

**Making Music with Mindful Lungfuls:  
A Portfolio of Compositions Exploring  
the Use of Awareness and Breathing in  
Musical Performance**

**Owen Russell**

**MA By Research**

**University of York**

**Music**

**January 2022**

**Word Count: 11,709**

## Abstract

This research project investigates the means by which mindfulness and meditation can be applied to musical composition. The topic initially arose as a result of the author's unexplored interest in the connections that Buddhist and related philosophies have to music. It explores what kind of musical forms can be evoked through a variety of compositional approaches and performance situations which relate to awareness.

After composing some works exploring this research topic with a more general approach, it became apparent that mindfulness as directed towards *breathing* is important in both meditation and musical performance on all instruments, wind or otherwise. This allowed the author to refine his area of study for the later pieces in the portfolio, in which the research question is directed explicitly towards using the qualities of a performer's breathing and their mindful awareness of it as generators for musical action.

## List of Contents

Abstract	-page 2
List of Contents	-page 3
List of Figures	-page 4
List of Accompanying Material	-page 4
Acknowledgements	-page 5
Declaration	-page 5
1. Introduction	-page 6
2. Meditative and Musical Practice: Research by Composition	
- Meditation and Awareness	-page 7
- Breath	-page 9
- Other Work in This Area	-page 12
- Additional Comments on My Compositional Approach	-page 17
3. <i>Unwinding a Tidal Separation and Dreams of Boundary Crossing</i>	
- <i>Unwinding a Tidal Separation</i>	-page 20
- <i>Dreams of Boundary Crossing</i>	-page 21
4. <i>Shallow Waves and Returning Waves</i>	
- <i>Shallow Waves for Three Winds</i>	-page 25
- <i>Returning Waves (Age of the Calm Evening)</i>	-page 28
5. <i>Ocean Waves</i>	-page 32
6. Conclusion	
- Compositional Approaches and Performance Practices	-page 38
- Experience, Sound, and Spontaneity	-page 39
- Notation	-page 40
- Summary	-page 41
Resource List	-page 42

## List of Figures

**Figure 1:** A diagram from an early version of *Shallow Waves* – Page 27

**Figure 2:** A colour-coded diagram from an early version of *Shallow Waves* – Page 27

**Figure 3:** Some notation from the workshopped ideas of *Ocean Waves* – Page 32

## List of Accompanying Material

### Scores:

- 'Russell\_204010072\_Score\_Unwinding\_a\_Tidal\_Separation.pdf'
- 'Russell\_204010072\_Score\_Dreams\_of\_Boundary\_Crossing\_Multitrack\_Score.pdf'
- 'Russell\_204010072\_Score\_Dreams\_of\_Boundary\_Crossing\_Opening\_Score.pdf'
- 'Russell\_204010072\_Score\_Dreams\_of\_Boundary\_Crossing\_Text\_Score.pdf'
- 'Russell\_204010072\_Score\_Shallow\_Waves.pdf'
- 'Russell\_204010072\_Score\_Returning\_Waves.pdf'
- 'Russell\_204010072\_Score\_Ocean\_Waves.pdf'

### Recordings:

- 'Russell\_204010072\_Recording\_Unwinding\_a\_Tidal\_Separation.wav'
- 'Russell\_204010072\_Recording\_Dreams\_of\_Boundary\_Crossing.wav'
- 'Russell\_204010072\_Video\_Recording\_Shallow\_Waves.mp4'
- 'Russell\_204010072\_Recording\_Returning\_Waves.wav'
- 'Russell\_204010072\_Recording\_Ocean\_Waves.wav'

## **Acknowledgements**

I wish to extend my gratitude to my supervisor Professor Martin Suckling. I am incredibly thankful for his guidance and assistance during the course of this research project. I would also like to thank all of the performers that collaborated with me in this portfolio, and I would like to thank my family for continually supporting me in my studies.

## **Declaration**

I declare that this thesis is a presentation of original work and I am the sole author. This work has not previously been presented for an award at this, or any other, University. All sources are acknowledged as References.

# 1. Introduction

In the months prior to this research project I had reached the end of my bachelor's degree in music at the University of York, and the end of my composition portfolio which I submitted towards it. During my degree I experimented with composing in different genres of music using different approaches and different kinds of ensembles. I decided to use my time in the following summer between academic study to continue to explore new styles of music and philosophy that might meaningfully connect to it.

Buddhism and related Asian philosophy and religion has always been something that has drawn my attention because of a personal curiosity in meditation and a drive to probe existential ideas. However, before this project I did not see a feasible opportunity to explore it in-depth as a composer and musician. As I became more interested in it across 2020, I discovered and revisited music that was tied to Buddhist philosophical principles which inspired me to consider incorporating it into my own work. I saw this as an opportunity for me to explore composition in a new way. I tended to use my music to continuously experiment and explore as illustrated by the constant transitioning of my compositional style during my degree,. I did not settle into an approach for long, even if there were some consistencies in my music between approaches. My intentions for this project were for it to act as a springboard towards a deeper personal understanding of both Buddhism and composition simultaneously. In addition, I wanted to investigate and reveal more about relationships between the two.

This project was my first in-depth encounter with Buddhism, so all references to Buddhist and other South-East Asian philosophical teachings are my own subjective interpretation of a limited number of sources. This commentary exists to provide insight and context on my own creative response to these ideas, not to provide authoritative or objective definitions of them.

## 2. Meditative and Musical Practice: Research by Composition

The research questions in this section were brought into focus *during* the activity of this project. As I went through the compositional process of each piece and had various discussions with performers, it gradually became clearer how the topic would narrow down. This portfolio thus represents something that Pauline Oliveros might characterise as a ‘stumbling’ progression towards an understanding of how my particular perspectives on meditation and music coalesced.<sup>1</sup>

### Meditation and Awareness

This portfolio is connected on a broad level by meditation, specifically mindfulness meditation. Mindfulness is a term that encompasses the practice of openly listening or paying attention to any kind of sensation. Or in Buddhist terms, being aware of the body, feelings, the mind, and mind-objects.<sup>2</sup> Yongey Mingyur Rinpoche also gives a beautifully simple definition, in that it is the act of connecting with your awareness – awareness is the essence of all meditation. Thus, any specific technique or type of meditation (whether it comes under mindfulness or not) is a type of experience which manifests in the field of awareness.<sup>3</sup>

When awareness is referred to in this research, it almost always means mindful awareness. Awareness itself means the knowledge of something.<sup>4</sup> Mindfulness (or mindful awareness) has been defined in critical literature as ‘paying attention in a specific, sustained, nonjudgemental manner.’<sup>5</sup> This attention is placed

---

<sup>1</sup> Pauline Oliveros, ‘My “American Music”: Soundscape, Politics, Technology, Community,’ *American Music* 25, no. 4 (2007): 403, <https://doi.org/10.2307/40071676>.

<sup>2</sup> Bhikkhu Nanamoli, trans. Bhikkhu Bodhi, ‘10 Satipaṭṭhāna Sutta The Foundations of Mindfulness,’ in *The Middle Length Discourses of the Buddha – A Translation of the Majjhima Nikāya*, Fourth Edition (Massachusetts: Wisdom Publications, 2015), 145-55.

<sup>3</sup> Richard Temps, ‘His Eminence Mingyur Rinpoche Gives Teachings on the Sutra of the Four Bases of Mindfulness,’ 20 July 2019, YouTube video, accessed 30 December 2021, 58:24, <https://www.youtube.com/watch?v=KxobCKBzZlg>.

<sup>4</sup> Cambridge Dictionary (Cambridge University Press, 2022), s.v. ‘Awareness,’ accessed 30 April 2022, <https://dictionary.cambridge.org/dictionary/english/awareness>.

<sup>5</sup> Ida Hanson, *Mindfulness Meditation Effects on Attention: A Literature Review of FMRI Studies*, University of Skövde, 2021, 7, <https://www.diva-portal.org/smash/get/diva2:1575387/FULLTEXT01.pdf>.

on the present moment. In my experience, this is important because when my mind is distracted I often forget my surroundings – in other words I start to daydream. Therefore remaining in the present keeps me in control so that I am prepared to be aware of whatever I might be focusing on.

The purpose mindfulness serves in Buddhism is as a means towards mental transformation. The same source referenced above describes this: ‘mindfulness is a way to decrease suffering;’ ‘mindfulness meditation ... enhance[s] self-regulation.’<sup>6</sup> ‘Right Mindfulness’ is the seventh step of The Noble Eightfold Path, a core teaching of Buddhism on eliminating suffering from daily life. Mingyur Rinpoche illustrates that mindfulness meditation can be used to sustain awareness so that the meditator can continue being fully aware of the present for growing periods of time.<sup>7</sup> Another similar description is given by Ṭhānissaro Bhikkhu, who explains that this concentration on the present is practised so that a person can consistently recognise whether they are progressing correctly or not towards enlightenment, and thus whether they are following The Noble Eightfold Path.<sup>8</sup> If someone previously made a choice that caused harm to others, for example, they cannot reflect on it if they are not *aware* that they made a choice in the first place.

Within Western secular society, mindfulness and associated meditative practices are commonly marketed as methods to reduce stress and manage emotions in day to day life. This purpose is similar to what mindfulness is used for in The Noble Eightfold Path. The factor which classifies it as secular is that it has been disconnected from Buddhist traditions, and is instead catered specifically towards people living in the modern world. Headspace, a popular digital meditation application, offers articles titled ‘easing travel anxiety’ and ‘what to do if you’re alone for the holidays,’ for example.<sup>9</sup>

Even though I draw from meditation as it is described in Buddhism, I would still classify my personal meditation practice as largely secular, as I have not yet

---

<sup>6</sup> Hanson, 8.

<sup>7</sup> Temps, ‘Mingyur Rinpoche Gives Teachings,’ 56:26.

<sup>8</sup> Bhikkhu Ṭhānissaro, ‘DN 22 Mahā Satipaṭṭhāna Sutta | The Great Establishing of Mindfulness Discourse,’ accessed 2 December 2021, <https://www.dhammatalks.org/suttas/DN/DN22.html>.

<sup>9</sup> Headspace, ‘Meditation and Sleep Made Simple – Headspace,’ Accessed 12 November 2021, <https://www.headspace.com/>.



committed myself to Buddhism as an individual. To give an example of my practice, one of my most common methods of practising mindfulness meditation is with sound. I sit either indoors, outdoors, or occasionally with music playing, and I listen to any sounds that I notice or recognise and attempt to stay concentrated as long as I can (often only for a few minutes or seconds). Sometimes my motivation in doing so would be to practise being aware of what runs through my head when I am frustrated or anxious. Thus, I can comprehend why those feelings arose – this act follows The Noble Eightfold Path as explained above. Other times it would be out of pure curiosity, such as if a particular sound or sensation caught my attention out of the blue.

I began to practise meditation as a result of an interest in broader Asian philosophy and religion, which I also attempted to incorporate into the early stages of this project (*Unwinding a Tidal Separation* being the primary example). As time went on, however, the topic proved too broad and unspecific to develop into a research project lasting only one year long. One of my foundational research aims thus became to incorporate specifically mindfulness meditation in some fashion into my music.

My initial research question emerged from all of the ideas above: What are the musical possibilities for a compositional or performance practice based on meditative principles? A practice in the context of this research can be defined as a group of techniques which serve a distinct artistic aim. In this case, it is a group of techniques based on mindfulness which serve the exploration of possible connections that music can have with meditation and mindfulness.

### **Breath**

Breathing forms a connection between meditation and musical performance. In music, breathing appears most often in the conscious minds of wind instrument players due to the nature of their playing techniques. From my experience as a brass player I often have to mark breaths into my notated parts, especially in solo pieces with fewer rests. For a contemporary composer, a wind player's breath could be used to devise a compositional restriction. In Kathryn Williams' *Coming Up For Air* project, for example, she asked composers to write whole pieces that only use a

single breath, inviting them to explore the creative possibilities within a highly restricted space.<sup>10</sup>

Regarding non-wind instruments, some research has been done into the activity of performers' breathing in piano performances of classical and romantic pieces.<sup>11</sup>

The study's questionnaire responses describe the awareness of breathing that the pianists had during a performance, with both similarities and differences between participants. Almost all of them had received some form of guidance on the connection between breathing and musical phrasing in their previous training, but only half of them were occasionally aware of their breathing corresponding with 'musical expression' during a performance.<sup>12</sup> A summary of the questionnaire by the authors details how the performers ignored their breathing most of the time and even considered it as an obstruction:

Most participants paid attention to (and actively controlled) their breaths in specific situations for example, when they felt anxiety, when they played specific parts and when they tried to get the right timing in ensemble performance. However, we should note that they were little aware of their breathing in usual performance except for such situations. Indeed, a few participants thought that it could be harmful to musical performance to be much aware of breathing. Especially, one participant gave a thought provoking comment that the breathing was naturally determined as the result of performance, and not to be consciously controlled.<sup>13</sup>

Furthermore, one of the two 'views' presented at the end of the study suggests that physical actions that contribute to piano playing may also have an effect on a performer's breathing rhythm at a biological level, based on tension and

---

<sup>10</sup> Kathryn Williams, 'Coming Up For Air,' accessed 3 December 2021, <http://www.kathryngwilliams.com/coming-up-for-air.html>; Williams, 'PIXERCISE.'

<sup>11</sup> Yutaka Sakaguchi and Eriko Aiba, 'Relationship between Musical Characteristics and Temporal Breathing Pattern in Piano Performance,' *Frontiers in Human Neuroscience* 10 (2016): Article 381, <https://doi.org/10.3389/fnhum.2016.00381>.

<sup>12</sup> *Ibid.*, 14.

<sup>13</sup> *Ibid.*, 14.

release.<sup>14</sup> A performer's breath could thus be described as oscillating in patterns and intensities that reflect or respond to many aspects of a musical performance that the performer may or may not be aware of. In other words, a person's breath naturally and spontaneously creates its own 'music' in response to a large number of different sensory stimuli which the person receives.

There are descriptions of breathing meditation in multiple Buddhist texts that resemble this interlinked relationship that breathing has with the body. The *Cūḷa Vedalla Sutta* states that 'in-breathing and out-breathing are ... states bound up with the body.'<sup>15</sup> A quote from the Buddha in the *Ānāpānasati Sutta* instructs the meditator to 'breathe in experiencing the whole body [of breath].'<sup>16</sup> Another translation teaches to 'breathe in sensitive to the entire body.'<sup>17</sup> In my interpretation, the first example above implies that this whole-body breathing is always happening, whether we believe we are controlling it or not. The following examples then explain that meditation will train the mind to be more aware of it.

Given the particular connection between meditation and musical performance that breathing highlights, it would be fruitful to explore what capabilities the breath might have if it were allowed to form and control sounds. To explain in other terms, Margaret Wetherell finds a similarly intertwined nature inside bodily and mental reactions to emotional stimuli in *Affect and Emotion*. To use Wetherell's language, tapping into the 'neurobiological polyphony' that surrounds breathing may provide fascinating patterns that could be translated onto musical phrases and structures.<sup>18</sup> Thus, in this portfolio of compositions I am going to explore how music can be created, altered, or controlled through a performer's breathing, and how different compositional forms can successfully accommodate this music.

---

<sup>14</sup> Sakaguchi and Aiba, 'Piano Performance,' 16.

<sup>15</sup> Bhikkhu Ṭhānissaro, 'MN 44 Cūḷa Vedalla Sutta | The Shorter Set of Questions & Answers,' accessed 12 November 2021, <https://www.dhammadata.org/suttas/MN/MN44.html>.

<sup>16</sup> Bhikkhu Nanamoli, trans. Bhikkhu Bodhi, '118 Ānāpānasati Sutta Mindfulness of Breathing,' in *The Middle Length Discourses of the Buddha – A Translation of the Majjhima Nikāya*, Fourth Edition (Massachusetts: Wisdom Publications, 2015), 943-44.

<sup>17</sup> Bhikkhu Ṭhānissaro, 'MN 118 Ānāpānasati Sutta | Mindfulness of Breathing,' Accessed 12 November 2021, <https://www.dhammadata.org/suttas/MN/MN118.html>.

<sup>18</sup> Margaret Wetherell, *Affect and Emotion: A New Social Science Understanding* (London: SAGE Publications), 45.

My initial research question can now be elaborated on: given the synergies between breath in performance and breath in meditation, what are the musical possibilities of a compositional or performance practice based on the breath awareness techniques of mindfulness meditation?

This question allowed me to discover new approaches to composition based on Buddhist models of thought. These models have previously offered alternative approaches to composition within the Western Art Music tradition to composers such as Pauline Oliveros, Éliane Radigue, John Cage, and Jonathan Harvey (and others). The work of these composers is rightly celebrated. However, given the vastness of the Buddhist tradition, there is considerable scope for further investigation into the relationship between the practices and philosophies of Buddhism and musical composition. Meditation and breathing is one facet of this relationship.

### **Other Work in This Area**

In this section are some examples of contemporary and historical music which connect with mindfulness and meditation. The most relevant example of a composer whose music references it explicitly is Pauline Oliveros, and the most prolific example of her work that involves meditation in composition are her *Sonic Meditations*.<sup>19</sup> These meditations are primarily concerned with the experience of the performer: She instructs participants to direct their attention or awareness (Oliveros makes a distinction between the two, and her theory on meditation takes a large number of religious sources into account)<sup>20</sup> towards a variety of objects, processes and environments. In Meditation 5 'Native,' awareness is guided towards the ground through the feet on a nocturnal walk. Those are the only controlled elements of the piece, and no production of sound in response is required.<sup>21</sup> Meditation 1, 'Teach Yourself to Fly,' is provided in two forms. The first provides the

---

<sup>19</sup> Pauline Oliveros, *Sonic Meditations* (Baltimore, MD: Smith Publications, 1974).

<sup>20</sup> Pauline Oliveros, 'On Sonic Meditation,' in *Software for People: Collected Writings 1963-80* (Baltimore: Smith Publications, 1984), 138-9; *Ibid.*, 141; *Ibid.*, 148.

<sup>21</sup> Oliveros, 'V - Native,' *Sonic Meditations*.

basic instructions for the piece alone, and the second is meant to be situated in different environments, thus providing a different experience.<sup>22</sup>

All of the *Sonic Meditations* are conveyed through text alone, and Oliveros uses language elegantly to reveal information and portray meaning in a short space. For instance, in *Environmental Dialogue*, the language is simple and each sentence has a single purpose: where to perform; how to start; how to perform; using what; and some sentences clarifying or extending the main technique.<sup>23</sup> Given that I aim to use a carefully specified relationship with breathing in my pieces, it is clear that text instructions either prior to or embedded within the score are a necessity. Considering Oliveros' reasoned approach, the following became a secondary research question: for music which follows a compositional approach based on meditative principles, what methods of notation are effective? What challenges must be considered when conveying meditative techniques in musical notation?

Following this point, challenges of devising performance practices also appeared due to my intent to use a synthesis of text-based and staff notation. For instance, when I was creating the performance technique in *Ocean Waves* I needed to consider how a technique involving the observation of a performer's own breathing, which is naturally subjective to each person, could interact with fixed staff notation so that the utilisation of breathing would be evident to the performer and their audience in every performer's case. This also somewhat draws from Oliveros' attitude towards inclusivity, whilst not being as far-reaching due to the use of traditional staff notation and performer-audience based roles.<sup>24</sup> The above can be summarised with another secondary research question: What challenges must be considered when combining text-based and staff-notated elements to convey performance practices that use meditative techniques? To briefly continue comparing this research with Oliveros' attitude towards universal inclusivity, challenges also appeared along with my intent to take inspiration from the musical backgrounds of specific performers in *Dreams of Boundary Crossing* (folk) and *Returning Waves* (jazz). I wanted to explore connections between mindfulness and

---

<sup>22</sup> Oliveros, 'I - Teach Yourself to Fly,' *Sonic Meditations*; Oliveros, 'II,' *Sonic Meditations*.

<sup>23</sup> Oliveros, 'VIII - Environmental Dialogue,' *Sonic Meditations*.

<sup>24</sup> Oliveros, 'Introduction II,' *Sonic Meditations*.

musical idioms that those performers were familiar with, so I had to investigate what connections existed and how to emphasise them.

Lastly, Oliveros' artistic intentions with the *Sonic Meditations* are reminiscent of the purposes of meditation within Buddhism and also reflective of her socio-political views. In the introduction to the score she describes that if a serious commitment is made to practising the meditations as a group, 'members may achieve greater awareness and sensitivity,' which mirrors the maintained awareness that mindfulness meditation aims to achieve.<sup>29</sup> Her article 'My "American Music"' offers an explanation for her interest in communal music-making as a response to the increasingly violent and separated political world that she was witnessing.<sup>30</sup> My aims for this project in particular are more solely invested in the musical benefits which mindfulness might offer. However, I acknowledge the intended positive personal and social effects of mindfulness and meditation as described by Oliveros and Buddhist sources. My insightful personal experience with meditation is what drove me towards delving into this compositional research in the first place.

One example of a composer who cites Oliveros in reference to their own creative process is Susanne Olbrich. She details how in the process of her piece *Beyond Gone*, 'musical material was generated through Deep Listening and improvisation in a deeply personal and intuitive process.'<sup>31</sup> Here the meditation is solitary in contrast with Oliveros' group work, and meditation is used primarily as a means to compose – the music itself does not involve the same process (it was transcribed in order to be performed). Some of the pieces in this research were composed through a mindful openness, but not through a meditation technique like Deep Listening. For instance, *Shallow Waves* and *Returning Waves* in section 4 were composed in collaboration with others. Listening openly when creating with others, it can be argued, is an act that requires mindfulness and willing attention.

---

<sup>29</sup> Oliveros, 'Introduction I,' *Sonic Meditations*.

<sup>30</sup> Pauline Oliveros, 'My "American Music": Soundscape, Politics, Technology, Community,' *American Music* 25, no. 4 (2007): 392–394, <https://doi.org/10.2307/40071676>.

<sup>31</sup> Susanne Olbrich, 'Dare To Create! Meditation, Insight and Creative Processes in Music,' in *Mindful Heroes: Stories of Journeys That Changed Lives*, ed. T. Barrett, V. Harris, and G. Nixon (Aberdeen, Scotland: Inspired By Learning, 2021), 227-228.

One common contemporaneous example of music that explicitly refers to meditation is meditation music associated with relaxation. This music is written to accompany meditation rather than to direct it on its own. It is often advertised for stress relief, much like how Headspace and other similar businesses advertise themselves (as mentioned on page 8).<sup>32</sup> This research is not too concerned with its existence, however, due to its lack of meaningful connection with Buddhism and its lack of intent to explore awareness.

Performance scenarios may encourage a meditation-like listening experience for music that was not necessarily written with meditation in mind. For example, an overnight concert was held for Max Richter's *SLEEP*, which concerns itself with states of consciousness in and out of sleep. Richter wants the audience to explore the relationship between music and sleep in their own subjective minds.<sup>33</sup> The length and subject matter of the piece provide a space for people to observe something reflective of states of consciousness. The freedom to listen in the given space is a quality representative of mindful listening. An example more explicitly connected with meditation is the World Meditation Day Concert that occurred at King's Place in 2021. A lot of the pieces that were performed (such as Monk's *Ellis Island* and the movement from Messiaen's *Quatuor pour la fin du Temps*) are not associated with meditation or mindfulness at all. Instead, the concert presented a programme encouraging three types of listening that each 'embody a meditation.'<sup>34</sup> Another example of a concert that similarly invites an audience into meditative listening is 'Deep Minimalism 2.0', which occurred at the Southbank Centre in 2019 and contained music based on breathing by Williams (mentioned above on pages 10-11).<sup>35</sup>

Mindfulness is naturally present in my listening experience of Jim O'Rourke's recent music: I noticed this because an online review of one of his earlier albums

---

<sup>32</sup> 'Soothing Relaxation - YouTube,' YouTube channel, accessed 28 April 2022, <https://www.youtube.com/channel/UCjzHeG1KWoonmf9d5KBvSiw>.

<sup>33</sup> Max Richter, 'Max Richter - Sleep,' Max Richter, accessed 28 April 2022, <https://www.maxrichter-sleep.com/?v=1>.

<sup>34</sup> 'World Meditation Day Concert • Contemporary • Kings Place,' Kings Place, accessed 28 April 2022, <https://www.kingsplace.co.uk/whats-on/contemporary/world-meditation-day-concert/>.

<sup>35</sup> 'Deep∞minimalism 2.0 at Southbank Centre, London (2019),' Resident Advisor, accessed 29 April 2022, <https://ra.co/events/1263702>.

*Long Night* compared the level of concentration required to keep up with the slurry of timbral transformations to meditation.<sup>36</sup> When I apply a mindful awareness to this music I become more acutely aware of motions through different sound worlds. In his more recent piece *between 2 and 6 a.m.* for example, between five and ten minutes in there is a section where some electronics play alongside a live recording of music.<sup>37</sup> Through listening mindfully, I noticed more details than I would have noticed if I had been preoccupied with trying to listen to something specific like following the large-scale structure. Such details include the rhythm of the electronic part matching the live recording, the difference in pitch or tonality of the electronic part, and the gradual fading in and out of both parts.

To summarise the music above which focuses on the mindfulness of an audience: an attempt to actively direct the audience's experience through some kind of meditation lies outside the scope of this composition portfolio, as the pieces are more about experimenting with the performers' experiences instead. However, this may come into focus in future research. O'Rourke's music influenced me because of the experience I had listening to his music: I wanted to explore mindfulness somehow, although my focus ended up being on performance techniques rather than directed towards an audience's point of view.

It can be argued that a lot of contemporary music that doesn't explicitly refer to meditation or mindfulness also has meaningful connections to them. For instance, mindful awareness has a more widespread relationship with the philosophies of other experimental composers from the late twentieth and twenty-first centuries. John Cage, in his lecture titled 'Experimental Music' from *Silence*, neatly articulated a kind of music in which the composer gives up control of sounds as a 'new listening', defined as 'an attention to the activity of sounds.'<sup>38</sup> One of Morton Feldman's descriptions of his approach to his own music was that he treated sounds with respect, as he would a human being, and avoided forcing

---

<sup>36</sup> laurel\_yew, Review, *Jim O'Rourke – Long Night*, 23 July 2013, accessed 29 April 2022, <https://www.discogs.com/release/1458924-Jim-ORourke-Long-Night>.

<sup>37</sup> Jim O'Rourke, 'between 2 and 6 a.m.', track 1 on *steamroom 57*, Steamroom, 2021, Bandcamp album, accessed 29 April 2022, <https://steamroom.bandcamp.com/album/steamroom-53>.

<sup>38</sup> John Cage, *Silence – Lectures and Writings* (London: Marion Boyars), 10.



sounds to his will if they suggested their own directions instead.<sup>39</sup> Closely related is the term used by Éliane Radigue, 'availability,' which she describes in an interview with Julia Eckhardt. Both herself and the performers of her acoustic pieces involve in-the-moment listening as a part of their composition and performance techniques. In Radigue's acoustic music, the performers make themselves available to listen and interact with sounds that emerge in the moment underneath a pre-composed structure.<sup>40</sup>

Radigue is a Buddhist much like Oliveros, but she does not write her music for meditative purposes.<sup>41</sup> Despite this I am strongly attracted to her use of the term availability, because of how it coincides with my understanding of mindfulness and meditation. I associate the concept of being available with the open listening of mindfulness, meaning listening without searching for a specific sensation or experience. Whereas Radigue directs this awareness (and instructs performers to direct their awareness in her acoustic work) to sound sensations, my developed research questions ask performers to be aware of bodily sensations which arise from breathing. That activity is then translated into sound by the performers themselves. Although this inevitably requires the performers to move their attention away from the sound, this does not imply that there is no attention to the sound at all – sounds and breathing are entities that will share space in the performer's foreground of consciousness. Cassandra Miller did something demonstrating this with *Tracery*, involving a performer practising a meditation technique which includes the performer's entire body (as opposed to only the breath), and being aware of how those sensations influence the sound.<sup>42</sup>

### **Additional Comments on My Compositional Approach**

I aim to write compositions which provide unique experiences for performers that reflect mindfulness meditation, and I also aim to explore how those experiences

---

<sup>39</sup> Morton Feldman, 'Crippled Symmetry,' in *Give My Regards to Eighth Street: Collected Writings of Morton Feldman* (United States: Exact Change, 2000), 142-143.

<sup>40</sup> Eliane Radigue and Julia Eckhardt, *Intermediary Spaces*, Second Edition (Umland Editions, 2019), 45-47; Rhodri Davies, 'Occam I,' track 2 on *Occam Ocean I*, Shiiin shiiin eer1, 2017, 2x compact disc.

<sup>41</sup> Radigue, *Intermediary Spaces*, 142.

<sup>42</sup> Cassandra Miller, 'Tracery : Lazy, Rocking.' 8 February 2017, accessed 30 December 2021, <https://cassandramiller.wordpress.com/2017/02/07/tracery/>.

can produce their own interesting patterns and compositional forms in music. An appropriate technique in order for me to investigate this would be to integrate breathing techniques into compositional mediums that are already familiar to me. For instance, before the beginning of this project I was already familiar with writing contemporary music in a modal style,<sup>43</sup> and I was also familiar with performing and composing using structures involving improvisation, such as in jazz. I decided this would be appropriate because due to my familiarity with the mediums, it would be obvious from my perspective if and how mindfulness techniques affected the music. In mentioning improvisation, I will state that it is beyond the scope of this research to discuss how mindfulness and improvisation are linked in detail. However, I will define the improvisation techniques where necessary, such as in *Returning Waves*, where it helps to explain the performance techniques used.

I wanted my compositional approach to create music which is evidently spontaneous to an audience. Illustrating a spontaneous experience requires a sufficient level of freedom in expressing these sensations to be given to the performer. Otherwise the music will not sound unique enough across performances for different experiences to be expressed in their own way. Therefore, I had to consider (as a secondary research question): how should the instructions of meditative musical techniques be fine-tuned, so that the individual experience of each performance will be expressed as sufficiently distinct from each other? Radigue communicates her solution for this issue: her performers are free to interact with smaller spontaneous happenings in the music, but always within a specified macroscopic structure.<sup>44</sup> This way, any performance will be guided by both the immediate irregularities in the sound, as well as by a more rigid underlying plan. My approach needs similar solutions, but based on techniques that use an awareness of breathing rather than of sound.

In this portfolio there are five main pieces: *Unwinding a Tidal Separation* and *Dreams of Boundary Crossing* in section 3; *Shallow Waves* and *Returning Waves* in section 4; and *Ocean Waves* in section 5. Each piece explores the research

---

<sup>43</sup> Owen Russell, *Quite Unlike Itself*, 1 March 2020, accessed 30 December 2021, <https://soundcloud.com/owencrussell/now-it-looked-quite-unlike-itself>.

<sup>44</sup> Radigue, *Intermediary Spaces*, 45.

questions from a different perspective. Generally, my commentary in section 3 discusses how I began to involve ideas to do with Buddhism, awareness, and mindfulness meditation in my composing. In sections 4 and 5, I then narrow my focus towards breathing. The pieces are ordered parallel to the development of the research questions stated in this section.

### ***3. Unwinding a Tidal Separation and Dreams of Boundary Crossing***

The two pieces in this section illustrate the first developments of my research topic. Both pieces use narrative to depict my interpretations of Buddhist and other South-East Asian philosophies. I use the word narrative to describe events or stories that are portrayed through music allegorically. This is reminiscent of Greg Simon's point in 'Tell Me A Story': 'music ... relies on the evolution of a listener's understanding over the temporal course of a performance or recording.'<sup>47</sup> The narratives I have used in this research shaped the structure of the pieces. In both *Dreams of Boundary Crossing* and *Returning Waves*, those structures provided a ground on which performance techniques involving mindfulness could stand.

#### ***Unwinding a Tidal Separation***

*Unwinding* represents an example of a musical style that is reminiscent of my previous compositions (as introduced on page 18), and an attempt to impose on it illustrations of Buddhist philosophy and related religious beliefs from South-East Asia. The illustration of this piece is allegorical, and is based on ideas related to this piece's external compositional brief. This piece was composed as a part of a collective of new works to do with *distance*. This theme was reflective of the lockdowns endured during the COVID-19 pandemic. My initial idea was to have two separate parts that intertwined together over time in a dance consisting of patterns of separation and connection. One particular religious principle that augmented this concept is the idea from *Sumarah* (a Javanese spiritual tradition focused on group meditation) that pain is a catalyst for enlightenment. Suffering experienced under isolating lockdowns can lead to greater happiness and empathy later on.<sup>48</sup> A similar and well-known Buddhist analogy describes how the beautiful lotus flower only grows in mud.

---

<sup>47</sup> Greg Simon, 'Tell Me A Story: Teaching Music Composition Through Narrative Design,' *College Music Symposium* 59, no. 2 (2019): 4, <https://www.jstor.org/stable/10.2307/26902587>.

<sup>48</sup> Laura Romano, *Sumarah* (USA: Lulu Press, 2013), 27.

*Unwinding* conveys this narrative with structure, tonality, and motivic ideas, which are ideas that I had been working with prior to this research project. The instruments begin in bars 1-3 with their own separated motifs, and through the course of the piece those ideas develop and flow into each other. They transform from short and relatively sparse statements in the first section into a flourishing dance in sections B, C, and D. The tonality and structure represent motion from suffering to happiness, going from darker minor-sounding modes (based around D minor at the very start) to brighter major-sounding modes (based around C major in section D). This is also highlighted by the instruments' tessitura as they gradually extend further upwards over time.

My original fundamental aim to express my interpretations of Buddhist and related philosophy is demonstrated with this piece, but not to the extent that I wanted to continue with. In discussing Buddhist ceremonial and ritual music, Ian W. Mabbett describes how using symbols in religious practice is an act of literally bringing the concept to the immediate present. For me, *Unwinding* was a step towards a more visceral involvement of Buddhist ideas. The approach I used for this piece is musically effective and can illustrate a narrative clearly, but there is much more room to fill. This piece does not ask the performers to adjust their performance technique at all, besides the specific recording attached to this portfolio having been recorded remotely due to the COVID-19 pandemic. Therefore, the idea I took forwards from this piece was that it may be possible to both illustrate a narrative or concept *and* involve that narrative or concept in the performance or compositional practice.

### ***Dreams of Boundary Crossing***

*Dreams* was composed shortly following *Unwinding a Tidal Separation*. It was the first collaborative piece in this project and was composed for a specific violinist and harpist. I decided to paint a narrative again, but this time because the performers had strong ties to folk music, where songs very often tell stories. I took the inspiration for the narrative of this piece from 'Toft,' a chapter in Tove Jansson's

*Moominvalley in November*.<sup>49</sup> The primary interpretation I had of this chapter that connects with Buddhist philosophy was to do with impermanence. In short, the character Toft is hiding under the tarpaulin covering a boat as winter approaches and is struggling to hold onto his fantasy of wandering around a lush Moominvalley during the summer. I thought of Toft as someone who was suffering because he was clinging to a vision of an ideal world. Impermanence is an idea that appears across Buddhism that implies all things are transitory and clinging to transitory things causes suffering.<sup>50</sup> This piece illustrates a vanishing or misting over of Toft's fantasy. His utopia is represented by a recognisable melody, as exposed at the beginning of the piece in section A (see the file 'Russell\_204010072\_Dreams\_of\_Boundary\_Crossing\_Opening\_Score').

This piece utilises awareness through a particular performance technique that obscures the melody over time. It does this by guiding the violinist to slowly transition from playing the melody in its original form, to freely ornamenting it, to forgetting it as ornaments turn into musical phrases of their own (see the file 'Russell\_204010072\_Dreams\_of\_Boundary\_Crossing\_Text\_Score'). Memory is the primary subject of awareness here. The violinist must be mindfully aware of what parts of the melody they remember in order to play something in response. At the same time, they must gradually shift the focus of their awareness away from those memories and instead towards how they perceive the ornamentation to develop. The harpist is aware of a recording of the violinist's playing, rather than their own. They play receptively to the recording by adding their own harmony as they listen. This awareness from both of the performers is integral to the piece because the changes in the focus of their awareness is what defines the structure of their recordings, and it is also the primary source of narrative illustration in this piece: as the melody is moved out of the focus of awareness for the violinist, the melody becomes lost just as Toft's dream became misted over.

The text score communicates the shifting in these ideas by using incremental steps, which themselves each ask for a gradual change. There are

---

<sup>49</sup> Tove Jansson, 'Toft,' in *Moominvalley in November*, (London: Sort Of Books, 2018), 18-23.

<sup>50</sup> Zoketsu Norman Fischer, 'Impermanence Is Buddha Nature,' in *The Best Buddhist Writing 2013*, ed. Melvin Mcleod (Shambhala, 2013).

specific instructions that denote how long certain sections should be so that the performers remain synchronised and the structure moves forwards, such as ‘gradually play softer and more sparsely for 1-2 mins.’ There are also vaguely worded instructions that indicate a freer approach to playing, such as ‘Let the lines of ornamentation control the direction of the material.’ This quote refers to ‘lines of ornamentation’ as if they are to be given respect like a separate performer. Feldman expresses a similar approach to sound (see pages 16-17) that appears frequently later on in this research, and again reflects the open listening of mindfulness.

To summarise, in a semi-notated context I composed a method of using mindful awareness in performance practice. In discussions both performers connected their experience of recording their parts to scenarios from their backgrounds in folk music.<sup>51</sup> The harpist compared their encounter with this piece to figuring out chords to a folk melody by ear, and the violinist had previously used a repeated melody to fill an ambient space in a fusion piece with a gamelan ensemble. The techniques I used therefore are not hugely different from some conventions which surround folk (and related) music, but in this piece they take centre stage and are moulded to fit a narrative.

The above techniques were designed around remote recording as the situation at the time demanded them. For the same reason I also decided to implement electronics in the form of sample transformation with digital effects. This enhanced the piece’s narrative illustration in two ways. Firstly, by using various effects to transform sounds or by panning them to the left or right, a spatial element could be created. Because almost all of the sounds in this piece are transformations of clips from the violin and harp recordings, the main recordings of the text score and the transformed samples can become ambiguously intertwined (especially regarding the harp sounds in sections F and G, heard in the recording from 5’55” to 8’14”). This ambiguity also helps to depict Toft’s dream misting over, congruent with the performers’ text-based directions. Secondly, a temporal ambiguity arose due to the use of samples from the main instrumental recordings

---

<sup>51</sup> Personal communication with the author.

in creating a spatial dimension for this piece. For a clear example, the line heard in the main violin recording in the excerpt 9'00''-9'15'' is heard much earlier in the background of the texture, in the excerpt 3'30''-3'45''. Other examples are less clear because of the distorted and transformed material, but many remain recognisable. As different fragments of material reappear in unexpected ways, the linear development of the piece becomes hazier, also contributing to the misting over.

There are some ways in which this ambiguity corresponds with my own experience of awareness or meditation, such as how the flow of events is less of a linear progression and more like the temporal and spatial ambiguity created by the electronics. For example, sounds I hear might be continuous or repetitive, and I might be aware of them or remember them in unexpected intervals. However, this was not deliberate and meditation does not correspond with the piece's narrative. In this case, the music was an illustration of a narrative connected with my interpretation of a different concept in Buddhism (impermanence). It was not intended to be an allegorical illustration of awareness, so much as it was created utilising it.



## 4. *Shallow Waves and Returning Waves*

The next three pieces use breathing in their performance practices. On the path to creating *Ocean Waves* (the most significant of the three), I composed two shorter pieces also based on breathing: *Shallow Waves* and *Returning Waves*. They are both focused on exploring a single technique, and the process of composing them involved some experimentation in order to distil a feasible compositional and performance practice.

### *Shallow Waves for Three Winds*

*Shallow Waves*, the first of the two smaller ‘waves’ pieces, is a piece for three wind instruments and was composed in collaboration with three performers. Our collaboration process was relaxed, and we openly bounced ideas off of each other during rehearsals as the piece developed. Nevertheless I was still loosely in control as a composer, and most of the time I worked on the score apart from them. These factors bring creative authorship into question which is a topic that, whilst intriguing and potentially fruitful to explore in the future, lands beyond the scope of this commentary. This piece moves forwards with the awareness used in *Dreams of Boundary Crossing*, and more directly draws from meditation and mindfulness by using breathing.

The technique in *Shallow Waves* contrasts with the other breath-based pieces because the central activity of the piece asks the performers to consciously control and adjust their breath to an extent, rather than purely observe it. The group has to maintain a consistent cycle through observing each other’s breathing (through visual and audible cues such as a rising and falling abdomen, or a performer exhaling exclusively through their mouth) as well as their own. They must also keep themselves synchronised by finding a natural collective rhythm that works as a compromise for the whole group, as each performer will have a slightly unique natural tempo to their breathing. For example, the bassoonist of our group had a large lung capacity and tended towards a longer breath cycle than the saxophonists. Therefore, in the process of discovering this rhythm, the performers must passively observe each other’s breathing and actively use that information to

control their own, rather than observing their own breathing and using that information to control sound. In summary, the breath is the subject of control.

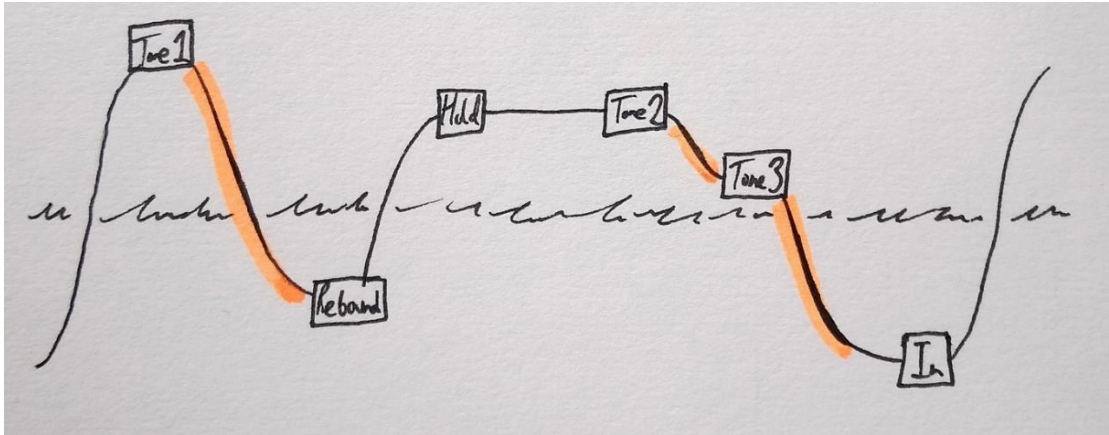
This was most true whilst the performers were beginning to rehearse. However, after several attempts at maintaining the cycle it became something that arose more naturally out of habit. Thus, more conscious attention could then be balanced towards the tonal aspect of the piece. The awareness required in the processes of selecting tones has similar qualities to the awareness needed for the synchronised breathing cycle. For tone 2, each individual offers their own perspective on the harmonic area that the whole group is filling, and so they must be aware of how they naturally interpret the harmony. This is made more difficult before the introduction of tone 3 because the performers are drawing harmony from a monophonic texture. Tone 1 needs a more immediate kind of the awareness used for tone 2, as the collective harmonic and melodic directions of the piece may be recognised and followed one tone at a time.

*Shallow Waves* presented challenges unique to a compositional approach that uses text instructions and no staff notation. I needed to ensure that the text accurately reflected my own comprehension of the piece. I wanted the directions to be as clear as possible to begin with, so as a group we comprehended the piece mostly from our discussion. We used any text-based material that I brought to each rehearsal as a guideline. The score in this portfolio is a repeatable representation of those discussed ideas, and the language and structure of the score were initially formed by reviewing the instructions together verbally. Later versions of the score were completed alone in the months after the recording was made. In early versions before the recording, I used graphical diagrams to illustrate how much air should be in the lungs at certain points during the cycle, on an x and y axis (see figure 1). It helped to illustrate my ideas to the performers whilst the terminology and structure of the score were not yet in focus, but once the language of the score became clear enough it was no longer needed. I also chose not to keep the diagram and work on the piece as a semi-graphical score (like Oliveros' *Wind Horse*),<sup>53</sup> as

---

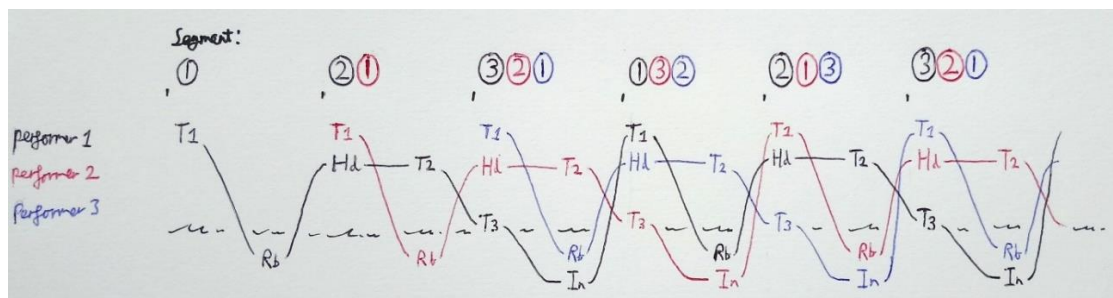
<sup>53</sup> Pauline Oliveros, *Wind Horse* (Deep Listening Publications, 1989), <http://deeplisting.org/site/sites/default/files/files/Wind%20Horse.pdf>.

graphics such as in the figures below would not give any information that could not be given with the text alone.



**Figure 1: A Diagram from an Earlier Version of *Shallow Waves*.**

X-axis = time, Y-axis = the amount of air in the performer's lungs.



**Figure 2: A Colour-Coded Diagram from an Earlier Version of *Shallow Waves*.**

Each 'segment' would occur simultaneously once all three performers had begun.

The instructions were developed mostly through reducing the complexity and specificity of my descriptions. For instance, I had initially imagined the six-step cycle to have been separated into three 'segments' of two steps each, and by using a second diagram it could be illustrated how the performers' cycles would overlap so that each segment would occur simultaneously (see figure 2). Later on, however, the term would become redundant as a short paragraph is enough to explain how the performers are synchronised. The language I chose to use for tone 2 also changed. Originally I asked for the performers to select a pitch based on what mode

or scale they believe they are playing in via tone 1. The performers expressed that this was too mentally taxing, especially alongside all of the considerations that are involved in breathing together. We decided that something more instinctive was required, so later on I switched to using ‘a pitch that you *interpret to be significant* within the tone 1 *harmonic space*.’

In contrast with the previous pieces composed for this project, this piece is not based on a narrative and does not attempt to illustrate anything abstract. Instead, the piece provides a scenario in which a meditative experience can translate into a performance. Just as in mindfulness where the goal is to practise maintaining an awareness of the present, the breathing cycle of the piece must also be maintained through an awareness of both a performer’s own breath and of the breath of the other performers. This produces a performance, firstly because of how the breath is made obvious as a synchronised regular element in the piece (see the file ‘Russell\_204010072\_Video\_Recording\_Shallow\_Waves’:the cycles are highlighted visually using opacity filters on each performer at the beginning and end). Secondly, the tones add extra layers and a musical structure to the process. Lastly, consistent availability is required in maintaining all of the processes of the piece. The performers’ patience and willingness to listen mindfully is evident to an audience both through the breath cycle and the tones. In summary, this piece presents one possible and effective performance practice based on meditation and awareness of breath.

### ***Returning Waves (Age of the Calm Evening)***

*Returning Waves* is the second shorter breath-based piece which was composed following *Shallow Waves* in collaboration with another specific performer who is a jazz pianist. Since we both have strong connections with jazz, I aimed to draw from elements of that idiom: the structure of this piece predominantly provides an environment for an improvised jazz solo, similar to music within the ‘jazz compositional tradition,’ as Lyle Mays describes.<sup>54</sup> The term improvisation here

---

<sup>54</sup> Gil Goldstein and Lyle Mays, ‘Lyle Mays,’ in *Jazz Composer’s Companion*, Revised and Expanded 3rd Edition (Mainz: Advance Music, 2014), 116–17.

refers to jazz improvisation exclusively which, whilst fluidly defined across the history of jazz,<sup>55</sup> has an emphasis on structured solos which is relevant to this piece.

Our discussions around the work were different from the discussions that occurred around *Shallow Waves*. They were less to do with the formation of the piece since I mostly composed this piece alone, and more to do with how the piece resonated with the performer's background as a pianist and as a jazz player. It felt as if I was facilitating this resonance by providing an experience that the performer could closely relate to. In that sense, this piece presents a collaborative compositional approach that uses awareness to explore and express elements of a performer's individual craft.

Similar to *Dreams of Boundary Crossing* and contrasting with *Shallow Waves*, a narrative was used to conceptualise the structure of the piece. It takes inspiration from the slowly eroding world of *Yokohama Kaidashi Kikou*, a science-fiction slice-of-life manga created by Hitoshi Ashinano. The sea levels gradually rise throughout and it is implied that humanity goes extinct not in an explosive catastrophe, but by being slowly engulfed in the ocean. The second half of the title for this piece 'Age of the calm Evening' comes from the main character's final monologue at the end of volume 14, describing the beauty they see in the gradually diminishing Earth.<sup>56</sup> From this, I wanted to illustrate the coastal erosion caused by the sea. This concept is very similar to the steady transformation in *Dreams of Boundary Crossing*, and the disappearing landscape is also suggestive of the Buddhist concept of impermanence. My original intention was for this structure to be dictated by a gradual infusion of the breath (representing the ocean) into the jazz solo until the music disappears.

Again similar to *Dreams of Boundary Crossing*, both score notation and text instructions are used. The score notation is treated in a standard way for jazz, where a written melody with chords is repeated and improvised upon. I initially

---

<sup>55</sup> Michael H. Zack, 'Jazz Improvisation and Organizing: Once More from the Top,' *Organization Science* 11, no. 2 (2000): 228–229, <https://www.jstor.org/stable/2640286>.

<sup>56</sup> For an English translation of all volumes, see: 'YKK Project,' accessed 29 December 2021, <https://www.yugenykk.org/>. For a further synopsis, see: Marc Hairston, 'A Healing, Gentle Apocalypse: Yokohama Kaidashi Kikō,' *Mechademia* 3, no. 1 (2008): 256–58, <https://doi.org/10.1353/mec.0.0036>.

wrote this particular melody as a test for the performer to see if they would respond well to the particular musical style, which they coincidentally did. The simple modality also suits the peaceful mood of the narrative. The text instructions then describe how breath-based performance techniques change the improvisation over time. The language is considerably more vague and condensed than it is in *Shallow Waves* because this piece utilises a performance tradition that does not need explaining, especially to the specific performer I was working with.

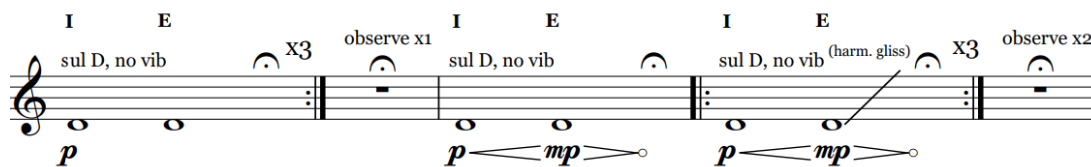
I wanted the music-specific instructions to work well alongside that improvisation technique, and so they only interfere with how strongly the improvisation connects to the notated melody: 'Now let the improvisation wander away from the head, loosening your attention on following the changes exactly.' Additionally, because of how variable in approach each performer's solo would be to a melody like this without any instructions, the language directing the breath's introduction has to be open to interpretation. However, it also has to emphasise the focus on mindful awareness. To achieve this I use language that once again reflects the open and respectful listening in mindfulness meditation, similar to how I described working with ornaments in *Dreams of Boundary Crossing* (see page 22): 'Watch your breath as you play. Start to work with it and give it a little room to decide how things are phrased.' To encapsulate the above, *Returning Waves* offers a performance practice based on awareness and meditation, similar to *Dreams of Boundary Crossing*, but organised in a way that draws from jazz music rather than from folk music. The breath awareness technique in this practice is based on mindfulness meditation and, like *Dreams*, provides source material for performers to let go of.

In *Shallow Waves* the pitch material corresponded with the breath cycle on the scale of single pitches, whereas *Returning Waves* uses breathing on the scale of improvised phrases which can vary in length. An unfortunate side effect of this is that breathing mostly remains within the experience of the performer and is not audibly explicit. In the recordings that were produced it was most obvious to me that breathing was co-creating the music towards the end of the piece, onwards of 6 minutes in the recording chosen for this portfolio for example. This makes sense because the instructions more dramatically altered the rhythm and flow of the jazz

solo over time. However, it was not evident at all for much of the rest of the piece, especially compared with *Shallow Waves* which clearly establishes breathing as a part of the piece at the very beginning. Therefore, this piece does not expand as effectively as *Shallow Waves* on the *illustration* of mindfulness techniques in performance practice when compared with *Dreams of Boundary Crossing*. It is difficult to judge whether or not the breath might be illustrated more or less clearly if another performer were to interpret it differently. However, instructions that more obviously introduce breath sonically and for longer would likely favour the expression of the performer's breathing in any interpretation.

## 5. *Ocean Waves*

*Migration III – Ocean Waves* was composed following the smaller ‘waves’ pieces. It brings ideas forwards from both of them, such as using awareness in different ways within a group from *Shallow Waves*, and treating the breath as a separate performer from *Returning Waves*. It also follows some smaller workshopped ideas for violin and piano which began to explore the notation for one particular technique using breathing. An example of the early notation is shown below in figure 3.



**Figure 3: Some Notation of the Violin Part from the Workshopped Ideas.**

This performance practice is more precise compared with the other pieces within this research. The performer passively observes their breath, exactly as they would in meditation, and plays their music so that it matches the rhythm of their immediate inhalations and exhalations (notated as I and E respectively). The breath cycles are divided into cells and the notes are given approximate durations as there is no time signature or pulse. This way, the object of awareness (breathing) can be tied to unchanging notated material, but it is still allowed to heavily impact the sound by controlling the rhythm.

A similar balance to the instructions in *Returning Waves* works effectively where although the breath is respected and followed, the performer has to translate this information onto their performance technique, and in some cases compromise. For instance, a violinist will eventually run out of bow if a note lasts for too long, so some leeway is needed for their breathing and bowing to interact. To extend this description of balance, my approach towards *Ocean Waves* links the strongest of this portfolio to the idea about the flow of affect expressed in breathing (on pages 10-11). Although it is naturally present to a lesser degree in the



other two breath-based pieces in this portfolio, the performance practice in this piece emphasises it. A performer's breathing, and therefore playing, will be affected to varying degrees by all of the sensations present in the performance scenario. Musical qualities such as phrase length, dynamic, or lyricism will feed into the rhythm and intensity of the breath that is then turned into a musical output. When all of the performers are going through this process they will also affect each other by way of ensemble dynamic balance, for example. This is in contrast with *Shallow Waves* where the group must actively and consciously affect their breathing, and this control constitutes part of the performance. Whereas, in *Ocean Waves* the group passively and subconsciously allows elements of the performance to affect their breathing. The breathing is *then* actively observed and translated onto music. In summary, the primary technique involving the performers following their own breath draws from a complex flow of performance elements affecting one another. This flow creates dynamic patterns in the breath, and thus in the music too.

Oliveros describes what happens when breathing is involved in her own work in a similar way: 'The breath does change, if the attention remains focused on the cycle. The quality of these changes is personal and varies with each participating individual.'<sup>57</sup> One example which illustrates this for me within the specific recording attached to this portfolio is at the penultimate part of section F (at 15'26'' in the file 'Russell\_204010072\_Recording\_Ocean\_Waves').<sup>58</sup> Each string part has four bars that are endlessly repeated, and the phase differences between the parts emerge as more time passes. The three violins and cello 2 especially interact in interesting ways and sound their crescendos and diminuendos at similar time intervals after a few repeats.

The workshop and smaller 'waves' pieces also helped inform decisions that I made before the composition process. The ensemble size is eight musicians because, although I wanted enough members so that more complex ideas related

---

<sup>57</sup> Pauline Oliveros, 'On Sonic Meditation,' in *Software for People: Collected Writings 1963-80* (Baltimore: Smith Publications, 1984), 150-151.

<sup>58</sup> Mute directions which do not appear in the score were added in this recording to improve the sound for the specific ensemble that performed the piece.

to the main technique could be developed, it also seemed important to keep the sense of intimacy that made the carefully coordinated cycle in *Shallow Waves* especially effective. Also given that this piece was not a collaboration with specific performers, keeping the group relatively small would mean that ideas could likely be explored in rehearsal with more depth and discussion than if they were being distributed across large sections.

The primary technique of breath observation spans the entirety of *Ocean Waves* for every part, but it is occasionally modified and controlled to affect the performers' synchronicity and to define the structure. At the beginning of section A for example, the violins have to be aware of each other so that they begin their inhalations on another player's exhalation. This 'following' is an idea that is developed elsewhere in this piece, for instance at the start of section B where violins 2 and 3 act as leaders to the violas and cellos. The structure can be seen in a logistical diagram at the end of the score. Because of the nature of the staff notation in this piece, a traditional score with all of the parts lined up would be unhelpful. For the majority of the time even if parts are the same length, each performer is observing their own breath cycle individually, and so the performers end up out of synchronisation with each other. Therefore In place of a traditional score, I made a logistical diagram to illustrate how the parts interact.

Specific instrumental parts usually have consistent roles in the various modified techniques which helps to define structural changes: the piano performs cues for the strings, plays lyrical solo passages between sections, and almost exclusively breathes independently and leads rather than follows. This role fits the piano as the strike of the notes acts as a good rhythmic anchor, and the more distinct timbre is easiest to follow for the strings in chaotic sections. The violins often act as leaders for their adjacent violas and cellos – the order of the strings from left to right is viola 2, violin 2, viola 1, violin 1, cello 1, violin 3, cello 2. This way the violins can act as leaders to their adjacent strings.

I had to rely on text alone to convey the performance techniques, without the opportunity to directly speak with any of the performers. The text is thus given less room for interpretation for the sake of clarity. The instructions on the title page of each part describe the notational and performance practices in advance of the

piece. Most of the instructions that appear as text above the staff notation are related to changes in technique and cues that specific instruments must give or follow. It was logical to use tailored text and cues instead of more symbols, because there were already many added symbols and deviations from traditional staff notation, and the instructions were often unique to each circumstance. For instance, the technique that the violins use at the opening of section A as mentioned before is not seen again for the rest of the piece.

Many of the notational principles were developed from the original workshopped ideas. Each inhalation and exhalation in *Ocean Waves* inhabits a separate cell, rather than a cell representing an entire cycle, as in figure 3. This change was made because smaller divisions are more flexible and can be organised in more convenient ways, such as if a section ends has an odd number of inhalations and exhalations. Additionally, in the original notation there is a pause at the end of the first and third cells. This was an attempt to illustrate the short pause which I noticed in my breath cycle between exhaling and inhaling but I did not consider the differences in each person's breath cycle. The violinist who performed in the workshop demonstrated that their cycle actually tended towards the opposite, with a pause in between each inhalation and exhalation. In simplifying the notation and explaining the technique in the performance directions, I developed a balanced notational practice that effectively couples the rhythm of a performer's breathing to staff-notated material using rhythm and phrasing.

The notation's flexibility gave me the opportunity to explore a variety of techniques. For instance, the almost totally individual observation in section A contrasts heavily with section F, where all of the strings are following the piano together. The techniques are organised in a way which corresponds to mindful meditative practice. A lot of the smaller structural chunks within larger sections resemble a recurring pattern of synchronicity, where a cue causes some or all of the performers to synchronise, often by following another particular performer's breathing, and then to gradually return to individual observation afterwards. This portrays the ebb and flow of concentration in mindfulness meditation: the reason why awareness of the present has to be practised is because it is not easy to maintain for long. I personally find that my awareness often snaps back to the

present when I suddenly realise I have become distracted by something. Yongey Mingyur Rinpoche gives a helpful metaphor to explain this process which resonates with my own experience, using a singing bowl which gradually begins to sound for longer over time.<sup>59</sup> The most obvious example of this in the piece is in section B, which is structured entirely by piano cues that ‘snap’ the other instruments forwards to new material. Thus, whilst this piece does not depict an extra-musical narrative as such, the structure of the material abstractly reflects the mindfulness-related aspects of the performance practice.

Within that structure which is defined by the changes in technique, there is a modal and motif-based structure that develops as well. My modal and motivic approach, similar to the approach I used for *Unwinding a Tidal Separation*, is something that follows my music prior to this research. The specific material in this piece is developed from the original workshopped ideas – frequent tonal centres around the notes D and G and some of the motifs (such as the grace note motif that first appears on the second line of the third page of the violin 1 part) were also present in those smaller fragments.

To summarise, breath plays an essential role in the compositional approach and performance practice of this piece. Despite the fact that this piece uses composed staff notation more significantly than the other ‘waves’ pieces, and relies less heavily on breathing to produce a sonic result, it still forms the most important part of this piece’s identity. I believe this to be the case because the dynamic performance practice based on mindfulness meditation utilises breath at its core. Without the breath (for instance, if the rhythms were just played freely instead), both the experience of the performers and the rhythms that come from it would be far less interesting. The breath in most cases exhibits a contour of tension and release in a slow-motion pulse. Although the exact qualities and sensations of breathing will vary between performers, the similarities are enough to evoke a consistent and identifiable tempo. Moreover, the staff-notated material reflects the more universal qualities of breathing, such as the aforementioned tension of

---

<sup>59</sup> Palpung Lungtok Choeling Temple, ‘2019-06-09 Yongey Mingyur Rinpoche’s Teaching on Meditation - 1/2,’ 7 August 2019, accessed 30 December 2021, 1:06:40, <https://www.youtube.com/watch?v=7BnebkKJ2PE>.

inhaling and release in exhaling, using crescendos and diminuendos respectively. The instruction is given to bow phrases on an inhalation upwards, and to bow phrases on an exhalation downwards, which reflects the traditional use of down bows on strong beats on all string instruments. Breathing is therefore inseparably woven into both the notated material and the performance practice. As the breath-based performance technique strongly relates to elements of mindfulness meditation, this composition as a whole exemplifies an emphasis of the synergies between breathing in mindfulness meditation and in performance.

## 6. Conclusion

### Compositional Approaches and Performance Practices

The first pieces in this project explored the relationships that Buddhist and related philosophical concepts can have with music. This relationship was explored through the lens of awareness. The performance practice in *Dreams of Boundary Crossing* used an open and available awareness, akin to the qualities of mindfulness meditation. The possibilities of illustrating a narrative from the perspectives of Buddhist philosophy were also explored. Firstly, *Unwinding a Tidal Separation* illustrated the closing of distanced relationships that arose because of lockdowns, reminiscent of the lotus flower in Buddhism. The concept of impermanence was then illustrated in *Dreams of Boundary Crossing* where a character suffers because they cling to transient things. A similar narrative appears in *Returning Waves*, illustrating the world being eroded away in a slow and calm apocalypse. This illustration is achieved in *Unwinding* through tonality and motifs. In *Dreams* it is achieved through both electronic sample transformation and mindfulness-based performance techniques, and in *Returning Waves* it is achieved through the performance technique alone. The narratives in *Unwinding*, *Dreams* and *Returning Waves* are integral to the structures of each piece, but contrastingly *Shallow Waves* and *Ocean Waves* did not originate from an extra-musical narrative. Instead, the performance techniques for those pieces came first in the process. This did not occur because I consciously abandoned using a narrative, and it may still be beneficial to compose narrative-driven pieces in the future. Both kinds of compositional processes produced fruitful results.

The research made a narrower exploration towards the connection that breathing posits between mindfulness meditation and music. This connection offers abundant possibilities in both compositional and performance practice. The three 'waves' pieces highlighted multiple compositional approaches and performance practices utilising that connection: *Shallow Waves* consists of a carefully controlled collective breath cycle, and a similarly collective process of tone-based music production. The maintained synchronisation of the performers that must be practised is reminiscent of the maintained awareness that is required for

mindfulness meditation. *Returning Waves* consists of a structure of jazz improvisation, infused with the breath's rhythmic characteristics. It uses an open and available awareness of the breath, similar to the awareness used in *Dreams of Boundary Crossing*. *Ocean Waves* consists of a large structure built on variations of a central technique which translates the rhythm and 'phrasing' of the performer's breath onto notated material. The same open and available listening is present here again, but also present is some illustration of aspects of my personal experience with meditation in the form of sudden synchronisations that represent sudden snaps of awareness.

None of these pieces use meditation or awareness without altering it to fit a purpose. They all instructed the performers to translate particular observed aspects of breathing onto music in different ways in order to create basic structures that I could use to compose. The technique in *Ocean Waves* is the most flexible, and the cells containing inhalations and exhalations are like bricks (or normal bars in staff notation) that are ordered and layered in abstract structures. In contrast, the technique in *Shallow Waves* is complex and works more like a section of scaffold. It provides the basis for the structure by itself and it is adorned with a system of tones to add a layer of sound and organise the repetitions of the cycle.

### **Experience, Sound, and Spontaneity**

The sounds and structures which arose as a result of the performance practices of the three 'waves' pieces functioned in varying ways. The coordination of the performers is the key aspect which is illustrated in *Shallow Waves*. The rhythm of everything in the piece is dependent on the synchronisation of the breathing cycle, while the tonal system is also coordinated within the group. The spontaneity that occurs in this piece is due to the individual fluctuations in the breath cycle that have to be accounted for by the whole group, and in the immediate decision-making required by the tones.

The rhythm of the breath is the primary element that is illustrated in *Returning Waves*, and it is gradually allowed to impact the jazz improvisation more towards the end of the piece. Rhythm is also the most significant feature of the breath that is observed in *Ocean Waves*. The layering of variations on that

technique upon eight musicians at once creates dynamic patterns of synchronicity. Because the technique also provided the means to define a large-scale structure (as illustrated by the logistical diagram), the proportions would be different in each performance depending on how the experiences of the performers affected their breathing spontaneously.

### **Notation**

The approach towards the use of text to convey the performance practice of a piece based on meditation and awareness developed throughout the research. My intention to describe the use of awareness with open-ended language was consistent between pieces. I began in *Dreams of Boundary Crossing* by asking the performers to give up control to the elements that drove the performance, such as the ornamentation for the violinist. In *Returning Waves* and *Ocean Waves*, I then landed on the expression of describing a performer's breathing as if it were itself a performer. I asked the performers to work *with* their breath, rather than to completely give up control, as especially in *Ocean Waves* what is required is a translation of the breath's rhythm onto music. *Shallow Waves* lies outside of the specific development above, but underwent its own distillation process via the removal of unnecessary terminology, for instance.

Different combinations of text and staff notation are used in the compositional approaches of this research. *Dreams of Boundary Crossing* has separated text instructions, that are arrived at after a notated introduction. *Returning Waves* uses text instructions to outline the structure and the development of the breath-based technique, whilst the staff notation acted as the mouldable material which the performance technique affects. This is also true in *Ocean Waves*, but the text is organised differently depending on its purpose: there is a set of performance instructions prior to the staff notation that explains the performance practice, as well as text instructions within the staff notation that instruct performers on how to move through the structure of the piece.



## Summary

Overall, this research revealed a set of compositional approaches which investigate the relationship between musical composition and mindfulness meditation. These pieces show that a performer's or composer's awareness (of their breathing or otherwise) can be utilised in various different practices to make music which emphasises or illustrates aspects of that awareness.

This research also propelled me personally towards a fuller understanding of mindfulness meditation and the compositional strategy of incorporating it in music, so that I may continue this research with a stronger perspective in the future. I aim to re-evaluate my artistic goals moving forwards, keeping the results of this research in mind. The most personally engaging and enjoyable work in this project came from the collaborations with specific performers. *Dreams of Boundary Crossing*, *Shallow Waves*, and *Returning Waves* drew out a variety of surrounding relationships between the performance practices and the performers' unique crafts and perspectives, and made me think about my role as a composer in collaborating closely with others. I especially relate these experiences with Oliveros' artistic goals involving connections with others, referred to previously on page 14.<sup>60</sup> I believe that, given the distressing direction that humanity is currently heading in, developing and emphasising the potentially positive and transformative social-political impact of this approach is the next step to take.

---

<sup>60</sup> Oliveros, 'My "American Music",' 392–394.

## Resource List

- Cage, John. *Silence - Lectures and Writings*. London: Marion Boyars, 1978.
- Cambridge Dictionary. Website. Cambridge: Cambridge University Press, 2022.  
 Accessed 30 April 2022,  
<https://dictionary.cambridge.org/dictionary/english/awareness>.
- Davies, Rhodri. 'Occam I.' Track 2 on *Occam Ocean I*. Shiiin shiiin eer1, 2017, 2x compact disc.
- 'Deep∞minimalism 2.0 at Southbank Centre, London (2019).' Resident Advisor, accessed 29 April 2022. <https://ra.co/events/1263702>.
- Feldman, Morton. 'Crippled Symmetry.' In *Give My Regards to Eighth Street: Collected Writings of Morton Feldman*, 134–49. United States: Exact Change, 2000.
- Fischer, Zoketsu Norman. 'Impermanence Is Buddha Nature.' In *The Best Buddhist Writing 2013*, ed. Mcleod, Melvin. Shambhala, 2013.
- Goldstein, Gil. *Jazz Composer's Companion*, Revised and Expanded 3<sup>rd</sup> Edition. Mainz: Advance Music, 2014.
- Hairston, Marc. 'A Healing, Gentle Apocalypse: Yokohama Kaidashi Kikō.' *Mechademia* 3, no. 1 (2008): 256–58. <https://doi.org/10.1353/mec.0.0036>.
- Hanson, Ida. *Mindfulness Meditation Effects on Attention: A Literature Review of fMRI Studies*. University of Skövde, 2021. <https://www.diva-portal.org/smash/get/diva2:1575387/FULLTEXT01.pdf>.
- Jansson, Tove. 'Toft,' in *Moominvalley in November*, 18-23. London: Sort Of Books, 2018.
- Lewis, George E. 'Too Many Notes: Computers, Complexity and Culture in "Voyager".' *Leonardo Music Journal* 10 (2000): 33–39.  
<http://www.jstor.org/stable/1513376>.
- Headspace. 'Meditation and Sleep Made Simple - Headspace.' Accessed 12 November 2021. <https://www.headspace.com/>.
- laurel\_yew. Review, *Jim O'Rourke – Long Night*, 23 July 2013. Accessed 29 April 2022. <https://www.discogs.com/release/1458924-Jim-ORourke-Long-Night>.

Miller, Cassandra. 'Tracery : Lazy, Rocking,' 8 February 2017. Accessed 30 December 2021. <https://cassandramiller.wordpress.com/2017/02/07/tracery/>.

Nanamoli, Bhikkhu and Bhikkhu Bodhi, trans. '10 Satipaṭṭhāna Suta The Foundations of Mindfulness.' In *The Middle Length Discourses of the Buddha - A Translation of the Majjhima Nikāya*, Fourth Edition, 145–55. Massachusetts: Wisdom Publications, 2015.

\_\_\_\_\_. '118 Ānāpānasati Sutta Mindfulness of Breathing.' In *The Middle Length Discourses of the Buddha - A Translation of the Majjhima Nikāya*, Fourth Edition, 941–48. Massachusetts: Wisdom Publications, 2015.

O'Rourke, Jim. 'between 2 and 6 a.m.' Recorded 3 December 2021. Track 1 on *steamroom 57*. Steamroom, 2021. Bandcamp album, accessed 29 April 2022, <https://steamroom.bandcamp.com/album/steamroom-57>.

Olbrich, Susanne. 'Dare To Create! Meditation, Insight and Creative Processes in Music.' In *Mindful Heroes: Storeys of Journeys That Changed Lives*, ed. T. Barrett, V. Harris, and G. Nixon. Aberdeen, Scotland: Inspired By Learning, 2021, 219-33. Oliveros, Pauline. *Sonic Meditations*. Baltimore, MD: Smith Publications, 1974.

\_\_\_\_\_. 'On Sonic Meditation.' In *Software for People: Collected Writings 1963-80*, 138–57. Baltimore: Smith Publications, 1984.

\_\_\_\_\_. *Wind Horse*. Deep Listening Publications, 1989. Accessed 30 December 2021.

<http://deeplisting.org/site/sites/default/files/files/Wind%20Horse.pdf>.

\_\_\_\_\_. 'My "American Music": Soundscape, Politics, Technology, Community.' *American Music* 25, no. 4 (2007): 389–404. <https://doi.org/10.2307/40071676>.

Palpung Lungtok Choeling Temple. '2019-06-09 Yongey Mingyur Rinpoche's Teaching on Meditation - 1/2,' 7 August 2019. Accessed 30 December 2021. <https://www.youtube.com/watch?v=7BnebkKJ2PE>.

Radigue, Eliane, and Julia Eckhardt. *Intermediary Spaces*. Second Edition. Umland Editions, 2019.

- Richter, Max. 'Max Richter – Sleep.' Max Richter. Accessed 28 April 2022. Max Richter, 'Max Richter - Sleep,' Max Richter, accessed 28 April 2022, <https://www.maxrichter-sleep.com/?v=1>.
- Romano, Laura. *Sumarah*. USA: Lulu Press, 2013.
- Russell, Owen. *Now It Looked Quite Unlike Itself*, 2020. Accessed 30 December 2021. <https://soundcloud.com/owencrussell/now-it-looked-quite-unlike-itself>.
- Sakaguchi, Yutaka, and Eriko Aiba. 'Relationship between Musical Characteristics and Temporal Breathing Pattern in Piano Performance.' *Frontiers in Human Neuroscience* 10 (2016): 381. <https://doi.org/10.3389/fnhum.2016.00381>.
- Simon, Greg. 'Tell Me A Story: Teaching Music Composition Through Narrative Design.' *College Music Symposium* 59, no. 2 (2019): 1-24. <https://www.jstor.org/stable/10.2307/26902587>.
- 'Soothing Relaxation – YouTube.' YouTube channel. Accessed 28 April 2022. <https://www.youtube.com/channel/UCjzHeG1KWoonmf9d5KBvSiw>.
- Richard. 'His Eminence Mingyur Rinpoche Gives Teachings on the Sutra of the Four Bases of Mindfulness,' 20 July 2019. YouTube video, Accessed 30 December 2021. <https://www.youtube.com/watch?v=KxobCKBzZlg>.
- Ṭhānissaro, Bhikkhu. 'DN 22 Mahā Satipaṭṭhāna Sutta | The Great Establishing of Mindfulness Discourse.' Accessed 2 December 2021. <https://www.dhammatalks.org/suttas/DN/DN22.html>.
- \_\_\_\_\_. 'MN 44 Cūḷa Vedalla Sutta | The Shorter Set of Questions & Answers.' Accessed 12 November 2021. <https://www.dhammatalks.org/suttas/MN/MN44.html>.
- \_\_\_\_\_. 'MN 118 Ānāpānasati Sutta | Mindfulness of Breathing.' Accessed 12 November 2021. <https://www.dhammatalks.org/suttas/MN/MN118.html>.
- Wetherell, Margaret. *Affect and Emotion: A New Social Science Understanding*. London: SAGE Publications, 2012.
- Williams, Kathryn. 'Coming Up For Air.' Accessed 3 December 2021. <http://www.kathryngwilliams.com/coming-up-for-air.html>.
- \_\_\_\_\_. 'PIXERCISE.' Accessed 3 December 2021. <http://www.kathryngwilliams.com/pixercise.html>.

'World Meditation Day Concert • Contemporary • Kings Place.' Kings Place, accessed 28 April 2022. <https://www.kingsplace.co.uk/whats-on/contemporary/world-meditation-day-concert/>.

'YKK Project.' Accessed 29 December 2021. <https://www.yugenykk.org/>.

Zack, Michael H. 'Jazz Improvisation and Organizing: Once More from the Top.' *Organization Science* 11, no. 2 (2000), 227-234, <https://www.jstor.org/stable/2640286>.