequence, which the reader controls, this type of indeterminate *sjužet* sequence permits no control at all over the sequence in which elements of *fabula* are discovered'[17] (Kafalenos 385). In effect this statement means that until the reader picks the next page to be read, they will have no idea what will come next, in contrast to other works which encourage an indeterminate, but guided structure to the sjužet sequence, as in the use of footnotes in Nabokov's *Pale Fire* (see: Kafalenos 385). The source text of *64'53"; or, World of Storms* adopts an identical process on a formal level to *Composition No.1* regarding sjužet sequence.

Kafalenos categorises *Composition No.1* as being indeterminate in both fabula and sjužet sequence, but not in sjužet focalisation. Here, sequence is an obvious aspect, given the loose leaf form of the work and the reader's physical control over the order of the pages. Likewise, it is clear on a formal level how an author might achieve this type of indeterminacy through the unbinding or reordering of a work. However, the indeterminacy of fabula requires a different strategy within the construction of an indeterminate text, and one which is closely bound to how chronological time and causal sequencing are depicted textually. Paraphrasing Kafalenos again, if a reader is unable to determine the chronological order of the text after a complete reading, either through the presented contradictions in the textual events or through a lack of causality between textual events, its fabula is indeterminate. For this effect to occur, each page unit must therefore include enough indeterminate values in order to allow the entering and exiting

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[17] This statement is also partially true in B.S. Johnson's *The Unfortunates*, although in Johnson's case, a certain amount of control is kept in place through the determining of the first and last chapters, and in the instruction to read these two chapters in their respective order.

of the work at any point – the page unit must stand alone, as well as remaining connected to the wider abstraction of the overall narrative.

In Saporta's case, through a lack of defined chronological and causal structure in the work, it is not any one specific point in the sjužet sequence that will appear significant, but rather the accumulative value of progressing through any sjužet sequence that will determine the moment when the reader may detect the abstracted (and indeterminate) fabula of *Composition No.1*, which involves responding to the moral consequences of the narrator-focaliser being consistent throughout the contradictory events of the novel. Kafalenos notes here how '[r]eaders of *Composition No.1*, until they determine the source of the focalization, cannot constitute as a whole the events associated with each of the various characters. The fragmentary scenes each page describes become a work only when the focalizer is discovered to be the protagonist whose perceptions are the source of every scene' (Kafalenos 404) – where each page at first appears as an objective description of an event, the depictions actually constitute subjective descriptions provided by a narrator who is present, emotionally involved, and central to all textual events. And although Kafalenos comments on how in Saporta's work the first page that is read tends to govern how the reader responds to a text as a whole, due to what Menakhem Perry terms the *Primacy Effect* (see: Kafalenos 398), there remains the possibility for every page to be the first page of the sjužet sequence due to the lack of defined causal information. The undecidability in the work also remains after the novel has been read in full, meaning that through the presented contradictions, it is also impossible to settle on a single interpretation without cause for doubt.

In *64'53"; or, World of Storms,* I have used similar conventions by describing events in a way that actively discourages an ordering of chronological time or causal sequencing. Unlike Saporta however, I have also attempted to adopt an approach that seeks to discourage any meaningful, shocking, or dramatic events unfolding at all, using a strategy that instead aligns with Cage's comments regarding the odd and inconsequential pieces of information in a small-town newspaper that can be read 'purposelessly'. However, here I have framed this 'purposelessness' within a novelistic context. Where Saporta centres his work on personal relationships, including weighty themes such as emotional abuse, love affairs, rape, and the context of war and violence, I have tried to develop a work that explores the interiority of textual description and its limits through a focus on what I would term the 'undramatic enigmatic' – inviting the reader, as a sphere of attention, to abandon conventional approaches to novelistic reading as the receiving of a specific textual message through thematic attention within a quasi-world, and to allow for more radical dynamic shifts to occur within the stage space of the reading event. Like *Composition No.1,* the work is frustrating for habitual modes of reading on account of the indeterminacy of the chronology of the events that are depicted, but it is also an exercise in frustration due to the lack of meaningful events described in the text in the first place, as well as through the frequent intentional use of redundant or repeated phrasing. Furthermore, unlike in *Composition No.1*, the reader of *64'53"; or, World of Storms* is not left with any lingering task of moral judgment of the narrator-focaliser.

In *64'53"; or, World of Storms*, the characters continue to repair the metal suit, to cycle on the generator bicycles, to cultivate the fungi and the mealworms, to remember and to imagine different times, and to perpetuate their individual routines as they are physically present in the interior space of 'Home'. Their approaches toward their tasks and their

circumstances will sometimes also change without explanation – for example, in some sequences the metal suit requires minor repairs, in other sequences it is in pieces, in storage, or it is not mentioned. The suit is also sometimes functional in nature, and other times it is an aesthetic object, seemingly a work of sculpture. In some sequences it is implied that the act of cycling on the generator bicycles has a genuine purpose, in others it has no purpose. Likewise, the fungi are either dying, or blooming, running low in supply, or taking over the troughs, and it is unclear how many modular rooms actually make up the characters' surroundings. These contradictions distort the sense of a narrative arc, while the reader, having read all of the 64 page units in their entirety will be unlikely to gain any sense of resolution within the interior events. However, through an alternative creative reading practice, when connections can form between the 'external' modes of ambient and recorded sound and the 'internal' mode of text, new indeterminate narrative meanings as well as a chance poetics can be explored. This strategy is an approach that subscribes to Cage and Cunningham's aesthetic, free from 'the explication of causal dialectically structured thought processes' (Meyer 72). In this sense the neutrality and inconsequence of the text of *64'53"; or, World of Storms* has been used as an effective means of exploring other formal aspects of the stage space of the reading event.

Moira Roth, in her essay *The Aesthetic of Indifference*, also identifies Duchamp, Cage, Cunningham, Rauschenberg and Johns as a group who made a 'positive cult of indifference' (Roth 209) during the McCarthy period of American history (1950-1954) through the employment of detached and distanced works which required intellectual playfulness and contemplation without centring on a specific expressed message. Roth notes how Cage and Cunningham 'used neutrality as their springboard' in their explorations of new formal models. The principles of this neutrality represented an

approach where the 'denial of conventional meaning was [used] in order to allow a different sort of meaning to emerge' (Roth 215). In his comments on *The Remove of Literature*, referring firstly to Nick Thurston's treatment of Maurice Blanchot's work, as well as Blanchot's own use of the term, Craig Dworkin extends these thoughts through a discussion of the concept of the 'neuter' with regards to readability. He describes the neuter as, 'an activity rather than a category, the Neuter is a "movement de écriture [movement of writing]" … a neutral space' (Dworkin, *No Medium* 48). In relation to this comment, the neutral space created by *64'53"; or, World of Storms* is therefore intended as an arena from which dynamic attentive responses can emerge. A congruent point here also concerns the topic of the representation of sound within literature, and the representation of the act of listening, which, in this neutral space, is not addressed through plot, or through the referential function of language – the characters are not concerned with listening or hearing, for example. Rather it is through the formal model as it is set in motion and experienced that the reader may become open to new perceptive models and the available chance poetics. As the reader becomes frustrated or bored by the text, thematic attention can shift onto other external events that may be of interest. The recordings contain 'outdoor' sounds, which contrast with the indoor-based text.

Through frustrating the reader textually, even at this first stage in the development of the text, it is hoped that the attending subject will be prompted into shifting between the textual work, and the stage space of the act of reading itself, through a series of frequent and dynamic attentional transformations. In Arvidson's terms this might include Singling-Out, Synthesis, Elucidation, and Margin to Theme Capture transformations, all of which are present in the forming of the 'dynamic tension' of the sphere under these new circumstances. Again, even before the chance organisation of layout occurs, it is

hoped that here, as the indeterminacy in the text continually presents itself, the reader may begin to let go of any expectation of a fixed interpretation in the written work. Instead they may begin to complete the creative act by connecting the different modes that occur within the stage space of the reading event, and to realise that even when reading continuous prose, the dynamic interactions between graphical text and other modes such as recorded and ambient sound allow for different sensations and interpretations to form.

Layout

Up until this point the analysis of the text of *64'53"; or, World of Storms* – in its presentation as an original work of loose leaf prose – has concerned the design of a text that is intended to be read in a manner formally similar to the cited example in Marc Saporta's *Composition No.1*. The novel has also used an Amazon branded box of 'C1' packaging as the container to house the novel as an additional *parergon* to the work. Narratively, *64'53"; or, World of Storms* possesses similar characteristics to Saporta's work, as it does to the work of other authors within the *Nouveau Roman* – particularly the 'movements' of Nathalie Sarraute, characterised by 'the form of undefinable, extremely rapid sensations' (Sarraute vi), and the descriptions of intricately repeated details in Robbe-Grillet's *Jealousy* (see Richard Howard's 2008 translation) – as well as other examples of prose that display qualities of fragmentation and narrative indeterminacy. Furthermore, through textual strategies of neutrality, the text demonstrates an intention to sit in dialogue with the anti-teleological approach observed within the Cage/Cunningham aesthetic.

However, at this stage the work is still limited by other habitual reading conventions of prose fiction that I have sought to question in order to further de-centre the focus of the

reader within the stage space of the act of reading. My intention has been to create an equalised attentional relationship between sound and text that has not been used in previous examples of novels with soundtracks. Therefore, the focus of the reader, as a sphere of attention, although disrupted in forming logical conclusions within the quasi-world of the narrative, is still likely to take the presented textual narrative as thematic in their overall engagement with the work. At the second stage of presentation, and in dialogue with the intended analogy between the work of the Merce Cunningham Dance Company and this new genre of writing, I have sought to present the visual element of writing in a way that allows for multiple readings to take place spatially within the text, just as the viewer of a Cunningham dance piece might choose to watch individuals, or groups of dancers anywhere within the stage space, or to choose to focus on a particular movement that could be repeated or duplicated throughout the piece as part of their 'response ability'. Cunningham, in an interview with Jacqueline Lesschaeve, comments on the 'television continuity' where an audience can 'jump from one thing to another' within his dances (Cunningham and Lesschaeve 133), which, in terms of cultural attentional engagement with phenomena, has become more complex in the internet age where the parallel screen use of mobile devices is commonplace.

Setting the aspect of sound aside for now, my aim with the visual aspect of the work has been to attempt to change the perceptions of the reader by encouraging thematic attention to be situated on the act of reading itself, before de-centring this act, and disrupting habitual methods of understanding. These habitual approaches have been discouraged in favour of a reading that is multimodally creative and responsive. I have aimed to allow the reader, as a sphere of attention, to shift dynamically between the available visual modes that have been presented within the stage space where the act of reading takes

place, and to discover for themselves the chance poetics that exist between words and sound within the time and space of the reading event.

At the first of the three stages (outlined at the beginning of the chapter), although the page unit is explored in the presentation model, and the reader is able to select each page individually according to a non-predetermined order, the manner in which the text is read remains conventional within a Western context – the text invites the attending subject to read from left to right, beginning at the top of the page and progressing to the bottom of the page – maintaining a familiar hierarchy. Here, I have looked to the experimental writings of Cage as a further model for disrupting the syntax within each page unit in order to present multiple strategies for creative reading within the wider, dynamic attentional space. My approach has been arrived at through a chance methodology that makes use of an open source integer generator to determine the final layout of the work.

Cage's decision to use chance methodology for composition has been well documented (see: Gann 148, and Kostelanetz 63). From 1950 onward, his use of the *I-Ching*, or Chinese book of changes (see: Laozi et al.) became central to the music he was producing. It also became essential to the organisation of elements in many of his writings, including the layout of several of the transcribed versions of his lectures. Also at work here is the strategy of the earlier discussed 'experiment' as a methodology, of introducing a set of parameters to a work and observing the unknown outcome that is produced. *64'53"; or, World of Storms* is comparable to some of these models on account of its use of a set of input data which is then processed in a manner outside of the author's control. A pertinent comment here comes from Christoph Klütsch, who writes that '[w]hile traditional artists – according to A. Moles – work under the dictum of trial and error, computer artists follow

a principle of experiment. No longer is the artist a person who might only search for a language of expression, trying out different forms of representation, discarding trials, and learning from errors. Instead, computer artists set up an experimental situation, scientifically described and repeatable' (Klütsch 72). These aspects also have a wider application to the text of *64'53"; or, World of Storms* as a whole, particularly the programming of the Raspberry Pi Zero single-board computer to play the field recording aspect of the work at random for a determined duration (See: Appendix B).

In terms of the page as a unit of space, I have developed a strategy for exploring these aims through the use of a new presentational technique. Here, I have organised each page-unit into a number of columns according to the available choices on the default setting of a standard document on Microsoft Word, which allows for column selections between 1 and 12 to occur on the page. The spacing between these columns has been set at 0.15cm, as an approximation of the standard distance of space between words in a typescript. It is through this technique that the writing becomes not only narratively and linguistically indeterminate, but spatially disrupted as well, aligning with further strategies employed by Cunningham in his choreography regarding the positioning of his dancers within the stage space. This method effectively creates twelve different versions of every page unit of the original parent text (12x64 page units) making the final reservoir of text 768 pages in total. For the prototype text of this thesis, one version of each page unit has been selected according to chance operations. Following Peter Jaeger's example, and his use of Random.org's truly random integer generator (rather than algorithmic randomness) to determine the off-beat paragraph breaks in his monograph, *John Cage and Buddhist Ecopoetics* (2013), I have used the website Random.org in order to generate a list of

numbers to determine which of the 12 versions of each page unit are to be displayed (see: Appendix B – Figure B.12-15).

Under this new columned arrangement, the text is organised with the narrative sequential words running from top to bottom down each column, and the columns themselves organised from left to right. Figures 2.1-2.7 demonstrate the method, showing alternative column selections (1,3,5,7,9,11,12) of the same page unit of one of the 64 pages from *64'53"; or, World of Storms*.

Lisa walks the hallways and she scratches her ribs and the back of her neck. She looks for the nodes along the wall, but she does not pay too much attention to their behaviour. The air is cool today in the hallway and it is the walk in the cool air that she is interested in. Her feet are bare. Her hands are gloved. She walks slowly.

She remembers the moor, the salt flats, the ground-nesting birds. She remembers the traps that she made, and the berries she gathered, the texture of the long grass, the weeds, the moss in the swamp. The berries, again, she remembers the taste of the berries, the smell of the fish she has caught. At the end of the hallway, just before the ladder to the door that is marked #9, Lisa leans against the wall, and she feels the pleasant texture of the rubber on her shoulder.

She scratches her ribs again, the itch. And she moves again, towards the room that is used as an alternative sitting room.

(Figure 2.1)

Lisa walks the hallways and she scratches her ribs and the back of her neck. She looks for the nodes along the wall, but she does not pay too much attention to their behaviour. The air is cool today in the hallway and it is the walk in the cool air that she is interested in. Her feet are bare. Her hands are gloved. She walks slowly.

She remembers the moor, the salt flats, the ground-nesting birds. She remembers the traps that she made, and the berries she gathered, the texture of the long grass, the weeds, the moss in the swamp. The berries, again, she remembers the taste of the berries, the smell of the fish she has caught.

the ladder to the door that is marked #9, Lisa leans against the wall, and she feels the pleasant texture of the rubber on her shoulder.

She scratches her ribs again, the itch. And she moves again, towards the room that is used as an alternative sitting room. At the end of the hallway, just before the

(Figure 2.2)

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Lisa walks the the hallway and it remembers the berries, the smell rubber on her

hallways and she is the walk in the traps that she of the fish she has shoulder.

scratches her ribs cool air that she is made, and the caught. At the end She

and the back of interested in. Her berries she of the hallway, scratches her ribs

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looks for the hands are gloved. texture of the long ladder to the door And she moves

nodes along the She walks slowly. grass, the weeds, that is marked #9, again, towards the

wall, but she does She the moss in the Lisa leans against room that is used

not pay too much remembers the swamp. The the wall, and she as an alternative

attention to their moor, the salt berries, again, she feels the pleasant sitting room.

behaviour. The air flats, the ground- remembers the texture of the

is cool today in nesting birds. She taste of the

(Figure 2.3)

Lisa   walks too   much in. Her feet birds.   She swamp. The the ladder to   She

the hallways attention to are bare. Her remembers berries, the door that scratches

and she their hands are the traps that again, she is marked her ribs

scratches behaviour. gloved. She she made, remembers #9, Lisa again, the

her ribs and The air is walks and the the taste of leans against itch. And

the back of cool today slowly. berries she the berries, the wall, and she moves

her neck. in the She gathered, the smell of she feels the again,

She looks hallway and remembers the texture the fish she pleasant towards the

for the nodes it is the walk the moor, of the long has caught. texture of room that is

along the in the cool the salt flats, grass, the At the end of the rubber used as an

wall, but she air that she the ground- weeds, the the hallway, on her alternative

does not pay is interested nesting moss in the just before shoulder. sitting room.

(Figure 2.4)

Lisa she does cool air remembe and the again, the feels the moves
walks the not pay that she rs the berries she hallway, pleasant again,
hallways too much is moor, the she remembe just texture of towards
and she attention intereste salt flats, gathered, rs the before the the room
scratches to their d in. Her the the taste of the rubber on that is
her ribs behaviou feet are ground- texture of the ladder to her used as
and the r. The air bare. Her nesting the long berries, the door shoulder. an
back of is cool hands are birds. grass, the the smell that is S alternativ
her neck. today. in gloved. weeds, of the marked he e sitting
She looks the She remembe the moss fish she #9, Lisa scratches room.
for the hallway walks rs the in the has leans her ribs
nodes and it is slowly. traps that swamp. caught. against again, the
along the the walk S she The At the the wall, itch. And
wall, but in the he made, berries, end of and she she

(Figure 2.5)

Lisa walks the hallways and she scratches her ribs and the back of her neck. She looks for the nodes along the wall, but she does not pay too much attention to their behaviour. The air is cool today in the hallway and it is walk in the cool air that she is interested in. Her feet are bare. Her hands are gloved. She walks slowly. remembers the She remembers the moor, the salt flats, the ground- nesting birds. She remembers the that she made, and the berries, she gathered, the texture remembers the weeds, the moss in the swamp. The berries, again, she the taste of the berries, the of the fish she has caught. At the end of the hallway just before the ladder to the the that is marked #9, Lisa leans against the wall, the to the door texture of the rubber should er. She scratches her ribs again, the pleasant itch. the she moves again, toward s the room that is used as an alternat ive sitting room. And

(Figure 2.6)

Lisa walks the hallways and she scratches ribs and the back of her neck. She

looks for the nodes along the wall, but she does not pay too much attention to their

behaviour. The air is cool today in the hallway and it is the walk in the cool air to that she is

interested in. Her feet are bare. Her hands are gloved. She walks slowly. She

remembers the moor, the salt flats, the ground - nesting birds. She remembers

the traps that she made, and the berries she gathered, texture of the long grass,

the weeds, the moss in the swamp berries . again, the remembers the taste of

the berries, the smell of the fish The caught. At the she hallway, y, just before

the ladder to the door that marked #9, she has Lisa leans end of the wall, and she feels

the pleasant itch. texture is rubber on her should against She scratch ribs

again, the And of the she moves again, toward er. room that used as her es alternat

ive sitting room. And she moves toward the room that is used as her alternat

(Figure 2.7)

The use of columns in literature has conceptual precedent in concrete poetry, Derrida's *Glas* (1974), and in more recent examples in works such as Johanna Drucker's *Diagrammatic Writing* (2013), which she describes as a demonstration of how 'a book is not a static object but a dynamic space, not a fixed and final expression but an organized arrangement of elements whose spatial relations encode semantic value' (Drucker "Diagrammatic Writing and Stochastic Poetics" 2). In *64'53"; or, World of Storms* I have attempted to move the approaches seen in these precedents into new territories, not only using the spatial layout as a disruptive strategy in itself, but allowing this disruption to perform alongside and frame the external elements of the work (recorded and ambient sound) in order to highlight the multimodality of the reading event.

Cage frequently made use of the column format in his published writings, with the partitions sometimes separated by vertical lines. In *Lecture on Nothing*, *Lecture on Something* (see: Cage, *Silence* 109,128), and *Julliard Lecture* (see: Cage, *A Year* 95), for example, the text appears to run in four column units down the page. Here the produced spatial notation between the columns causes off-beat and incongruous pauses throughout the sentences, as they are read from left to right. This strategy can be identified as the main method used by Cage to include the sounds of the environment among the written text when the work was spoken aloud – the spatial pauses function in much the same way as the earlier cited example of the open window during Suzuki's lecture, which allowed 'external' sounds to enter the internal lecture space. In *How to Pass, Kick, Fall and Run* (see: Cage, *A Year* 133), Cage uses columns in a traditional newspaper format, designed to be read, starting in the left-most column, from the top to the bottom. In *Empty Words*, the spatial freedom afforded to the reader is greater – it is unclear for example, due to the

lack of logical sense in the passages, if one should read across the page, or down the page, or if the words and fragments of words may be read in any order (see: Cage, *Empty Words* 65-76).

Due to the habitual reading process of scanning from left to right in Western society the presentation in *64'53"; or, World of Storms* encourages a reading that takes place across the columns rather than down them, forming a new text from the used library of words, and creating a semantic indeterminacy that is not a result of authorial decision making. This semantic indeterminacy offers an unpredictable and temporal sensation, a 'suspension of the reader' during the act of reading due to the lack of logical and syntactical sense produced through conventional reading responses to the arranged text (Fish 73). Neologisms are produced by reading across the column structures, though the original narrative text will always be present on all pages and can be read as such by consuming the text from top to bottom, and progressing left to right through the columns. This strategy however requires additional effort to firstly determine the number of columns, and secondly, to identify which words, or partial words are contained within each column.

Recalling again the earlier comments by Johnson, which refer to Cunningham's 'simultaneous vision', where 'there is no central focus, except where the observer … concentrates at any moment (J.Johnson 77), the column technique has been an attempt to form an analogy with this approach, while additionally exploring a prototype methodology of human/computer generative text production, aligned with Cage's other 'Writing Through' projects and his treatment of a text as a 'reservoir' (Cage, *Empty Words* 65). Once again, the presentation of the text in this manner has been intended as a

further strategy for encouraging the attending subject, as a sphere of attention, to undergo more frequent radical transformations within the sphere – the reader can choose to discover the neologisms and disjunctive syntax, they may invest in the challenge of reading against the grain of the presentational format in order to engage with the indeterminate narrative text, or they may choose to employ these strategies sequentially, or use alternate reading methods from page to page – the attending subject may read one page across the columns, followed by another page read down the columns. The use of each strategy occurs within the same time and space as the external events and sounds of the work, allowing further interpretations to occur at the point of reader response.

Even through this disjunctive presentational model, the consistency of the character names and objects as they appear throughout the text continues to give the work a sense of cohesion, of an internal space of the quasi-world – irrespective of the unconventional layout – due to the limited vocabulary used within the work. The character names of 'Lisa', 'Hannah', 'Laura', Michael' and 'the old man', generally remain intact regardless of the column lengths, while named rooms and objects also provide a sense of consistency, recurring and repeating throughout.

Through this presentational system, it is still possible for the text to appear as a single page unit if the column selection determines one single column of text. It is for this reason that the extensive and meticulous process of creating an indeterminate, loose leaf novel in the first instance is of importance. Where any found text, including linear texts, could be used as part of this technique with similar results, for this working method, and the overall focus on expanding the interiority of the novel, it has been deemed necessary that

the material that is processed by the chance operations has been an original indeterminate text, specifically designed to be read in page units.

The layout of the prototype version is also individual to each copy of the text – chance operations have been used to determine the layout of each page unit of each of the initial copies of the work, resulting in the effect that each copy is unique. Here, the use of individual layout in each of the copies has been a further attempt to discourage a content-driven discussion between readers of the text. Instead, upon realising the difficulty of having meaningful conversation about the text-as-an-object, it is hoped that readers will focus their discussion on the experiential effect of the text, their response to the alternative reading processes involved, and the dialogues that have formed between the different modes.

Durational Reading

Returning to the wider discussion of the formal presentation of the visual element of the writing in *64'53"; or, World of Storms,* and building upon the considerations of the work's physical form, narrative indeterminacy, and unconventional layout as strategies for the disruption of conventional reading processes, I will now discuss another aspect of the novel, one intended as a connecting theme to the forthcoming section relating to the role of sound within the work. As the title of *64'53"; or, World of Storms* suggests, this aspect is the advocated duration of the work. John Cage, speaking of musical composition, proposes in his 'Experimental Music Doctrine' that 'any valid structure involving sounds and silences should be based, not as occidentally traditional, on frequency, but rightly on duration' (Cage, *Silence* 13). Within the context of literature one might substitute frequency with traditional organising features such as page numbers,

plot, or the material length of the written work. The durational organising principle in *64'53"; or, World of Storms* marks another employment of a Cagean aesthetic, and an alternative strategy for the reader, as a sphere of attention, to participate in the reading event under new conditions, through which new modes of perception are able to take place and a chance poetics can be made available.

64'53"; or, World of Storms calls for a durational parameter through which the writing is to be read. Here, the duration that has been suggested, when coupled with the disjunctive physical form and the unusual layout of the graphical text, results in a resistance of the possibility that the text can be read in its entirety within these parameters, at least within conventional terms. The duration of 64 minutes was selected, in a similar manner to the 64 page units, as a reference to the 64 possibilities outlined in the *I-Ching* or Chinese book of changes – a significant compositional tool for both John Cage and Merce Cunningham. The additional 53 seconds has been added due to the average start-up time of the Raspberry Pi Zero single-board computer. In reducing the necessity, or even the possibility for the text to be read in its entirety under these time constraints, the text promotes its treatment as one of a performative event rather than as a text-object.

Conceptually, this durational structure also places the sound element of the work on equal standing with the written word. This approach departs from previous examples of 'books with soundtracks' where the act of reading a textual work in its entirety has been the organising principle upon which the sound or music element of the work must adhere to: the auditory component would stop before, or be repeated until, the written work is read in its entirety, and the work would be considered incomplete until the written text has been read throughout. In *64'53"; or, World of Storms*, the time structure will signal an

end to the field recording collection, at which point the reading performance can also come to an end. Any extended reading beyond these parameters would represent the beginning of a new performance.

Arvidson writes of the phenomenal temporality in the 'streaming' process of the sphere of attention (Arvidson 8), also noting how the 'temporal context of attention' has recently become a more popular area of attention research, citing the work of Olson and Chun within the field of psychology as an example (see: Arvidson 20). Here Arvidson's considerations of temporal sequencing studies, and specifically temporal context cueing, are listed as promising avenues for attention research as 'it forces the researcher to consider the effect of non-focal, contextually relevant information' (Arvidson 48). Furthermore, in attending to sound within the context of theatre, George Home-Cook notes the temporality of the phenomenological experience through his accounts, when he refers to the '*play* of listening', linking movement in time with the physical movement of sound through space as he listens (Home-Cook 86). Through the introduction of a temporal parameter, the text of *64'53"; or, World of Storms* intends to move closer to a theatrical space, and to be treated as such, rather than inviting interpretations through monomodal approaches offered in literature studies.

Although this durational parameter is not a rule to be enforced, it nonetheless provides an invitation for the reader to approach the work differently to how they would approach a conventional novel narrative. My focus has been on the relationship between the interior text and the exterior sounds and events that happen to take place during the allotted time, and in the location where the reader chooses to engage with the work. Repeat performances are encouraged, further establishing the formal message that the environing

world, and specifically the sonic aspects of the environing world, are not only unique for each reading, but are able to play a dynamic role as a result of a creative and attentive reading-listening practice whereupon the discovery of a chance poetics between graphical text and sound is made available.

SOUND

The perceptual inclusion of sound within the stage space of the act of reading is the central focus of this research practice. Where the visual and narrative elements of the written work have focused on disrupting the habitual and conventional methods of reading graphical text – in order for the sphere of attention to undergo more frequent radical transformations, promoting an awareness of 'external' environmental occurrences and the continual presence of sound during the act of reading – it is the inclusion of a fragmentary collection of audio field recordings within *64'53"; or, World of Storms* that accounts for the most essential formal step in exploring the aims of the project. With the aid of a mini amplifier, 5W speaker, 5W surface transducer, battery pack, on/off switch, and a Raspberry Pi Zero single-board computer, programmed to play a library of recordings at random, and to shut down after 64 minutes – when the performance will come to an end – *64'53"; or, World of Storms* includes sound, not as an illustrative, ambient, or musical accompaniment to the written text, but as an equal element of the text, intended to form a dialogue with the printed material through the principles of assemblage.

This section will firstly explore how *64'53"; or, World of Storms* rejects textual descriptions of sound in favour of the use of recorded sound, positing instead a consideration of audio field recording as a contemporary writerly technique – a strategy used in response to prevalent approaches by some writers of fiction, as well as

practitioners within the field of Sound Studies, for whom drawing the reader's attention to sound and listening within their writing practices has been addressed through the referential function of language. In place of this approach, *64'53"; or, World of Storms* presents the sound element of the work as sound, unmediated by words. In choosing to 'silence' my writing in this regard, by rejecting an approach of consciously describing sound through language, I have aimed to allow the autonomous elements of the work to perform their own functions within the ensemble, in a manner similar to the performances of the Merce Cunningham Dance Company.

The method used in the collection of the field recordings, the recording strategies employed throughout this method, and finally the presentation of the field recording collection according to a non-predetermined order within the durational constraints of the piece, will each be addressed in the following section. I will also examine the relationship between ambient sound and recorded sound through volume variance between the different recordings. Reference to the use of framing during the listening process will be made, and the formal presentation as a single function device – which allows for the blurring of boundaries between presented material, and the unpredictable presence of ambient sound within the stage space of the reading event – will be addressed. These 'external' factors have been designed to appear in dialogue with the 'interior' aspect of the quasi-world of the written graphical text. As with the previous section of this chapter that centered on the visual and narrative elements of the work, I will firstly outline these sonic aspects of the text as independent and autonomous practices in their own right. This approach will provide further foundation for the concluding section of the chapter in 'The Text Event'.

Silenced Writing

The use of descriptive language as a framing device for sound and listening can be considered an effective approach within writing practices, highlighting the aural sensations or experiences that are sometimes underrepresented in favour of visual descriptions in written text. In such descriptions of sound, the use of writing is often employed in inventive ways, focussing on the sounds heard and the experience of hearing, conveying to the reader the attentive practice of close listening through eloquent and often poetic accounts. These textual descriptions create an interesting lens through which the author represents the world, in some cases providing important documents of historical soundscapes during eras when modern methods of recording were not readily available. In *The Soundscape: Our Sonic Environment and the Tuning of the World* (1977), R. Murray Schafer coined the term 'earwitness' to describe such authors whose acute attention to aural environments provide the reader with convincing forms of textual realism. Schafer cites Tolstoy, Thomas Hardy and Thomas Mann as authors whose authentic descriptions of sound serve as historical record in this respect.

Examples of a descriptive approach to the inclusion of sound in literature can also be seen in contemporary works of fiction, such as Luke Williams's *The Echo Chamber* (2011) – where the narrative focalisation emerges from a character with a heightened sense of hearing:

> I hear the calls of Jankara market women, broadcasting the succulence of their goods with words I do not understand, so that amidst the commonality of staple foods – palm oil, yams, groundnuts and spices – I fancy I hear entreaties to enter card games, river cruises, witch-hunts. The elephant grass at the edge of our garden obscures my view of Ade, our servant-boy, but I can hear him; he is making

telephones from empty cans and lengths of string. In the distance the thud of

leather striking wood tells me that Riley has scored another four (Williams 6-7).

Stephen Benson argues that within a musical context, textual descriptions which centre on the act of listening can be considered a valid and important document of musical performance, when he claims that, '[t]he gap between the literary representation of music itself need not be read as a mark of the paradoxical presence of the ineffable. … Ineffability is a verbal effect, but it is a felt experience nonetheless, one which no doubt tinges many of our everyday musical encounters. … [Through text] the absence of music only serves to bolster its (music's) strength, to make it more palpably present' (Benson, *Literary Music* 142). More recently, Benson has acknowledged more explicitly the limitations of a descriptive approach, though, through his comments, he stands by description's value as a document of a close-listening practice:

> My language, as it works to disaggregate and give adequate expression to what I
>
> hear, is effortful. … critical inarticulacy is admissible nevertheless, and worth
>
> preserving, as the mark of an aesthetic response such as I am seeking to register
>
> here and to work through. (Benson "The Nondescript" 67)

As with Benson's rationale above, in the non-fiction prose of sound art practitioners and writers such as Brandon LaBelle, David Toop, Hillel Schwartz, and Daniela Cascella, the act of describing sound is considered central to the experiential phenomena each writer wishes to convey. In Cascella's work, for example, the experience of listening and its relationship to writing and reading is discussed through phenomenological accounts and recounted memory:

23 January 2011.

I think of reference in Writing Sound as I read Chapter Two in *Pandora's Hope* by Bruno Latour, entitled *Circulating Reference:* the French sociologist describes the procedures carried out by soil science experts and geographers to translate soil samples from a forest into a map of a forest, and compares such procedures to the use of reference: *to pack the world into words*, he says. In the same chapter Latour shows how *in losing the forest we win knowledge of it*. I would like to draw a parallel between the transition from forest to map and the transition from listening to writing, with particular regards to the function of reference: that is, packing into words the world of listening, while being removed from it.

In losing sound we gain knowledge of it: in words (Cascella, *En Abîme* 89).

Here, Cascella goes on to recall the Latin verb *referre* (to bring back) when she describes the layers of transformation from listening to description, employing mapping, navigating, and 'walking about' metaphors aptly in relation to her own position, the process of 'writing sound', and of Latour's writing on territory and representation.

While this idea of 'bringing back sounds' through words is undoubtedly interesting, it has not been the focus of this study. *64'53"; or, World of Storms* has set out to expand the stage space during the act of reading by de-centring the thematic focus of the attending subject as a sphere of attention, and to invite the reader-listener to include the traditionally marginal events and sounds as relevant and related, and in dialogue with the 'interior' aspect of the written work. The approach has been based on my creative decision to use formal innovation, rather than descriptive writing to promote the effect of a Cagean listening practice during the act of reading. What my research practice seeks to develop is a site or opportunity for the reader to experience the combination of sound and text,

and to perceive the unplanned, chance poetics of the encounter between the modes, rather than describing a listening practice through the mode of writing. My approach has sought to introduce a different dynamic in combining the two mediums – to expand the stage space of the act of reading and to consider the act of reading as a further site for creative listening – rather than incorporate the features of one element within the other.

Field Recording in *64'53"; or, World of Storms*

The inclusion of a collection of field recordings in the text of *64'53"; or, World of Storms* sets out to explore three main areas for questioning. The first – with reference to the above paragraphs on abandoning the referential function of language in the depiction of sound events – considers the place of field recording as a writerly technique to be used by the contemporary practitioner. This notion is supported by Michael Pisaro in his essay "Rubies Reddened by Rubies Reddening" when he comments on how "[f]ield recording, composition and poetic text are three forms of writing' (Pisaro, "Rubies Reddened" 109), and it also finds a functional counterpoint within Stephen Benson and Will Montgomery's comments that consider the perspective of 'literature *as* field recording' (Benson and Montgomery 23). The second question relates to field recording's function within the text of *64'53"; or, World of Storms* as an invitation for the attending reader, as a sphere of attention, to perform frequent Singling Out, Synthesis and Margin to Theme Capture transformations as they encounter the autonomous modes within the durational stage space of the reading event. Thirdly, I will explore the use of field recording as a framing device for the mode of ambient sound to be included within the stage space of the reading event in a similar fashion to how the field recordings themselves are perceived.

Recalling Duchamp's comments on removing the 'retinal aspect' of his work through the inclusion of an additional 'boxed' element in *The Green Box*, the inclusion of field recording in *64'53"; or, World of Storms* serves to distance the purely literary notion of printed graphical text, with the field recording aspect of the work intended as separate and functionalist, a catalogue of descriptive sound rather than music composed or selected according to aesthetic purposes, or intended to support the written material illustratively. Both aspects, the aural and the visual, when consulted within the same space and time make available a chance poetics to which the reader can exercise a 'response ability'.

In their collection of transcribed interviews with contemporary sound artists, *In the Field* (2013), Cathy Lane and Angus Carlyle note how, aside from, 'the broadly "representational" aspect of field-recording …where a particular reality [is] uncovered for an audience through attentive listening, skilful recording and careful re-presentation' (Lane and Carlyle 13), the qualities of the sounds themselves, with their unique movements and complexities, have also provided their own motivation for these developments to take place, and for the use of field recordings to enter new territories within a variety of disciplines.

There is an inherent indeterminacy present in our perception of sound and noise, and, in particular, in unseen sound events, something which links well to the references to 'external' events in the text and the use of the demonstrative 'this' discussed previously. Hillel Schwartz notes in his comprehensive volume, *Making Noise: From Babel to the Big Bang & Beyond* (2011) how, 'noise personified is a trickster. We cannot fix noise to a single meaning, nor can we completely rein it in' (Schwartz 28). Salomé Voegelin also speaks of the 'phenomenological doubt of the listener' through her analysis of the contrast

between our visual perception and our aural perception. She notes how, in Western societies in particular, the cultural interpretation and valuation of seeing often 'subsumes sound' to a supporting role: 'Sound fleshes out the visual and renders it real; it gives the image its spatial dimension and temporal dynamic … [however] these are attributes of the object seen, ignoring the event heard' (Voegelin xi). Making a similar point, Andrew Whitehouse speaks of his frustration at, despite having heard the call of a corncrake several times on the island of Islay in western Scotland, he has not yet seen this particular species of bird. He describes how, 'one of the cornerstones of our ontology is the idea that the world is filled with objects and that sounds have their source in the actions of these objects … Hearing a bird, in this way of thinking, is no different to seeing its nest or its tracks. They are made by the bird, but they are not the bird itself' (Whitehouse 72-73).

I have sought to make use of this inherent indeterminacy, and the 'phenomenological doubt' of the listener in *64'53"; or, World of Storms* by using the text of a collection of field recordings – and their chance determined presentation – as an indeterminate narrative device that can be related to the 'interiority' of the written text in a manner that promotes free association. It has been important that the field recordings in this instance are not illustrative of the interior events within the text, and that through listening to the aural aspect of the text in isolation, the sound text is able to produce its own interpretative response through the undecidability of fixed meaning in its assemblage.

My approach for making these field recordings has been loosely based on the method that Cage used in *Roaratorio* (1979), when 626 of the 2293 locations mentioned in *Finnegans Wake* (1939) were selected according to chance protocol, recorded, and then used as a

framing device for Cage's reading of his 'writing through' of Joyce's text. Cage comments in the liner notes of *Roaratorio*, how he had 'previously connected the notion of place and sound …in *Variations IV* which was written for the Merce Cunningham Dance Company [and was] a piece that was not concerned with sounds but only with the places in which they would be produced' (Cage, *Roaratorio* 14). In *64'53"; or, World of Storms* I have also sought to examine this notion of sound and place, although my approach to the recording process has not been as prescriptive as Cage's in this case, nor has it been pre-determined by an existing text. Instead, I have adopted a similar approach to that of the ongoing project curated by the John Cage Trust and promoted by Cage's long-time publisher C.F. Peters, in the *4'33" App*, which advocates the recording of multiple versions of the three-movement piece, and for these recordings to be uploaded and shared on an online map[18].

Through my field recording practice, I have recorded multiple versions of *4'33"* using varying time structures between 2 minutes and 19 minutes, with the only general rule or principle that I followed being an aversion to personal involvement in the recording process wherever possible: no events have been staged, and all recordings have taken place in 'exterior' locations. Some recordings were made when I arrived at a location, others were made on the move, mostly while walking or on public transport, and other recordings were started after I witnessed something interesting going on. I have used a ZOOM H4n recorder – though I do not believe specialised equipment is overly important or necessary – to steadily build up a library of different soundscapes from a diverse range of locations, representative of where I happened to have been at various times in the past

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[18] Also pertinent here is Cage's second version of *4'33"*, entitled *0'00"* (1962).

several years. Non-human entities, objects, weather, and other natural forces, different forms of transport and machinery, as well as fragments of human conversations in Czech, English, Finnish, German, Norwegian, and Romanian have been recorded[19]. Personal memories have been documented as well as objective documentation of wider events involving communities that could serve additionally as socio-historical records – for example there is a recording taken during the construction of the new library at the University of Roehampton, and one during the annual meeting of elderly members of the rural municipality of Puolanka, Finland, as they sharpen scythes, cut summer grass, and discuss their youth. There has been no altering or 'cleaning up' of the recordings in post-production, and it is common to hear the button of the recorder being pressed, or the microphone being bumped, or buffeted by the wind on occasions. It was important for the research practice that these events have been represented in the novel through the mode of recorded sound, rather than being transcribed into writing, and that the reader would have the opportunity not only to experience the sensation of listening to the individual recordings, but to engage in a creative practice of relating the recordings to one another as they are presented according to a non-determined order within the durational parameters of the work.

The produced field recordings have been presented using a Raspberry Pi Zero single-board computer that has been programmed to perform the singular function of playing the collection according to a non-pre-determined order for a duration of 64 minutes whenever the switch inside the box is activated. The entire library of recordings amounts to over 100 works, representing over seven hours of material. Not only will the order of

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[19] The recordings that depict human conversations were all made in an open manner, in line with the ethics approval that was applied for at the beginning of this research project. All recording equipment was visible to those speaking and no covert recordings were made (see Appendix A for ethics declaration).

the recordings be different with each performance, but the durational parameter ensures that a selection, rather than the entirety, of the collection is presented for each performance.

The field-recordings in *64'53"; or, World of Storms* can be considered as a record of locations, voices, and objects, as well as a series of events which occur in these locations. For the listener, these recordings represent a challenge to decipher, or to establish the 'location', 'event', 'voice' or 'object' that has been recorded, either through a complex process of sound identification, which may include, for example, noting the 'Soundmarks', 'Keynote Sounds' and 'Signals' according to R. Murray Schafer's taxonomy (see: Schafer 9), or through some insider knowledge or exposition: i.e. familiarity with the location, recorded event, object, or speech, or through information provided as paratext in this commentary, for example. This point pertains to each individual field recording, but also in relation to the sound design in *64'53"; or, World of Storms* as a whole, which is made up of a substantial collection of field recordings. The listener therefore may try to resolve this indeterminacy through an attempt to figure out the objects, events, voices, and locations which produce the sounds in each of the recordings, as well as through their attempts to uncover the possible relationships and causality between the recordings and the manner in which they have been organised and presented. In an approach similar to the textual descriptions of the interior space of 'Home', this is a task which is not designed to have a conclusive meaning, even if the locations, events, voice and objects contained within the recordings are accurately identified.

The second consideration I wish to make, with respect to the earlier comments by Schwartz, Voegelin, and Whitehouse, relates to our cultural relationship with the perception of sound, and how we naturally seek to relate sound to objects[20], and to infer causality between our visual and aural perceptions in order to make sense of what we are hearing. And because *64'53"; or, World of Storms* makes clear that sound is an included feature of the work (in the events that follow the pressing of the switch), the natural assumption based on its appearance as a novel – despite its unconventional form – is that the written language will provide the exposition for the objects, events, and landscapes in the sound design in order to create some sense of unity for the reader's perception. This approach is also not the case.

The role of the field recordings in *64'53"; or, World of Storms* functions on a principle of collage rather than unity, and, in order to encourage this principle, I have refrained from providing any obvious link between the field recordings and the written text. In fact, given the vague, incomplete setting and perspective in *64'53"; or, World of Storms,* no single or obvious relationship could ever be established. This approach is an effort to set 'the theorising mind to theorising' (Cage, *Silence* 10) in an audience – to allow the reader the freedom to question and ponder the connections between the field recording and the text, and to respond to the text/sound experience with their own interpretations, without a fixed meaning or goal being promoted by the author.

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[20] A good example here can be found in the figurative use of 'foley' sound in the sound design process of films, radio plays, and video games, when artificial constructions are used in place of the 'real' sounds – i.e. the sound of split coconut shells drumming on a table can be synchronised to a horse's hooves on screen. This is an effect which largely goes unnoticed by the average member of the audience.

Ambient Sound

64'53"; or, World of Storms uses the frequently changing field recording element of the text to frame the ambient sound that is also present within the stage space of the reading event. Some of the recordings within the collection depict dynamic, soundful environments, while others – which have been produced in quieter locations – skirt the boundaries of perceptibility when they are played back to the listener. As soon as it is understood that recorded sound is an active formal element of the reading event of *64'53"; or, World of Storms*, the perceptions of the reader, as a sphere of attention, can begin to anticipate sound as relevant in their engagement with the text. However, if a quieter field recording is presented by the Raspberry Pi, the ambient sound of the environment is also able to enter into the stage space more freely, resulting in an undecidability in perception. Depending on the site where the reading takes place, and as the perception of recorded sound is engaged with dynamically – at times thematic within the sphere, and at other times becoming marginal – the reader may begin to find it difficult to distinguish between the recorded sounds of the text, and the external happenstance sound elements within the reader's environment. It is through this realisation that the reader may consider how sound has been occurring during all previous reading experiences, and that sound will also occur during all future reading experiences. If the reader, as a sphere of attention, is open to the dynamic and radical shifts and transformations of the sphere – treating all sound as relevant to the stage space of the durational reading event – new modes of perception can become available and a chance poetics can be discovered. *64'53"; or, World of Storms*, through its operation outside of traditional communicative structures, uses formal innovation to provide a platform and occasion for these new perceptions to be considered.

The effect experienced during the transition between a dynamic and quiet recording produces a sensation which aligns with what Home-Cook refers to as a 'false sound bed':

> [f]alse sound beds are created by playing back a recording of environmental space that we tend, ordinarily, not to notice. Since background noise is, by its nature, usually on the fringes of our attentional radar, we tend to forget that it exists altogether. Hence, when this manufactured or false ambient sound is suddenly 'switched off', a range of intriguing, and highly dramatic, registers of experience are brought into being (Home-Cook 76).

The almost imperceptible recordings that form part of the collection in *64'53"; or, World of Storms* function in a similar manner. And although the recordings are never 'switched off' (except at the end of the performance), the lack of perceptible sound during some of the recordings will function in a similar manner at the point of response for the attending subject, creating the effect of a Margin to Theme Capture transformation that addresses the ambient sound of the stage space of the reading event. Furthermore, as the recordings of varying lengths perform, the frequent and indeterminate changes between soundful and quiet recordings allow for continual readjustments in perceptions to occur.

The obvious precedent here is Cage's *4'33"* which, as discussed in the previous chapter, uses the framing devices of a performance event and the expectation of the traditional mode of music to allow the audience, as spheres of attention, to transform previously irrelevant and unrelated marginal events and sounds into thematic ones. And although a genuine (or plagiarised) Cagean 'silence' is not presented during *64'53"; or, World of Storms*, the quieter recordings – such as those recorded in deep winter near the Paljakka nature reserve in the Kainuu region of Finland – will be, in comparison to most ambient

sounds present during the reading event, almost as imperceptible as a complete lack of presented sound material.

Recalling Joan Retallack, and Marjorie Perloff's earlier comments on Cage's *Lecture on the Weather*, the above strategy is another attempt to 'dissolve' the boundary between internal and external space within the text event, allowing the external events of the environing world to be included within the sphere of attention with the potential to generate new perceptions and alternative reading strategies. Where a natural 'response ability' on the part of the reader is helpful in realising the present chance poetics through new forms of perception, it is the formal presentation of the work that provides the process of frame awareness.

This formal presentation has been made possible through the Raspberry Pi Zero single-board computer, as well as the online instructions for programming the open source software and hardware (see: Appendix B). The simplicity of a single function device, activated by a single switch, and operating with no volume controls, was deemed more suitable to the aims of the project compared to a digital app design for existing platforms. The first reason for the selection of this presentation model is that apps for smartphones and other mobile devices require continual resources for testing and updating which would ultimately limit the lifespan of the research (see: Bruhn 116). The second reason is that existing smart devices and other technology, as ubiquitous parts of everyday life, are also expected to be included as one of the external elements within the work, existing as they do in their own natural form. If an email or text message happens to arrive on the attending subject's nearby electronic device during the reading event, the reader, as a sphere of attention, is free to abandon the presented text in order to check or respond to

these occurrences. In these scenarios, the sound element of the text will continue, introducing further reading/listening dynamics through an engagement with other forms of text and other forms of reading. Again, because the text event of *64'53"; or, World of Storms* is determined by a duration, rather than through the requirement of having to read a written text in its entirety, interruptions from external events and occurrences are not thought of to be distracting in this case – rather they can be included within the same space and time in order to emphasise the notion that the reading event of each text has a unique soundscape.

THE TEXT EVENT

In taking Cage's collaboration with the Merce Cunningham Dance Company as one of the main analogies and points of reference for the practice-as-research carried out within this project, the conceptual focus of *64'53"; or, World of Storms* has been concerned with the chance poetics that manifest themselves when perceptions are drawn to three autonomous events performing within the same space and time – in this case it is the visual event that occurs during the act of reading, the aural events that occur while listening to the mode of field recording, and the mode of ambient sound. Here, the opportunity for the attending subject to exercise a 'response ability', in a unique manner, is made available through the project's aim of a de-centralisation of the stage space of the reading event. Where the Cage/Cunningham aesthetic had been developed within the context of Modern dance in 1950s America, the research practice of *64'53"; or, World of Storms* has sought to translate this conceptual and formal model into the space offered to the field of literature in the digital age, and to offer a similar perceptive disjunction that resonates with phenomena such as parallel screen use, intermittent text notifications,

saturated aural environments, as well as the continual negotiations that take place between digital and physical space in the contemporary moment.

Until this point this chapter has attempted to describe the construction of the two main elements of the text of *64'53"; or, World of Storms* (words and sound) and I have made several references to the intended experiential effect of attending to these autonomous elements within the same time and space during the reading event, making suggestions as to the perceptual shifts that can occur as a result, primarily using Arvidson's model of the Sphere of Attention. This section therefore intends to summarise, conclude, and explore further *64'53"; or, World of Storms* as a multimodal ensemble work, one in which the separate elements in an assemblage are combined by the reader, and in which the internal text meets the external stage space of the reading event.

The aim of *64'53"; or, World of Storms* has been to create a form or genre of writing that is based on the incidental interaction between sound and the written word as they occur within the context of their environment. These points of incident are intended to be experienced as sensation, creating dynamic, radical transformations in the sphere of attention and introducing new opportunities for perceptive engagements with regard to the work and its surroundings. These engagements are unique to each reading, and will change according to a variety of factors. For example, in the case of a page unit displaying a single column of continuous prose, if the reader engages with a section of the textual narrative that describes Michael cycling on the generator bicycle, Lisa walking the hallways, the old man sleeping, the mushrooms growing, or the two girls playing, while – at the same time – they listen to the recorded sound of the wind, the sea, footsteps on snow, a passing car, the alarm call of a Mute swan, or the ambient sounds of their own

environment, the sensation of the experience is suggested to be unique each time, providing that the attending subject is responsive to the aural element of the work.

If many column structures have been determined through the chance operations, and the effect of the text allows for neologisms as well as unusual phrases to form within the written element, the disrupted text, read in this manner, has an effect similar to that of a mishearing of an overheard fragmentary conversation. The temporal hesitancy involved in the close-reading process of the indeterminate text on a word-by-word level – the 'suspension of the reader' as described by Stanley Fish – can provide a further interesting site for the attending subject to discover the sensations produced between text and sound, outside of the suggestions of narrative. These instances may bring about unique responses if they are read in conjunction with different field recordings, for example, recordings depicting the sounds of wind chimes, conversations in a foreign language, the reel of a fly fishing rod, the station announcements on public transport, or again, the ambient sound that occurs naturally during the act of reading. The reader may also decide to attend to the play between the field recording collection and the ambient sound of their environment, and only occasionally refer to the provided text, or they may also abandon the textual material for longer periods of time. The emphasis has been on introducing a durational platform or arena for the reader to make their own discoveries related to multimodal reading, the selection of new 'reading paths', and the consideration of the act of reading as a new site for creative listening practices to emerge.

The aim of the piece has been to showcase a combination of separate events as a site for new perceptions to be arrived at, and not in any way to force these perceptions upon the reader – the work centres on individual discovery, rather than on the presentation of

specific combinations of words and sound, or attempts to synchronise words and sounds according to the author's tastes. Equally, if a particularly harsh or unpleasant sound happens to occur at the time of reading from 'outside' the text (the testing of a fire alarm in a nearby building, for example), the reader may struggle to read fluently, altering the experience of the text. Such occurrences are not thought of as negative – in contrast to the discourse related to *Irrelevant Sound Effect* (see: Savage et al., Beaman, Perham & Vizard) – but rather they are seen as natural occurrences within experimental conditions, leading to further contemplations as to how sound may affect the reading process within the durational constraints suggested in the work's title.

In an interview with the Walker Arts Center in 1981, Cage and Cunningham discuss their collaborations, and the relationship that is formed between chance-organised Modern dance choreography and chance-organised sound as two autonomous elements that are concurrently present. Their comments are of particular pertinence to the aims of *64'53";* *or, World of Storms*, both conceptually and thematically. Here, Cage characterises the performative results of their collaborations as 'less like an object, and more like the weather' (Cage and Cunningham 00:02:05-00:02:09), an analogy that resonates with the earlier cited comments made by Cage in his interview with Daniel Charles, when he describes the idea of presenting a 'conversation', and a 'circus situation', where 'objects surge forth' (Cage, *For the Birds* 148).

The possibility of 'arbitrary relationships between actions within a performance' (Díaz 7), had been in Cage's mind as least as early as 1948 when Cage's theatrical production of Satie's *The Ruse of Medusa* was performed at Black Mountain College. This format, where unrelated activities occurred concurrently, was later developed in the production

of *Theatre Piece* in 1952 – which included simultaneous performances, readings, dance, and displays of art works within the same time and space – before being established as a consistent working method within the Merce Cunningham Dance Company.

In relation to *64'53"; or, World of Storms* the aim of the work has followed the Cage/Cunningham example and has sought to create, not a conventional book or text, but a durational occasion akin to what Johanna Drucker cites as a probabilistic system – within which stochastic processes, those akin to weather systems, can occur.

> Stochastic processes belong to the physical world, the realm of emergent, complex systems. They have a mathematical identity that distinguishes the ways they can be modeled as nonlinear, probabilistic processes. Unlike linear processes, which progress in predictable ways according to the changes in value in a variable, probabilistic systems (think of dice games or weather) do not. The mathematics of stochastic systems are complex, but the phenomena that conform to these models are common—the fluid dynamics of the atmosphere, social systems and relations of influence, traffic patterns, and chaotic behaviors are stochastic (Drucker "Diagrammatic Writing and Stochastic Poetics" 4).

It has not been my central aim in this critical commentary to provide my own account of the reading experience of *64'53"; or World of Storms*, or to impose my own interpretations or experiences upon the reader. Rather through the formal design, and the new perceptive models it hopes to encourage, it is anticipated that the effect of *64'53"; or, World of Storms* will be experienced as a multimodal ensemble, one which invites the 'response ability' of the reader in unique ways, akin to witnessing the types of processes as those listed by Drucker above. And it is through an active engagement with the work

where the reader stands to come into direct contact with the research enquiry through an adoption of a reading-listening practice. Here the dynamic and radical transformations that take place in the sphere of attention can uncover a series of issues and questions, framing this processural activity as a site of discovery for new knowledge. The work encourages the reader/listener to become a practitioner in this sense, actively participating through dynamic attending within the durational encounter.

Conclusion

John Cage wrote of how 'poetry is not prose simply because poetry is in one way or another formalized. It is not poetry by reason of its content or ambiguity but by reason of its allowing musical elements (time, sound) to be introduced into the world of words' (Cage, *Silence* x). In *64'53"; or World of Storms* it has been the inclusion of audio field recording and ambient sound within the 'stage space' of the reading event that marks an attempt to introduce these (Cagean) musical elements into the world of words. The novel that has been produced is original in its conceptual framework because of its durational organising principles, as well as its appearance as a multimodal work that deals with the tripartite relationship between field recording, ambient sound, and writing. Here, due to techniques of disjunction, and the disruption of habitual methods of reading that are encouraged, the aural and visual elements of the text are able to perform autonomously, allowing for a new consideration of poetics to be discovered by the reader/listener. This final section of the thesis will serve to reiterate the new knowledge that I have attempted to communicate through my practice and commentary, while additionally signalling towards future directions and possibilities for creative reading and writing practices as a result of the insights that this research has provided.

In following a Cagean 'experimental' methodology, *64'53"; or, World of Storms* has sought to introduce the reader to the chance poetics that are available between sound and graphical text during the act of reading. Here, the emphasis has been placed on the reader discovering the chance poetry or poetic moments that occur when the visual display of fragmentary narrative prose, or the illogical syntax within language itself, are perceived within the same time and space as a collection of audio field recordings and the ambient noises that occur naturally in the reader's environment. Through the modes of writing,

recorded sound, and ambient sound, the experiential effect of *64'53"; or, World of Storms* reframes the act of reading, and allows for a 'response ability' in the reader to take place. Overall, the novel has aimed to promote three central ideas: a consideration of field recording as a contemporary writerly technique, an exploration of reading as an activity that takes place within the wider and dynamic process of attention, and an examination of the availability of alternative perceptions relating to the ambient or environmental soundtrack that is present during all encounters with graphical text.

In *64'53"; or, World of Storms* it has been the unknown outcome of the experiment that has been the means by which the critical-theoretical ideas of the work have been communicated. The underlying principle in this approach is that, within disjunctive conditions that produce an unknown outcome, a productive means of discovering new perceptions within a given formal framework can be uncovered, promoting frame awareness in an audience and making available new perceptual models. The above chapters have highlighted this process from a theoretical standpoint, demonstrating the rigour with which the scholarly enquiry has been approached. The emphasis throughout the project has been on the unique nature of the sonic aspect of each reading event as it occurs in space and time, offering a departure from existing examples of 'books with soundtracks' that have sought to promote a composed or illustrative relationship between textual narrative and music. Likewise, the work has separated itself from the social and cultural phenomenon of using music as a 'concentration aid' for the reading of graphical text, an approach which strives to prevent Margin to Theme Capture transformations from occurring within the sphere of attention with respect to environmental sound.

Taking *4'33"* as a leading example of a formal experimental methodology that produces frame awareness in an audience – and being demonstrative of a work that conveys new knowledge and considerations of form in ways that have had a proven impact on arts research and practice – the project of *64'53"; or, World of Storms* has aimed to shift the practice of attentive and creative listening from one of music and sound studies, into a context within literature – to consider the act of reading silently as a further site *for* creative listening practices to occur. The work has also drawn from Cage's instructions for the 'purposeless' reading of his kōan texts, and the Cage/Cunningham aesthetic, whereby two or more autonomous events occur within the same space and time, making available the opportunity for a chance poetics to manifest themselves between elements. *64'53"; or, World of Storms* has aimed to de-centralise the 'stage space' of the reading event, freeing graphical text from its traditional role as the sole object of thematic attention.

The first chapter of this critical commentary discussed John Cage's treatment of ambient sound as a semiotic resource in *4'33"*, as well as how, in this example, innovative form leads to an instance of frame awareness in an audience, an approach which is considered a productive means of making available new perceptual models. The temporal nature of the act of reading was then addressed and the model of the 'Sphere of Attention' was formally introduced within this context. The model of the Sphere has been used to describe the complex and dynamic changes that take place within the processes of attention during the act of reading. Importantly, it has been identified that even as a reader engages thematically with graphical text, ambient sound is also present in the margin of the reader, who exists as an embodied sphere. Here, Synthesis, Singling Out, Elucidation, and Margin to Theme Capture transformations can be seen as some of the ways in which

thematic focus shifts between the 'interior' and 'exterior' arenas of the text event, making available a perception of the chance poetics that occur naturally between the modes of sound and graphical text. Aside from its application within the practice element of this thesis, these considerations may also open new avenues for the legacy of Cagean poetics, as well as the use of the Cage/Cunningham aesthetic within new contexts. More generally, and in line with George Home-Cook's thesis, the Sphere of Attention is advocated as a productive model for the theoretical discussion of the practice of reading-listening.

Chapter Two has aimed to describe the process and function of the research practice that has been created during this project, exploring the ongoing analogy with the Cage/Cunningham aesthetic, and describing in detail the layered aspects of the written and aural elements of the text, as well as their position in relation to the theory discussed in Chapter One. As a critical commentary, Chapter Two dealt with aspects of the work within three sections. The first of these sections centred on 'Writing', and focused on elements such as the composition of an indeterminate narrative, the loose leaf form, the unconventional presentation of the text, and the durational reading format that has been the suggested manner of engagement with the work. The second section focussed on 'Sound', with regard to the consideration of field recording as a contemporary writerly technique, the abandonment of referential descriptions of sound within my writing practice, and the formal inclusion of ambient sound as an active and dynamic resource within the text event, framed through the variance of volume within the selection of the audio field recording collection. The final section of the chapter concluded with 'The Text Event', as the components of the work are set in motion within space and time. Here, an emphasis on a first-hand engagement with the text as a means of encountering the

'knowing how' (Nelson 40) of the work, and the invitation for the reader to become an active practitioner in attending has been encouraged.

Overall, the practice has sought to establish the groundwork for further theoretical and practice-led research to be carried out on this interdisciplinary topic. The approach can be taken as an example of an alternative and open approach to 'construct[ing] a world' (Robbe-Grillet *For a New Novel*, 21) – at once novelistic prose, language poetry, field recording documentary, as well as an occasion for attentive listening to happenstance environmental events. Throughout the durational encounter, each aspect occurs as part of a system that invites the participation of the reader to combine the presented forms through an exercise in 'response ability'. The model is open to development and adaptation by writers, field recording practitioners, poets, and sound artists in the future. I feel that the inclusion of audio field recording within a novelistic context is a particularly promising area for expansion. Likewise, the formal appearance of the audio work as a physical and self-contained object can be viewed as an interesting instance of framing for the presentation of field recording, which is more commonly distributed through existing mediums such as CDs, cassettes, and vinyl records – forms that suggest a musical lineage as well as requiring an additional piece of technology for playback. The presentation of field recording collections, as seen in the research practice of this thesis, is therefore not suggested to end with its appearance as a box of Amazon packaging. Rather, I would posit that through the aid of low-cost open source hardware such as the Raspberry Pi Zero, collections of novelistic field recordings can be imagined to be produced in the future within other containers or objects.

The text of *64'53"; or, World of Storms* is also not considered as defined by its current form. It has already been adapted into other contexts and will continue to be explored in this manner through my ongoing practice. At the time of writing the work has recently been displayed within a visual art context at *Oddart Festival* in the town of Odda on the Hardanger fjord in Norway (see: Appendix B, Figure B.16-B.21). In this version of the text – entitled, *Tekst og Lyd; or, World of Storms* – 30 of the 64 pages of the reservoir text (printed in standard A4) have been selected by chance to be hung on fishing lines and displayed within the space of a 220cm x 120cm window of an electrical shop (ten columns and three rows of pages). The Raspberry Pi Zero was positioned externally in a newly designed Perspex box, with two 5W speakers connected via speaker wire and positioned under the window. In addition to the field recordings, the work also included a chance selection of audio clips from a cassette collection of Norwegian folk and pop music that were digitised and segmented as a further material resource – each one lasting between 1 and 64 seconds in duration, and performed on a loop throughout the festival. This adaptation was arrived at in an attempt to engage with the site-specificity of the new context in Norway, and the added challenge of framing the concept of the work within the new environment of a busy street during an art festival. The visual appearance of the work in this case also represents another process of the reframing of a novelistic form, which is perhaps even closer to an analogy of Cunningham's choreography than that explored in the presented research practice of *64'53"; or, World of Storms*. Within the shop window, the reader views all 30 pages at once, and is free to select a page of interest simply by looking and moving. The reader is also able to contemplate the collection as a whole with one glance, which has formed interesting patterns as a result of the chance selection of the columned structures of the text. In this case, the source text's function as

a reservoir of indeterminate narrative has allowed for the possibility of further formal explorations to take place.

In my consideration of how I could conclude this thesis, I have been thinking again of an idea that I had during the early stages of the project when I was assessing my methodology and I was testing hypothetical strategies that could help demonstrate my findings through qualitative data. At this point I considered organising private reading group experiments, interviews, or discussions with a selection of participants, and using the feedback as a method of guiding the production of the creative work. In deciding against this approach, I considered the argument that the creative writing produced during this project was not the most important feature, but rather it was the formal aspects of the work as a whole – the experiment as it has been set up, and the effect of the text – as well as how my reader would consider the act of reading before and after their engagement with *64'53"; or, World of Storms*, that would establish whether new knowledge had been conveyed.

I considered then, and I still consider now, that it is the *next* work of prose or poetry that is read following the experience of *64'53"; or, World of Storms* that will be possibly the more important event, in some respects deciding the research outcome of this project. If the reader, as a sphere of attention, maintains their awareness of sound during the next occasion when they engage in the act of reading, and if they are attentive to the possibility that they can make connections between words and environmental sounds in new and dynamic ways, then my research practice is able to take responsibility for facilitating some new strategies of perception. Overall, I expect both the theory and practice centred on this interdisciplinary topic to be ongoing, and it is hoped that in the future further examples of works that make use of autonomous text and sound will be developed by

others. These works, like *64'53"; or World of Storms*, might also resemble probabilistic systems, and – to recall Cage's words for the final time – will appear and perform less like objects and 'more like the weather'.

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Appendix A

The research for this project was submitted for ethics consideration under the reference

ECW 15/ 012 in the Department of English & Creative Writing and was approved under

the procedures of the University of Roehampton's Ethics Committee on 17.03.15

Source Text: The following section contains the original reservoir text of *64'53"; or, World of Storms*. The presentation of the following text is in its continuous prose form discussed in the first part of Chapter Two – before the disruption caused by the column technique has taken place. This version is also a bound copy, and is included here for reference only, rather than as a true representation of the work.

64'53"; or, World of Storms

It is a pleasant feeling for Laura to be taken into the room that is used as a warehouse. Lisa shows her the troughs and the valves and the sprinkler system. She observes the mushrooms and the bales of heather and she smells the strange smells in the torchlight. Lisa walks with the crutch and she points to each item, sometimes with her crutch arm, sometimes with her free arm, sometimes with the crutch itself. Laura walks around the trough and she inspects the contents. She reaches out and she tills the soil and she feels the moist warmth of it. So the trick here is to monitor the moisture level, and the texture. And we add more heather as we need it. Laura nods her head. But we need to check it often, says Lisa, it's a delicate balance. She moves with the crutch to the end of the trough and she points to the gate where the heather bales are kept.

They sit around the table, talking calmly, and exchanging their thoughts on the situation they are in, and on the progress they have made. Lisa takes a jar from the shelf and she opens it, releasing the smell of vinegar, and fish, into the room. They eat with forks. Michael shifts in his chair. He picks a small bone from his mouth and he places it on his plate on the table. He contemplates the question that has just been asked. Lisa puts the lid back on the jar and she puts the jar back into the cupboard. Michael puts his fork in his mouth while the old man scratches his chin.

Hannah, the older of the two girls, rolls around on the floor. She places her head on the floor, supports herself with her arms, and she attempts to run around in circles, clockwise. She is in the room that is used to project light, and she is alone. As she pivots and rotates she becomes dizzier and dizzier. The lights are projecting images on this occasion, of land and of sea and of clouds and of stars. In the corner of one of the images, the outline of a figure crouching by the salt flats appears for several seconds. Hannah, the older of the two girls, continues to roll around on the floor, clockwise. The figure in the image stands, and it appears to walk, and Hannah spins around and around. At last an image of a cloud appears, one single cloud edged with light. Hannah stands and falls over and she laughs to herself. The floor is damp.

I still like the texture of the heather, says Lisa, when it dries I mean, how it's a bit rough and a bit brittle and how it has that smell, you know, that intoxicating smell. It gives me such pleasure, even though I use it all the time, in everything, practically. The old man reaches out his hand and Lisa passes the small branch to him. He smells it himself, and he grasps at it, crushing it, releasing more of its perfume into the air. The old man smirks, and he passes the branch back to Lisa. Aye, says the old man. I know what you mean. Takes you right outside doesn't it. Reminds you of things. When I smell that, I think of the hill up yonder, on the south coast, where it gets a slight bit more shelter, you know, and where it maybe gets a bit more sunshine too. That's the place where you can smell it the strongest.

Lisa continues to stir the soup. She adds a pinch of the heather, for the flavour, and she lifts the pot from the hob and she places it on the table. The old man shuffles over to help, and he retrieves the large jar from the cupboard. He sets the jar down beside the hob and he goes back to the table to sit. Lisa watches the frying pan as it heats, how the oil bleeds and moves on the surface. She again adds a sprinkle of heather, and a pinch of sea salt. And with the pan now hot enough, Lisa opens the jar. She picks out a handful of the mealworms and she tosses them into the frying pan. She watches how they writhe and stiffen, and she takes care to move them about the pan, to roll them, and to not allow them to stick.

Did I ever tell you, begins the old man, about the time I stayed out, during one of them. His smile is wry, and he doesn't wait for an answer before he speaks again. All I had on me was the clothes on me back, that and an auld sack with some basic tools, a hammer, a saw, and a few pegs, and the harness too, this was back when Maggie was here. I knew I was going to miss the chance to get back to home of course, and I think that's what saved me in the end. I knew I needed to prepare, instead of wasting time trying to run. I had to look around, real quick you know, and find a bit of the land that looked less exposed. That's something you should always be doing even if you think you don't need to, everywhere you go, you should always be looking around for those sorts of places. I got to this little cove, a wee nook in the hill, and the gorse was hanging over me. And I'm seeing this thing, stalking sort of, as it moves across, and I'm just praying that it passes around. And I'm watching it as it rolls in, the gorse trembling and shaking you know.

Aye, says the old man. I'll be down soon. I'll come down now. And he shifts his weight in his chair and he attempts to stand. Michael leaves without him, going back out of the room that is used as a kitchen, descending the ladder to reach the door marked #7. The old man shuffles and leans, his body listing slightly. He goes to the sink to run the tap. The water is green again. But the drink is refreshing, the way simple pleasures often are. The old man drinks the whole glass down, rinses it, sets it aside, and he turns the tap off again. He walks out of the room, and he reflects on the contents of a dream, or a daydream he has had recently. The grass is how he remembers it, long, and flowing, and dry, and above the ridge he can see a large V of distant geese as they push across the sky. He feels the weight of his backpack on his shoulders, and he stops to drink from his flask of water. The water is green again.

Lisa walks the hallways and she scratches her ribs and the back of her neck. She looks for the nodes along the wall, but she does not pay too much attention to their behaviour. The air is cool today in the hallway and it is the walk in the cool air that she is interested in. Her feet are bare. Her hands are gloved. She walks slowly.

She remembers the moor, the salt flats, the ground-nesting birds. She remembers the traps that she made, and the berries she gathered, the texture of the long grass, the weeds, the moss in the swamp. The berries, again, she remembers the taste of the berries, the smell of the fish she had caught. At the end of the hallway, just before the ladder to the door that is marked #9, Lisa leans against the wall, and she feels the pleasant texture of the rubber on her shoulder.

She scratches her ribs again, the itch. And she moves, again, towards the room that is used as an alternative sitting room.

Back to those rumours then, says Michael, the ones they talk about up on the hill. Is it true what they say do you think. About the rumours. What do you think. The old man smiles. I do think so, he says, but I haven't seen, and I have seen a lot you understand. But who would know. On other matters, I think. I think this here has something to do with it.

The beetles scuttle and crawl in the terrarium, and the old man reaches in to dig the deepest part of the farm and he gathers the tiny worms and some of the soil with the long spoon. He transfers them, the tiny worms, to the small dish and he separates the tiny worms from the soil as best he can. Michael hands the old man the small box with the oats and the skins of the root vegetables and he watches the process as the tiny worms are transferred.

It must be enormous, if it is true, and it must be a secretive thing too, says the old man. Makes you wonder. I do have several questions in fact, but no one speaks of these things too often. The tiny worms vibrate en masse. The old man returns the crumbs of soil to the terrarium and he watches the tiny worms again before he closes the lid on the box. One day we may find out, or you may find out, or the girls will find out. Or equally, continues the old man, none of us may find out, and somewhere someone may find out. Likewise, nobody may ever find out and the whole thing is forgotten. It's funny to think of it like that, of it being forgotten. Now, this, now.

In the room where the mealworms are farmed, the adult beetles scuttle around inside the terrarium on the right hand-side of the room. They sift through the bed of heather and gorse with their pincers, and they explore their surroundings in cautious, determined movements. Their lives are short, relatively speaking, and it is important to ensure that they breed, lay eggs and produce larvae, and that enough of the larvae make it to adulthood in order to mate and to produce more larvae. The majority of the grubs are eaten however, after they have grown, moulted their skins – moulted their skins several times – and are cooked in oil and sea salt. As Lisa enters the room where the mealworms are farmed, she intends to gather some more mealworms to be stored in the room that is used as a kitchen, in order for them to be accessed more easily for the purposes of cooking. First she watches the adult beetles – how they scuttle from one side of the terrarium to the other, the motion of their legs while they walk, how they interact with each other, etc.

She moves to the second section and she views the mealworms as they consume the skins of the root vegetables. She opens the terrarium, that is, the second section of the terrarium, and she reaches inside and she fills her container with heather and the skins of the root vegetables. She then picks up the mealworms, about thirty in total, and she drops them into the container. She closes the lid on the terrarium, that is, on the second section of the terrarium, and she goes again to watch the adult beetles as they scuttle about, as they sift through the bed of heather and gorse with their pincers as they interact with one another, etc.

In the room that is used to dry the fungi, Michael prepares the metal trays, ready to be placed inside the drying oven. He sets them, four trays by three trays on the work surface and he arranges the fruiting bodies, evenly, but in no special order. It is a good harvest on this occasion, and there should be enough mushrooms to fill one of the larger jars. Michael enjoys seeing the results of the process, how the fungi contort and curl, and how brittle they seem when the process is finished. He opens the door of the oven, which is connected to the ventilation shaft by means of a pipe, and he loads in the twelve trays. The room is the narrowest of the rooms in home, apart from the hallways, and its function is undoubtedly singular. There is little room to move to the side of the work surface, and the oven itself occupies a considerable amount of space. There are three empty jars also on the work surface, but they rest against the wall and do not get in the way of the trays as they have been set out, four by three, like so.

The heat that is applied to the fungi is gentle, and the air flow is also gentle. The process does not take very long, relatively speaking, and it can usually take place in the background, while other tasks, such as the cleaning, the cooking, the cycling on the generator bicycles etc., are taking place. The drying oven bears the letters HV above the dials that control the temperature and the timer, and it has been a cause of much frustration, to the old man especially, to work out what these letters could stand for.

The old man unscrews the lid of one of the jars that contains the pieces of fish preserved in vinegar. He sits in the room that is used as a kitchen, and he guides his fork carefully inside the jar and he takes care to lift out one of the larger pieces of fish. His care is somehow rewarded. He adds some sea salt and he divides the piece into three sections with his fork, following the line where the flesh was previously attached to the bone. The two girls, Hannah and Laura, watch him carefully. And that's the story of how I found the piece of rope, he says to the two girls, Hannah and Laura.

As they stare back at him, the old man clears his throat and he sinks a little further into his chair. When the two girls whisper to each other, as they tend to do, they do so in each other's ears, leaning in with their hands cupped. What, asks the old man. What, and the girls shake their heads.

The old man walks over to Michael's chair, the one made of leather that's been bleached by the sun, the one that still smells faintly of the stones and sea salt. He traces the splits and cracks in its surface. He opens his mouth to comment upon it, but he smiles first. I couldn't believe it you know, when I saw you that day carrying this here. Balancing it up on your back. I was thinking, what the hell is that there coming towards me. Just about the oddest thing that has washed up, isn't it. I told you that I thought that it must have come from a boat once, some fancy yacht or something. It's the only way to explain the condition it's in. The wood inside would have swollen, if it had been floating round for too long, but no. Made me think it had been kept fairly safe inside for a time. And it's buoyant too, that's also what saved it, once the boat was presumably sunk.

Michael stops skipping. He begins to bundle the rope, ready to store it away, and he also stretches his back. Sit down, he says to the old man, have a rest for a bit. The old man stands, still massaging the arm of the chair, the left arm.

Lisa and the old man put the lead from the old knee joints of the suit into the large metal pot. They add some old fishing weights, those that they think they could do without, and they prepare the hob to melt them all down. Michael is down below, in the room that is used for everything that the other rooms are not used for, and he is cycling on one of the generator bicycles. The girls are somewhere, perhaps in the bedroom, perhaps playing in the hallway. It'll take a few minutes, says the old man, especially with the amount we're doing. The old man lifts the pot onto the hob and the two of them watch on as the metal begins to fall out of shape. The pieces become enmeshed together, a shiny puddle forming around them, before they are consumed entirely. Lisa prepares the two moulds nearby, ensuring they are secure in place on the table, and that each mould can be accessed when the time comes to pour the liquid inside them. She scans the room, making sure the two girls, Hannah and Laura, have not entered unnoticed, and she stays alert for this reason, glancing between the pot and the doorway. The old man stirs the lead with the spoon that has been designated for this purpose, and he nods his head when he is satisfied that the lead has changed state in its entirety. He lifts the pot using the handle, and he carries it over to the table. He pours the metal quickly, and efficiently, and he does his best to coax the remainder of the lead out of the old pot before it solidifies.

The old man is telling his climbing story again, the story that describes how he had to scale the face of a cliff, first by climbing down into a small cave, then to climb up again, beyond it. He tells this story well, and for the most part he does not give into exaggeration. So I fixed the rope onto the largest boulder that sat in the cluster, just arranged like that. And I wasn't even sure if it would take my weight. I hadn't time, says the old man. I lowered myself down, bit by bit, and I had to get it right, to gather my momentum and to be able to swing myself to reach the mouth, the mouth of the cave, sort of crossways. That was the easy part. But then, this is what happened, he says. The old man unties the bale of heather and he rolls it, or rather he tumbles it, out of its netted holder, down onto the ground. Lisa helps the old man with the bale of heather and she waits for him to continue with his talking.

The old man walks at his leisure, out of the room that projects light, down the hallway, up the stone steps, until he arrives at the door marked #27. And there he waits. He leans against the wall, that is, against the rubber nodes on the wall, shifting his position occasionally, sniffing the air, rubbing his face at times, and he draws circles on the floor with his left foot, which is socked. As Michael approaches he is surprised to see the old man standing where he is standing. Michael nods his head, and the old man nods back to him in return. Cold, says the old man. Isn't it. What are you doing, says Michael. Why'd you wander off like that. The old man stops circling his left foot, which is socked. I was just on my way back, says the old man, moving. And they walk back together, down the hallway, turning left, and into the main section of home.

Lisa piles the salt on the kitchen table in the room that is used as a kitchen. Using the salt, she creates mounds of varying sizes and she views the landscapes she has created from multiple angles. She walks around the table, watching for the patterns of things. The salt is a pure white, appearing pink. Lisa adds more to the middle section, piling two mounds higher and higher and observing the changes in light and shadow that now occur with regard to the rest of the piles. The shadows are a source of intrigue. She sets down the container, now empty, and she dusts her hands down. In the corner of the table, top left as it is currently positioned, along the short edge that faces the sink, Lisa uses her fingers to produce a series of fine indents in the smooth surface of the salt.

In the room that is used as a bathroom, Michael uses the rag that is soaked in vinegar to clean the floor, and the sink, and the seat of the toilet, and the shower area. He inspects the bucket, by removing it from its hinge, and he rinses it, cleaning out the inside of it with the rag. The room is beginning to smell like vinegar. When he is outside, Michael thinks, when he does not have to work, he will go for example to the point of granite to fish for fish. The fish he catches, and the bag in which he places them, the priest he uses to end their lives, are all vivid and solid things. The anticipation he feels, as the line slices the water, and the shock of the thump when the fish bite, the fear that the line will break, and the relief he feels when he lands them, and also the fish themselves, are vivid things. The technique he uses, and his familiarity with the equipment, the ways his arms strain, are all things that feel natural, and part of his habit. Michael takes the vinegar to the storage room of home. The hallway is dark, and the nodes on the walls pulse and vibrate, perhaps as a result of his presence, or as a response to the smell of the vinegar.

Michael gets out of bed while Lisa and the two girls are still sleeping. He fumbles about, using his hands to guide him in the semi-darkness, and he makes his way to the room that is used as a bathroom. Michael runs the taps for a long time and he fills the bucket with water. He then primes the bucket, hanging it on the hook on the wall, and he makes sure the rope is well within reach. He strips off, wets his hands under the taps again, and he pats himself down to moisten his skin. He takes a handful of heather and moss and crushed seashells from the box beside the bucket and he starts to massage himself and to scrub himself clean. After a few minutes he pulls the rope under the bucket and he drenches himself in the oblivion of the cold water.

In the torchlight, Lisa bundles one of the bales of heather out from the storage space and she rolls it across the room towards the section where the large troughs rest in their six parallel rows. She unclips the two belts and she begins to pull apart the compressed heather by the handful. It is a difficult task at first, but once the first few clutches are taken, the rest follows. She spreads the heather evenly down the line of the left-most trough, pushing the bale with her feet and sliding it down the line as she distributes it. One bale should last the whole length of one trough, if she distributes it well, which is the case on this occasion. She turns the taps at the far end, releasing a fine, warm mist from the nozzles above the trough, and she waits until there is enough charge in the pipes so that the steam, rather than the water vapour, is released from a few of them. She keeps the steam on for around a minute, disrupting her vision in the torchlight until she thinks that she has made the conditions agreeable. She smells the heather, as it mixes now with the steam, and she uses her hands again to mix it in with the existing soil.

Michael kicks over the carpet and he opens the door marked #13 that leads to the room that is used for everything that the other rooms are not used for. He goes first to his armchair, the one made of leather that's been bleached by the sun, the one that still smells faintly of the stones and sea salt from the beach where Michael found it. Then he walks toward the two generator bicycles. He checks their display dials and he determines that the old man must have recently been here, stopped pedalling, and gone. There are sweat droplets on the floor. Michael climbs onto the bicycle and he stares at the slanted bank of salt currently resting along the side of the room. He sees how the damp patches have crystallised in the corner, how the white of the salt has merged with the grey of the wall, creating a bearded boundary of sorts.

Michael uses the skipping rope in the room that is used for everything that the other rooms are not used for. He imagines it well. He walks along the ridge, or he will one day walk along the ridge, across the lip of that strange recess. And out of habit, Michael tends to think of the land as land.

Never forget that, says the old man. In short, there are many ways to describe it. And this is a real thing, as you know yourself, he says. Lisa continues cycling on the generator bicycle and she agrees with the old man. It was certainly different, different subtleties, you understand, objects, not only the gorse and the heather, the shapes of the rocks, the coastline. This is what I mean. The old man keeps cycling. Let me get something to eat, he says, after I finish this here, I'll get something to eat and I'll tell you that story. It's been something I've been thinking about too, lately, and probably from the beginning.

The old man scratches. It's as well I didn't keep pulling till it went completely though, he says. And at least we can get a hold of it this time and thread the new one in and around it. Michael nods his head. I'll go get my tools, he says, and I'll come have a look. It's the weight of them, the old man says, wasn't designed to hold that sort of weight for that length of time. Michael retrieves his tools from the room that is used for everything that the other rooms are not used for, and they then walk together, Michael and the old man, to the room that is used as a warehouse, up the stairs, and down the hallway on the left-hand side, to the door that is marked #18. In the torchlight, they move to the back of the room, where the steam is released, and where the moisture clings to the fine mesh of the green netting. They slide the larger door across and they look up at the remaining bales of heather. Michael sees the latch which has come loose and he sees where the elastic rope has frayed. He thinks for a while before he comments. I'm going to tape it this time, because the damage isn't that bad. I'll tape up the rope and I'll replace the latch. That's all we need to do.

One of the girls, Hannah, the older of the two, appears behind them. The old man turns and comments about something, and Hannah scrunches up her nose and turns to look at the troughs where the fungi normally grows, but where it has now stopped growing.

Down through the door marked #33, inside the room that projects light, the shapes being produced are oblong and green in colour. They gravitate and spin, becoming larger, giving the impression that they are moving closer to whomever is viewing them. The projections of light occur on each wall, usually, although sometimes they are selective, and they occur on only one or two walls, or on the ceiling, or on the floor, for example. The two girls, Hannah and Laura, sit transfixed in the middle of the room. They stare and they wonder and they touch their faces and they suck their fingers, blinking slowly, and deliberately, every so often. When the shapes change direction, they, the two girls, Hannah and Laura, follow them with their eyes. The thoughts that occur to them are both simple and profound, depending on what perspective is taken. Often they need to be removed from this room, physically, and at other times they wander out of their own accord.

The green shapes continue to oscillate and curve, to gravitate and spin toward them, and to pass them by. They are then replaced, or joined, by other shapes – a dodecahedron, on this occasion, which spins quickly, clockwise, moving from left to right, diagonally. Look, says Hannah, Look at that. And she points. Look. She says again, and she points to something else.

Lisa sits and thinks. She thinks of the previous day, and of the day ahead, and she thinks too of other things. She thinks of how they arrive, always, with little warning. They form, as thoughts form in the mind, and they fill the space they need to fill. They last for as long as they last, and then they go away again, once more, just as thoughts are forgotten in the mind. There is something to be said about that. And it is during them and after them and before them too, that life feels like life.

In the room that is used as a warehouse, through the door marked #18, the fungi grow where the light is not used. Michael inspects the mushrooms with the aid of the torchlight, and he checks the moisture in the soil by pinching it between his fingers and his thumb. He thinks about how he'll need to retrieve another bale of heather soon, to distribute it, and to mix it with the existing soil in order to encourage the best kind of growth. He can tell the soil is currently on the edge of good production, but that it will soon be low on nutrients. He sees the evidence in the size of the sporocarp, and he can feel it too, in the texture of the soil itself.

Michael moves further down the line of the troughs, where the floor is damp and where the steam is released, where the moisture vapour clings to the fine mesh of the green netting. He inspects more of the fungi now, and he picks a few mushrooms that are in their prime. Ones which are swollen and firm, reflecting the torchlight in a way that reminds Michael of the time he saw the moon. He picks seven in total, as much as he can comfortably carry, and he returns to the entrance. He closes the door marked #18, and he descends the staircase.

The girls play in the room that is used as a bedroom. The older of the two, Hannah, takes the white stone and she begins to draw on the wall. She draws a spiral and two indistinct stick figures. The younger of the two, Laura, goes over to her and begins to rub out the drawing with the palm of her hand. No, says Laura, you're wasting it. You're wasting it, and you're ruining it, so you are. Laura attempts to take the stone off Hannah, but Hannah holds it high in the air. Hannah continues to draw higher up on the wall, above Laura's reach. She draws another spiral and the shape of a long, thin fish.

The old man sits in the room that is used as a kitchen. He thinks, and he scratches his head, feeling the texture of his hair, as he often does. He opens his eyes and he casts a glance over the cupboards, the sink, the bin. He notices that the bin is full and needs to be emptied. He wonders if he should be the one to empty it, through the door marked #8 and into the container that houses the composting material. He stands, then, to stretch. And he wanders over to the doorway of the room that is used as a kitchen.

The meetings are sometimes serious, sometimes enjoyable, sometimes relaxing, hopeful, sorrowful, etc. But they are always brief and to the point, somehow. They feel the need to discuss things, to discuss anything, and to speak more often than not about the future, or the past, or their current situation. These things too they will consider, as they occur. Lisa shakes her head. They've been asking questions, she says. They're relentless sometimes, with their curiosity. And they could help with some things, little things, preparing the soil, watering it, for example. It's important.

Michael gets up from his seat and he walks towards the small sink. He pours himself a glass of water and he holds the glass up to the light. The colour is odd, one they have not seen before, at least not a colour they have seen in the water. It is violet. Michael brings the glass to the table, and they each stare at it for a time.

Michael is alone with Lisa in the room that is used for everything that the other rooms are not used for. Lisa continues to cycle, while Michael takes a short break. He sits on his armchair, the one made from leather that's been bleached by the sun, the one that smells faintly of the stones and sea salt. He grips the arm rests as he closes his eyes. Lisa sits up straight, as she likes to do every now and then, and she straightens her back. She leans over and she reaches for the dial on the wall. She presses a button, and soon they both feel the cool breeze descend from above. It's about time, she says, isn't it. Michael agrees.

In the left corner of the room that is used for everything that the other rooms are not used for, Michael's most prized possession sits waiting for him. The old armchair, the one made of leather that's been bleached by the sun, the one that still smells faintly of the stones and sea salt from the beach where Michael found it. And it is a pleasant smell of salt.

Michael and the old man cycle on the generator bikes. The old man tells Michael that he wouldn't be able to imagine it, that he'd fall over from the shock of it if he could experience it. The old man says that it is not something you easily forget either, and that it is something he always finds himself thinking about, whenever this occurs. He then shifts the topic slightly, and he says that without the ocean things really would be different. And he starts to talk about boats, the large boats that they used to have, the ships, the ferries, and the tankers, and how they were used for transport and for war and for catching fish. You wouldn't believe it, the number of fish we used to catch, he says. You wouldn't believe your eyes if you saw it.

Michael listens to the old man, and he watches the wisps of white hair as they flail limply on the old man's head. The old man is discussing strange things again, about trees, the things that produce wood, and he is talking again that a day will come when there won't be any wood left in the world. You won't find it washing up anymore, he says, not on the beaches, nor by the mouths of the rivers. Even the scraps from the heather and the gorse won't last much longer. But we have the seeds, he says. They stored them, the seeds, so they did.

Lisa joins them by the table, she pours herself a glass of water and she unscrews the cap on the large glass jar that contains pieces of fish preserved in vinegar. She sets the jar in the centre of the table and she takes three forks and three plates from the cupboard. She hands them out. Together they pick out bits of fish with their forks, and they eat.

Michael turns on the dim electric light and he turns on the small electric stove. He takes out the dried fungi from the pre-prepared bowl, and he adds the contents to the pot that is already on the single hob. He takes the pot over to the sink and he adds some water and some sea salt, and then he puts the pot back onto the hob. Michael does up the last remaining buttons of his shirt and he glances down at the water in the pot. He thinks about things, about nothing in particular, the residue of his dreams maybe, and he casually bites the nail of his left thumb. The water begins to boil and Michael turns down the heat and lets the pot simmer. He paces around the room for a while, then he opens one of the cupboards.

Michael goes to the room that is used as a kitchen and he lifts the heavy mortar and pestle from the corner beside the sink. He places it on the table and he gets the sack from the cupboard which contains the whole sea shells. He lifts them out one by one and he glances over their shapes and their patterns.

Lisa approaches the table and she picks up one of the shells, and, like Michael, she examines it, the ridges and the lines that give it its texture, the arrangements that form as a result. She handles the shell thoroughly.

It has been a while since they have all seen the suit. And as they unfold it, they try to flatten out the creases. The lead inside the fabric is hard, thin, but malleable, and it provides a satisfying feeling when it is pinched and flattened and twisted into shape. The three of them, Lisa, the old man, and Michael all work together, shaping the limbs back into position, before they hang it on one of the hooks in the room that is used as a kitchen. They then stand for a time, to observe it. The old man inspects the left boot, the treads on the shoe, and the rip at the knee.

As he gathers the fungi, the old man inspects the quality of each stalk and cap in the torchlight. The colour, and the size, and the texture, are all considered before he breaks them, carefully, at the correct segment, between the soil and the stem. His basket is almost full, but many of the fruiting bodies are not yet fully formed – the decision whether or not to harvest them, can sometimes be a difficult one. The less he picks now, however, means there will be more in the coming days. And when he leaves the warehouse room, the room that is used as a warehouse, the old man walks the length of the hallway at a casual pace, his gait shuffling, left leg leading more than the right, giving his step that characteristic imbalance. He glances around at the nodes on the wall, watching them pulse and move.

Laura watches Lisa as she prepares the casts for the molten lead, and she goes to her and she hugs her, awkwardly, around her legs. Lisa looks down and she smiles at Laura before she sets down the cast and the tools. She attempts to lead her, Laura, back to the hallway. Where's Hannah, she asks, and Laura tilts her head to the side and closes her eyes. Are you not tired as well, asks Lisa.

Laura walks back towards the table and she pulls one of the chairs out to sit down. She then sits down, crosses her arms on the table and rests her head on top of her arms. You'll need to be still if you stay. I need to concentrate now. This is important. Laura nods her head and closes her eyes. Lisa continues to carve the small groove in the block with her tools. She aims to make the recess much deeper than the last one, but with a stronger curve, so that there is more flexibility in the joint.

Hannah approaches the barrier in the hallway, near where the floor begins to slant downwards, and she toys with the mechanism to release the gate. She knows that the food comes from there sometimes, in baskets and in jars, and she imagines a place filled with fungi and fish and sea salt and beetles and mealworms. Maybe there are even other things there, she thinks, things besides fungi and fish and sea salt and beetles and mealworms. She presses her head against the bars, then she turns to walk back through the hallway and into the room that is used as a kitchen.

When Maggie was here, things were different, says the old man. This is her I think. We had different habits, all of us, and a different way, don't you think. I think so anyway, I don't know about you, he says. But it seems like that to me. Very much so. And it is Lisa who replies first, saying that she thinks some things have changed, but other things have not, and some things are surely better, while other things have been made worse. When Maggie was here. When Maggie was here.

The machinery, the instructions, the artefacts themselves, thinks Michael, where they go, why we collect them, but especially where they go, again, these are things I don't understand. The need to eat, however, and the other things we need, are things I understand well enough. The future. I do not understand the future. And the past. I do not understand the past. That is all.

Michael adds the ground-up flour to the existing pile in the large metal bowl, and he gathers the last of the dried seeds. The two girls, Hannah and Laura, enter the room that is used as a kitchen, and they take their seats by the table, and they stare, fascinated, at the operation in progress. The girls kick each other's feet.

I'm going to tell you something, says the old man, that might not sit too well with you both. But if you hear me out first that's all I ask. This. So, well, I lost them, so I did. They ran away from me, down the corridor, the blue one. Then I couldn't find them. I looked, but I couldn't find them. They could be anywhere, really. Practically anywhere. So I came back here. Maybe they'll return on their own if we give it some time. They're too quick for me, says the old man. Or I'm too slow. Or I wasn't really paying attention to them. I forget. I went to get a glass of water, for I was thirsty you understand, and then, gone they were. There is nothing to see, but we might as well look. And I think one of us should stay here, says the old man. And I nominate myself, for I told you already, they're too quick for me, so I would be little use up there, as I've already demonstrated.

What was once the suit is piled in bits and scraps on the table in the room that is used as a kitchen. They take pieces from the pile, examine them, and they order them according to their size, shape, and colour. The fabric is soft in places, stiff in others. The metal sections too are bent and fragmented. Other sections are smooth and intact. The sorting process is all in good fun. Michael holds a strip of fabric up to the red light, then he cuts the frayed threads with a knife on the table. It is a shame, says Lisa, that the garden room was not prepared. The old man takes a piece of metal and begins hammering it with the spoon. He also uses his hands, bending the section over the corner of the table, like so. He grips the two edges of the metal, applies pressure to it over the edge of the table and he smoothens it out, back and forth, back and forth. The stack of metal pieces is orderly and exact. The pieces of fabric are equally organised. Lisa smiles.

In the room where they now collect the salt, the old man and Lisa work in tandem. Lisa uses the picking tool and the old man gathers the deposits with the push shovel. They move methodically. The old man piles the salt at the other end of the room, a distance of exactly fourteen of the old man's steps from the collection point. Lisa uses the picking tool on the crystals with her right hand, striking with strong, accurate strokes at various angles. Small sections fall with each stroke, and occasionally larger shelves calve off from the wall, and shatter on the ground. Lisa stops her actions and she stands back from the wall and she observes the old man shuffling from one end of the room to the other end of the room.

The push shovel takes maybe six kilograms of salt with each shunt, and the old man has a few more shunts to do. Lisa cleans the picking tool with her gloved hands, dusting off the salt from the point and shaft, then she tucks the picking tool under her arm and she dusts off her gloved hands once again. The old man, wearing the sock on his left foot, increases his pace. The salt is piled high now, a small drift stretching from the left corner of the room, all the way to the doorway.

In the room where the desk is, Michael works with the two girls to sort the items they need in order to begin the process. The desk, first of all, is prepared. The chairs, next, are positioned. And the two girls climb up onto the chairs and wait for Michael to signal the start of the session. They draw with fingers on the table. A response is returned. They follow along with it and they repeat and they counter and they discuss. It is confusing and enjoyable and challenging and exciting and dull. Michael, standing to the side of the table watches as the two girls continue unaided, growing ever quicker with less hesitancy when they take their turns.

Lisa thinks of the moorland and the salt flats and the nets she has used, and will use, to catch fish. She thinks of the moon and the distance between the moon and her eyes during that one time when they, or when she alone, had been watching the moon. The light is soft in the room with the well that brings the water. She adjusts the pipes, and she removes the sections that she needs to remove. It is a filtering section, also used to connect two pipes of differing widths.

Cleaning the filter is a necessary process but there is no regularity with how often it must be cleaned. However, it is prone to clogging as time goes on. And the things that clog the filter are surprising sometimes. Like the small crustaceans that appear in vast numbers, the crustaceans that are removed and cooked and eaten, for example. Then there are the times when it is algae, thick, as well as the sand deposits, which are sand-like, or the hardened chalk and limescale too, that sometimes disrupt the system. Most often however it is the plastic that clogs the pipes. And it comes in many forms, the plastic. On this occasion it is the long tangled mass of a fishing line. Lisa takes the filter in hand and she pulls the line out, handling it carefully. She disassembles the balled mass, retrieving the longer strands that are tunnelled down the length of the longer pipe. There is no hook attached, but Lisa observes the curled end of the line where a knot had once been tied. Not her work. Not the work of her.

Lisa remains in the room that is used for everything that the other rooms are not used for and she attempts again to fix the belt on the generator bicycle. It is not that the rubber is perishing, but more that the shoes that are worn when the machine is used are too wide, and slightly too long for the fittings, and they, the shoes, rub against the rubber belt at times, causing it, the rubber belt, to wear. If there was a way to reposition it, or to widen the pedal shanks slightly, that would be the better option, but a different sets of tools will be required, and the available tools, as Lisa knows, matter so much in these circumstances. Lisa instead is attempting to narrow the belt, by folding it over, thickening it, but ensuring it no longer comes into regular contact with the shoe as the user pedals. This may solve the problem, but it may also wear the rubber on the fold. Lisa considers that at least in this manner it will wear evenly, rather than at certain points and at certain times. She is content, and she works into the night, the hillside on her mind, and the things she once saw, or the things she will see, now present.

Laura, the younger of the two girls, is inspecting her toes and she is enjoying picking out the fluff from under her toenails. She thinks her feet look funny and she compares her feet to her hands and she smiles, curls her toes, and flexes her fingers. She is in the room where they farm the beetles and she feels safe in the glow of the dim lights. The beetles scuttle and crawl in the terrarium. There are several beetles that are active while Laura sits, inspecting her feet. She is not so concerned with them. She lies down on the floor and she stretches her arms above her head.

Regarding the time spent observing, it was never a consideration. Just as the days repeat with variation, the observations continue when they need to, or when they are asked to observe. Observations in snow, through heat, in the cold, in wet and windy conditions. As the old man reflects upon his experience he does not remember the names of those whom he shared the experience with. He remembers neither their faces, but he does remember the clothes.

In the room that projects light, Lisa sits. When she previously had been walking for much of the time, Lisa had been used to the rhythm, and to the pace of the day as it passed, as the light grew and faded, and as distant objects became closer objects. She had become used to things coming and going as such, and she had been used to making observations about the surroundings, and about herself within those surroundings. For example, the time when she felt the change in conditions, as the sun was setting on some occasion, and she had wandered onto flatter land, descending down the hill to the valley, seeing the smoke rise from the cove.

Now, in the room that projects the light, there is an image that is projected that bears a resemblance to this. As she drinks the soup from the bowl, Lisa thinks of walking and of objects and of environments and of distant things, like the cove and the smoke and the valley and the grass, the long grass especially. And the taste of the fungi is strong and good and comforting.

During the time when he had been dismantling things, the old man had been exercising shoulder muscles that now no longer exist. He feels them often, his shoulders, and he feels his arms and the muscles between his ribs, his intercostals. He trades a glance with Hannah, the older of the two girls, and then with Laura, the younger of the two, and he returns again to what he had been meaning to say. Don't do that, he tells them, you can't, you mustn't do that, you understand. The two girls laugh and giggle, and the old man fiddles with the wisps of hair on his head. Put the bag down, he says, put it down.

Lisa fixes the leak under the sink in the room that is used as a bathroom. She uses the tools she has access to and she uses her ingenuity where her tools are found to be lacking. When she had experienced the time when she had spent her days walking, she had learned many things that have now proven useful to her during the present days. She knows, for example, about materials and their uses, how to consider situations within wider contexts, and now this. She cleans the pipes out and she inspects the rubber seals and she uses her fingers to check the places that she cannot see. Michael enters by the doorway and he asks if she is alright, if she needs help, if she is hungry.

I'm nearly finished, she says, but I'll join you soon. For the food, the soup, I mean. We're celebrating are we not. Michael crouches down to inspect the pipes. He nods his head and he scratches his chin and he stands again and he nods his head. We are, he says. We'll wait for you.

Speed is the key, says the old man, don't forget that. Speed is the key to it. Lisa attempts to catch the moth with the small net, swiping here and there, but not reaching high enough to trouble it. She then stands on the chair in order to reach the lamp. Maybe we should just leave it, says Lisa. It's doing no real harm after all. And the moth flits higher, and higher, landing on a spot on the ceiling close to the lamp. I do respect them, says the old man, the moths, how they appear from nowhere, seemingly, and how they use their dust, to deceive their predators. Very clever.

Lisa and Michael and the old man and the two girls, Hannah, the older of the two, and Laura, the younger of the two, are all together in the room that is used for everything that the other rooms are not used for. Michael and Lisa cycle on the generator bicycles and the old man entertains the girls who both sit on the armchair, the armchair made of leather that still smells faintly of the stones and sea salt, the one that has been bleached by the sun. The old man himself is positioned on the floor.

The generator bicycles continue their motions and the legs of Lisa and Michael burn and strain and the air is filled with the smell of perspiration. There is no point to this. The old man places his hands on his belly and he closes his eyes. The two girls, Hannah, the older of the two, and Laura, the younger of the two, attempt to stand on the backrest of the chair.

The two girls eat their mealworms and mushrooms in the room that is used as a kitchen. Michael is below them, cycling in the room that is used for everything that the other rooms are not used for. Lisa is sleeping in the room that is used as a bedroom. The old man, supposedly looking after the two girls, is falling asleep by the table in the room that is used as a kitchen. The girls notice his head tilt and nod, tilt and nod, and they giggle. Hannah then takes one of the mealworms from her plate and she gently rises from her chair. She creeps over to the old man and she places the mealworm in his mouth. The old man does not stir, at all, but he continues to breathe, his chest rising up and down as his head tilts and nods. Only the tip of the worm, either the head or the tail, is visible between the old man's lips. It stays there for some time before his body eventually becomes aware of it, and he closes his mouth. The girls laugh silently, and they clutch at each other's hands and they tug at each other's shirts.

The old man is with Michael in the room that is used for everything that the other rooms are not used for. The old man sits on the old armchair, the one made from leather that's been bleached by the sun, the one that still smells faintly of the stones and sea salt. Michael sits cross-legged on the floor. Good job, says the old man, got there in the end. Likely it won't need done again for another couple of years. Can't mind the last time we changed that one, can you. Think I maybe did it myself. I think I did. You must have been out. On the job, or out fishing at the point.

Michael puts each of the tools back into his canvas bag. He gives them all a good going over with the cloth, one by one, before he slots each of them into their compartments again. And the bag itself still has a mystery to it. Bats, rabbits, foxes, badgers, deer, lots of deer, says the old man, stoats, hares, then grouse of course, hen harriers, that's another bird of prey, buzzards, golden eagles, kestrels, merlins, meadow pipits, skylarks … shrews, rats, mice, pheasants, even the odd adder, which is a snake, a reptile, I told you didn't I. Then the gannets, the cormorants, shags, guillemots, razorbills, terns, herring gulls, lesser black-backed gulls, greater black-backed gulls, ospreys, curlews, oystercatchers, fulmars, ravens, hooded crows, magpies. Aye.

There are times when Lisa forgets where she has been, the things she's seen, the journey through the mud and the long grass for example, or the cave. She forgets the time in the cave now and then, until she is prompted by something into remembering it. She recalls the bats on occasion, or the smells of the places, but she does not think of these things with much regularity. Lisa washes the root vegetables in the sink in the room that is used as a kitchen. She washes them and she scrubs them with the brush. The water is a cool blue. Eventually the two girls remark on the appearance of the suit on the table. It's big, they say, it's got bigger since last time. Lisa turns, still washing the root vegetables. Did you add this. Why did you add this.

Lisa's thinks of the time when the moon was large and she would wander, for days, sometimes.

There are several textures to the floor that affect the feet. As Michael walks the corridor he thinks about the textures of the floor and he thinks again of his shoes and his boots, his slippers and his socks, his tights and his long johns, his woollen socks, his snow boots and shoes, the rainproof boots, the rubber boots, the rubber-soled canvas shoes, the ones made from leather, and the long boots, and the knee-high boots made from plastic, and those made from fur. As he descends the ladder to the room that is used for everything that the other rooms are not used for, Lisa remarks that he is early. You're not wearing your cycling shoes. Where are your cycling shoes she asks. Michael walks to the armchair, his most prised possession, the one made from leather that still smells faintly of the stones and sea salt, the one slightly bleached by the sun. He digs his hand in between the cushions and he retrieves his cycling shoes. He then goes back up the ladder and through the hallway where he thinks about the floor, his feet, walking generally. Lisa continues cycling on the generator bicycle.

The old man sleeps alone in the room he has chosen to sleep in. Michael sleeps in the room that is used as a bedroom, as does Lisa, as do the two girls, the older of the two, Hannah, and the younger of the two, Laura. When all are sleeping there is little said or spoken between them, though they are some of the time present in each other's company. In the room that is used as a bedroom, as they sleep, several beads of moisture form on the ceiling on account of the humidity. In the room that the old man has chosen to sleep in there is no such humidity. Instead it is the blinking light by the doorway that switches on, providing the change in circumstance in the room.

The old man wakes from his sleep and he looks to the doorway and to the blinking light. He ignores it, the blinking light, turning on his side and settling back into sleep. Elsewhere, in the room that is used as a bedroom, one of the beads of water from the ceiling hangs, elongated, as if it were about to fall.

In the room that is used as warehouse, through the door marked #23, Michael and Lisa gather the fungi that has been blighted by the unknown cause. The fungi are black and slimy and they have an interesting, but not an entirely foul-smelling odour. They gather the fungi in buckets and they load the material into the larger suspended drum with the metal mesh at the bottom. The lights are on.

As the liquid drips out, onto the floor and down the drain underneath, Lisa comments on the state of things. It is good to reset everything once in a while, replies Michael, but I agree with you. Lisa goes to the south end of the room and she slides the large gate across, left to right. She looks at the sacks containing the compost and she counts them again. There are several of these sacks in storage. Piled in 2x2 formations, alternating lengthways, in a cross-hatched structure, the stacks of sacks reach Lisa's height. And there are several of these stacks, each in the same formation. Lisa reaches the closest of the stacks and she climbs on top of it. There she sits.

In the room that has remained disused for some time the two girls, Hannah, the older of the two, and Laura, the younger of the two, inspect the items that are stationed against the wall, items that are either physically leaning against it, or have been stored in such a way that they appear alongside the wall. There are stacks of papers, there is a tall lamp. Metal doors and blocks of polystyrene make up the bulk of the collection, but there are a few other oddities to their eyes. The suit is there too, looking how it looked the last time they saw it, though considerably different. But they also inspect something that is completely new to them, something they cannot understand. Hannah, the older of the two, asks a question. Why is this here, she says and Laura responds by shrugging. I wish, she says, I wish that, I don't know. The two girls walk to the wall and they try to squeeze in behind the stacked metal doors. You want to, says Hannah, and Laura nods. She crouches down and she crawls through and then she appears on the other side.

In the room with the conveyor belt, the objects pass by from left to right as they are observed from the doorway. And on this occasion the items that pass through are a source of intrigue to Lisa. She observes the flowers and the grass cuttings and she observes too the moss and the sea shells, and the gravel as well. There are many gravel deposits, of varying sizes and colours. Nothing appears to be of use to her, right now at least, but she moves closer to inspect each element from a closer distance. It is the different smells that she craves, the smells of the grass in particular, and that of the gravel, and that of the flowers too. And soon nothing travels past on the conveyor belt and Lisa retreats back to the doorway and she watches the belt continue. Lisa looks at her feet and she scratches her knee and she touches the back of her neck. I am the crusader, she says.

It falls. They pass over. It feels the effects. It, too, is affected. They move. It gets blocked out. These things they happen. It changes, this. The two girls look up the old man's face. Laura, the younger of the two, begins to pick her nose. Hannah then asks the question, are you the oldest. And the old man scratches his chin. He sits down on the floor beside them and he nods his head. I knew, says Hannah. I knew you were really old. You must understand, he begins. Laura reaches out to the old man and she pokes him, above the eyebrow, to the left, with the index finger of her right hand. The two girls giggle.

Michael's thighs burn as he drives them up and down to push the pedals on the generator bicycle. He pictures it as he had seen it, that afternoon when he walked, after the long day, or the shorter one. He remembers a joke that had been told to him, and he remembers how he laughed to himself, all alone, as he crossed the narrow ridge at the jaw of the cliff, just before the entrance to home had come into view. He remembers how he thought he saw something flash across his step then, in that moment, something small and light brown in colour, and how it had disappeared over the edge of the cliff. The cliff indeed. The swell, he remembers, was large that day, as if something had been stirring in the deep.

Appendix B

Programming Instructions for *64'53"; or, World of Storms*

This section of the appendix is intended as a guide to the process of building the digital element of the research practice. It is not intended as a precise technical instruction, but rather it can be thought of as an additional reflective insight into the building process of the work, providing supplementary information to the main thesis body.

The interaction of field recording and graphical text has been realised in *64'53"; or, World of Storms* through the building of a single purpose device using the Raspberry Pi Zero single-board micro computer. The Raspberry Pi Zero has been adapted using additional hardware in the form of a digital amplifier, audio transducer, micro SD card, binary switch and 5v battery pack. The device has been programmed to play the library of field recordings upon start up, and to automatically shut down after 64 minutes. The field recording collection is also played back according to the random algorithmic function of the media player, ensuring that each performance will be as unique as possible.

Hardware

1x Raspberry Pi Zero 1.3 single-board computer

1x I2S 3W (4-8 Ohms) Adafruit Speaker Bonnet

1x Adafruit Large Surface Transducer with Wires - 4 Ohm 5 Watt

1x Binary switch

1x Male to Female Micro USB cable

1x 5v Power bank Battery pack

Hardware Installation

The assembly of the components that are housed inside the repurposed Amazon packaging in the discussed version of *64'53"; or, World of Storms* requires a few specialised tools, however, the assembly itself has been a relatively simple process. I have used male and female connection headers to connect the Raspberry Pi Zero to the Adafruit Speaker Bonnet. The audio surface transducer and additional speaker have been attached to the Adafruit speaker bonnet. Minor modifications have been made to the box itself to accommodate the binary switch, as well as the USB input to charge the battery pack. As all components are visible in the work, the reader is able to examine the objects that are producing the sound element of the novel. I felt this was an important feature, allowing the reader to understand what is producing the sounds they hear, rather than concealing the components.

Operating System & Installation Process

The operating system used is *2017.02.16 Raspbian Jessie Lite*. The image for this system was downloaded from:

http://ftp.jaist.ac.jp/pub/raspberrypi/raspbian_lite/images/raspbian_lite-2017-02-27/

The image was mounted onto my SD card using *Etcher*, an open source programme that is specialised in burning disk images to external flash drives and memory cards. https://etcher.io/

After the disk image of the operating system had been burned onto my micro SD card, the card was inserted into the larger Raspberry Pi 3 version of the computer so that I could

connect my USB keyboard and computer monitor for these initial stages[21]. Following the

initial installation process, the system requests a username and password. As with all

Raspberry Pi the default is stated below. These values are typed into the command line.

```
login: pi
```

```
password: raspberry
```

I then entered the set up menu by typing the following command into the command line:

```
sudo raspi-config
```
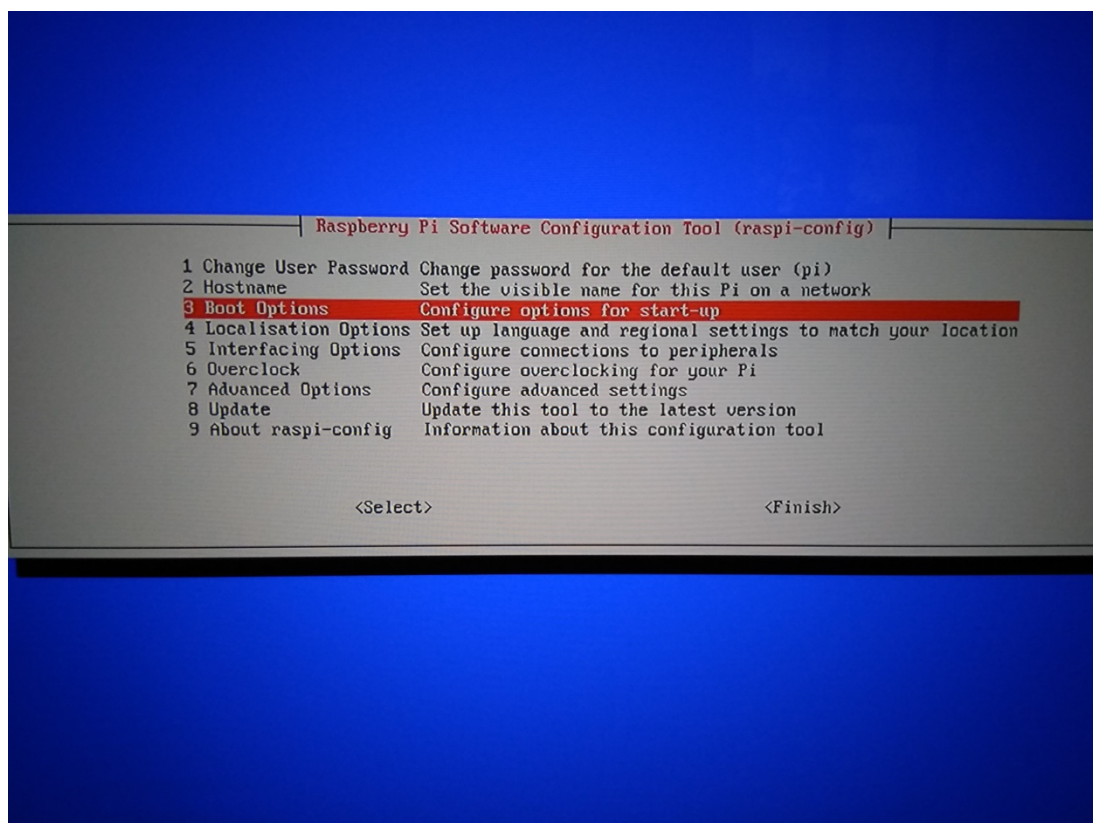

(Figure B.1: 'raspi-config' set-up menu)

---

[21] It is possible to complete these steps using the 'Zero' version, but it requires additional components (micro USB– standard USB converter) as well as additional programming knowledge. The steps I have taken are limited by the fact that I am not a specialist in these fields. I have no doubt that more complex and more creative ways of achieving the desired results are possible, and the steps shown represent one possibility only.

In the set up menu, I used the arrow keys to navigate and I selected option 7 'Advanced Options' and I enabled a function called SSH which allowed me to access the Raspberry Pi remotely from my Macbook using the *PiFinder* programme - another piece of Open Source software. I exited the menu and shut down the Pi by first rebooting it through the menu options, followed by the command `sudo shutdown now` after it had restarted.

From here I connected the Pi 3 to my internet router using the Ethernet cable and I opened *PiFinder* on my Macbook. At this point I was able to access the Pi over the internet connection, and use the command line directly from my Macbook. This feature also allowed me to access the internet to update the file systems on the Pi, and install a simple GIU (Graphical User Interface) that will be used in some of the later steps.

An excellent guide for this process can be found on the below blog (see: Figure B.2), which details the advantage of using the less intensive operating system (lite) rather than the standard version.

Log into Raspbian again. We want to make sure we currently have the latest files and packages so type in:

```
sudo apt-get update
```

and press Enter. If there are updates available, install them. To install the updates, you would type in the letter "y" when asked "Do you want to continue?" and then press Enter. When finished, the message "pi@raspberrypi:~ $" will appear signifying that the Pi is ready to receive a command. Now, type in:

```
sudo apt-get upgrade
```

and press Enter. If there are updates available, install them. Now, type in:

```
sudo apt-get dist-upgrade
```

and press Enter. If there are any updates available, install them.

If packages were updated and installed, then these packages were stored somewhere in the SD / microSD card. We need to delete them so that they don't take up valuable space. To clean up leftover packages, type in:

```
sudo apt-get clean
```
and press Enter.

```
sudo reboot
```

(Figure B.2: Instructions for upgrading GUI interface from: https://www.raspberrypi.org/forums/viewtopic.php?f=66&t=133691)

Audio Setup

Having connected my Pi 3 to the internet through the router connection, and accessing my Raspberry Pi using *PiFinder* on my Macbook, I used the command line in the terminal to install the drivers for the I2S amplifier. There is a longer way to perform this task, but I have used the quicker packaged version provided by the manufacturer Adafruit. I typed in the code below and addressed the prompts when required:

```
curl -sS https://raw.githubusercontent.com/adafruit/Raspberry-Pi-Installer-Scripts/master/i2samp.sh | bash
```

followed by

```
sudo reboot
```

Media Player

Next, I installed the media player I wanted to use, called MPV. I settled on this player
after several attempts using other versions and other players. The advantage of MPV is
in its simplicity, and its ability to play digital audio signal through an I2S driver, in
addition to playing audio using analogue signal, and digital signal through the HDMI
output. This is important for the Raspberry Pi Zero, which has no analogue output. HDMI
was not an option due to the fact that the audio signal would have to be separated from
the video signal somehow, which would require a number of additional components.

I installed MPV player using the command:

```
sudo apt-get update
sudo apt-get install mpv
```

The next step involved accessing the Pi's system using the GUI interface, rather than the
terminal command line. For this process I stopped accessing the PI's system remotely
through *PiFinder* and my Macbook, and instead connected the Pi 3 directly to a computer
monitor. From here onwards I did not need an internet connection. This step allowed me
to plug in a USB keyboard and a USB mouse in order to use the desktop. On boot up I
entered the set-up menu again (See: Figure B.1).

```
sudo raspi-config
```

In the menu, I chose Option 3 and selected the function to boot to desktop without requiring log in credentials, then I rebooted when exiting the menu.

Adding the Field Recordings

On the next boot up, the Pi displayed a graphical desktop which could be controlled using the mouse and keyboard in a manner that is familiar to any computer user. I opened the home directory and created a new folder called 'worldofstorms'. I then plugged in my external hard drive via one of the free USB slots and I transferred the library of recordings into the new folder I had created.
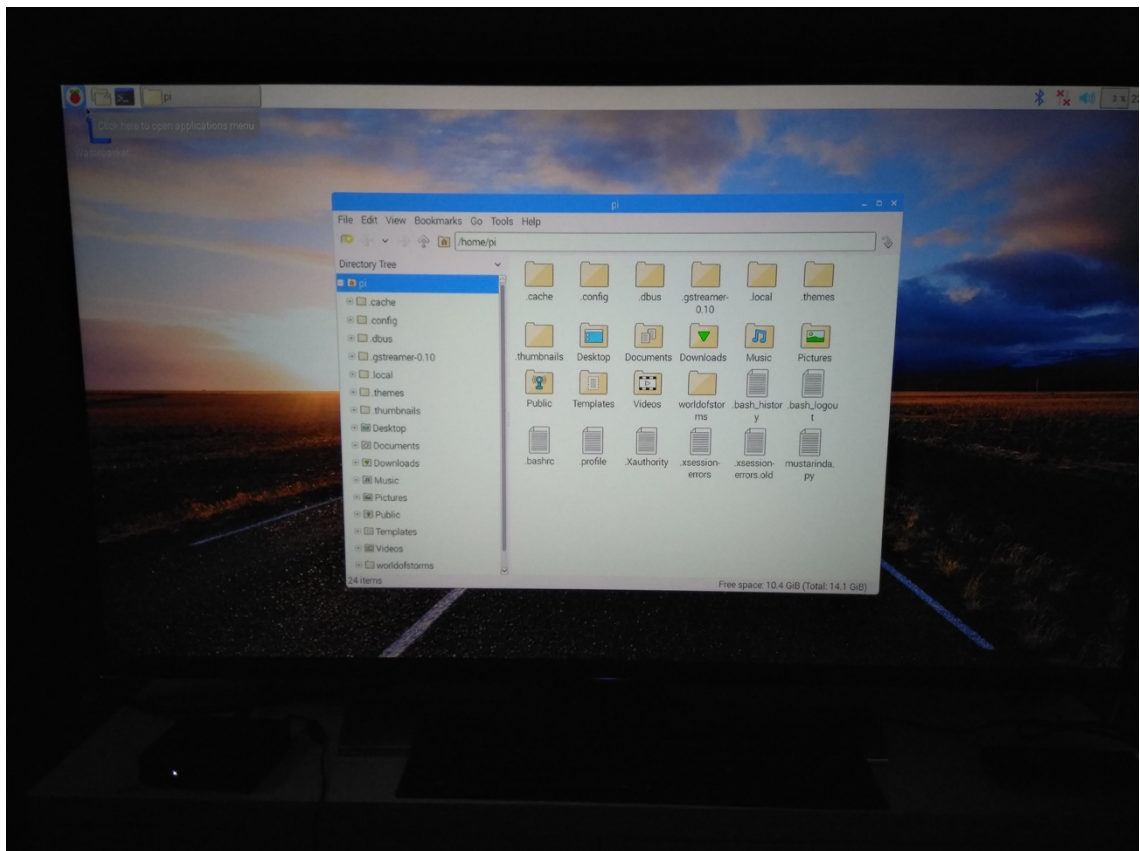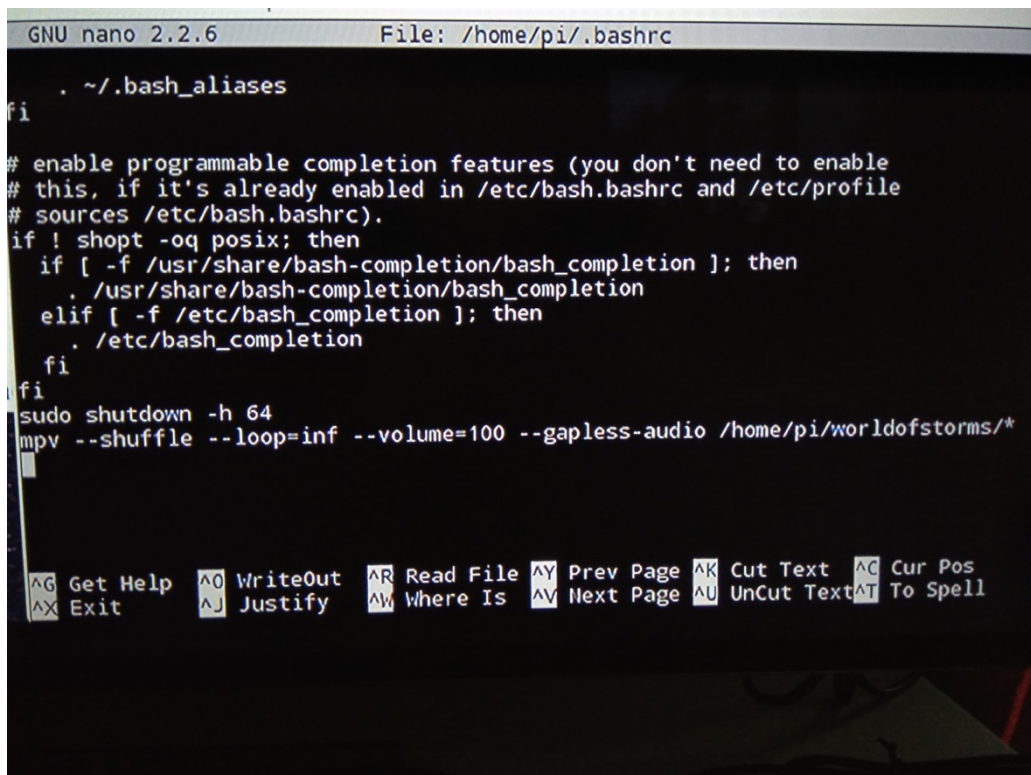
(Figure B.3: 'worldofstorms' folder in home directory)

Programming *64'53"; or, World of Storms*

The next step was to programme the Pi to automatically play the recordings according to a random order, and to also shut down after the length of time indicated in the title of the work. Once again there are several ways that this task could be made possible, but the solution I found is favourable as it required only two lines of script, which were added to one of the existing start up files that the operating system is already programmed to run when the computer is connected to a power supply. This file is known as 'bashrc'. To access this file in the terminal I used the code: `sudo nano /home/pi/.bashrc`

The terminal opens this script file for editing. I used the cursor to navigate to the end of the file and I added in the first line `sudo shutdown -h 64` in order to programme the Pi to switch itself off after 64 minutes, followed by a series of instructions for the MPV programme: `mpv --shuffle --loop=inf --volume=100 --gapless-audio /home/pi/worldofstorms/*`

(Figure B.4: Editing the script of bashrc. in the Terminal)

The above line of script instructs the programme to shuffle the files in the folder, to play them in a random order each time, to loop the playlist, so it will continue playing until the earlier shutdown instruction is executed, to play the audio at 100% volume, and to remove all gaps between audio files – so that each recording transitions onto the next one without lapse. Finally, I stated the location of the folder where the programme can access the files. I then entered 'ctrl + x' to exit the text file, I selected 'Y' to save changes to the script and I pressed enter to return to the terminal.

I once again opened up the terminal to access the configuration menu by typing in `Sudo raspi-config.` This time I selected Option 3 and selected the simple terminal interface again to allow the Pi to run the script without loading any GUI desktop. I rebooted upon exiting the menu. On next reboot, and with the Raspberry Pi still plugged into the monitor, the Pi could be observed to play the files automatically in the terminal.

(Figure B.5: Audio Playback)

Entering 'ctrl+c' at this point cancelled the process. I entered `sudo shutdown now` to shut down the pi again.

At this point I removed the SD card from the Raspberry Pi 3 and I transferred it into my Raspberry Pi Zero, the smaller version of the two computers. This version is more specifically designed to run 'headless' – i.e. without a screen or monitor – and it is the version that I had attached the Adafruit audio amplifier 'bonnet' at the beginning of the set-up.

From here on, every time a power supply reaches the Pi Zero it will start up, issue the command to turn off after 64 minutes, then open MPV player and play the folder of audio files at random.

Images of *64'53"; or, World of Storms*

(**Figure B.6:** *64'53"; or, World of Storms* **– open box**)

(**Figure B.7:** *64'53"; or, World of Storms* **– USB port**)

(**Figure B.8:** *64'53"; or, World of Storms* **– Amazon logo**)

(**Figure B.9:** *64'53"; or, World of Storms* **– C1**)

(Figure B.10: *64'53"; or, World of Storms* – delivery label and QR code)

(Figure B.11: *64'53"; or, World of Storms* – components close-up)

RANDOM.ORG

Search

True Random Number Service

Do you own an iOS or Android device? Check out our app!

Random Integer Generator

This form allows you to generate random integers. The randomness comes from atmospheric noise, which for many purposes is better than the pseudo-random number algorithms typically used in computer programs.

Part 1: The Integers

Generate 64 random integers (maximum 10,000).

Each integer should have a value between 1 and 12 (both inclusive; limits ±1,000,000,000).

Format in 4 column(s).

Part 2: Go!

Be patient! It may take a little while to generate your numbers...

Get Numbers   Reset Form   Switch to Advanced Mode

Need more numbers than this form supports? Check out our File Generation Service.

Note: The numbers generated with this form will be picked independently of each other (like rolls of a die) and may therefore contain duplicates. There is also the Sequence Generator, which generates randomized sequences (like raffle tickets drawn from a hat) and where each number can only occur once.

(Figure B.12: Integer Generator)

RANDOM.ORG

Search

True Random Number Service

Do you own an iOS or Android device? Check out our app!
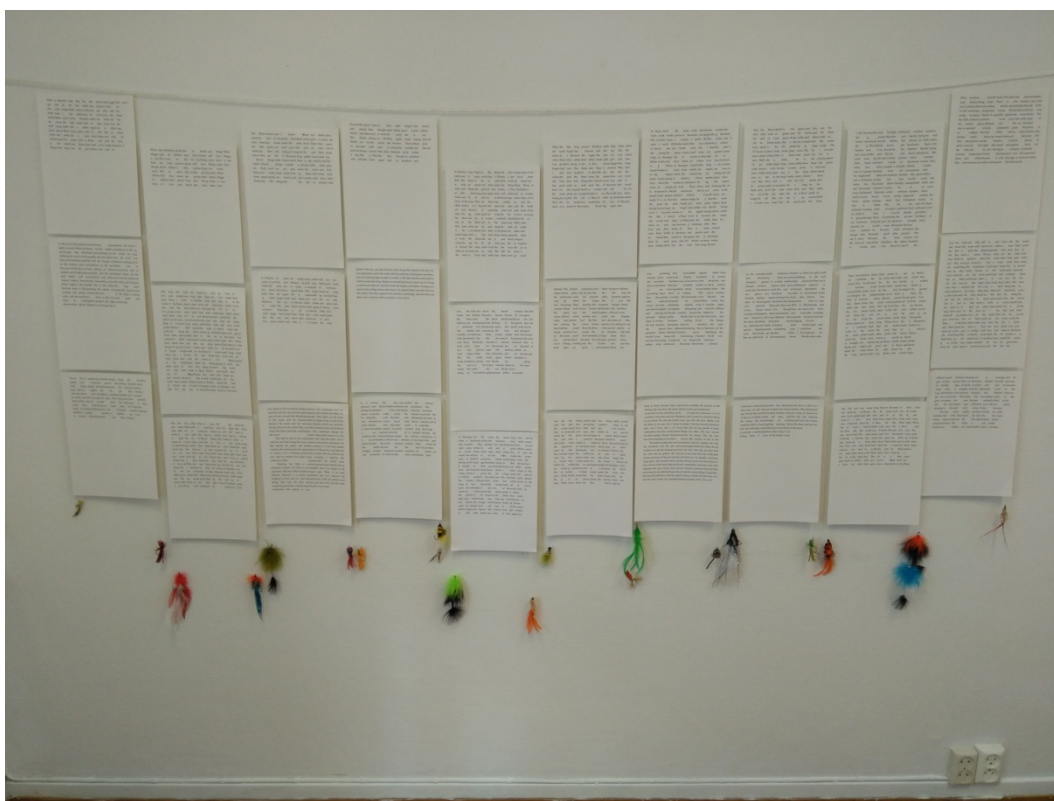
Random Integer Generator

Here are your random numbers:

2	12	11	7
4	9	4	7
4	12	12	1
11	5	10	1
2	12	11	4
6	3	10	8
3	3	12	5
12	4	2	8
10	10	4	2
4	8	12	2
7	4	1	2
2	6	3	7
3	8	12	2
3	2	10	4
11	9	11	6
3	9	1	10

Timestamp: 2018-07-17 11:03:30 UTC

Again!   Go Back

Note: The numbers are generated left to right, i.e., across columns.

(Figure B.13: Chance Selection 1)

(Figure B.14: Chance Selection 2)

(Figure B.15: Chance Selection 3)

(Figure B.16: *Tekst og Lyd; or, World of Storms* – **Open Studio display Kunstnarhuset Messen, Ålvik, NO, 2018. Photo: Neal Cahoon)**

(Figure B.17: *Tekst og Lyd; or, World of Storms* – **(image 1) Oddart Festival, Odda, NO, 2018. Photo:** *Ingrid Pasmans)*

(Figure B.18: *Tekst og Lyd; or, World of Storms* **(image 2) – Oddart Festival, Odda, NO, 2018 Photo:** *Ingrid Pasmans)*

(Figure B.19: *Tekst og Lyd; or, World of Storms* **– Exhibition Talk (Image 1), Oddart Festival, Odda, NO, 2018. Photo:** *Ingrid Pasmans)*

(Figure B.20: *Tekst og Lyd; or, World of Storms* – Exhibition Talk (Image 2) Oddart Festival, Odda, NO, 2018. Photo: *Ingrid Pasmans*)

(Figure B.21: *Tekst og Lyd; or, World of Storms* – (Image 3), Oddart Festival, Odda, NO, 2018. Photo: *Ingrid Pasmans*)