

A Portfolio of Original Compositions with Commentary

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2 Volumes

Volume 1: Commentary

Declaration

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Abstract

Martin Mario Della Vecchia

A Portfolio of Original Compositions with Commentary

This composition portfolio consists of fourteen musical scores and recordings, supplemented by a written commentary. The analytical commentary details my exploration of an array of compositional styles: some of them follow a more traditional approach and others are more experimental in nature. The latter were created to expand my vocabulary as a composer. The compositions are written for a range of instrumental ensembles, including works for solo instruments, chamber music, unconventional instruments (such as prepared piano, electronics, and a megaphone), and for symphony orchestra. Throughout the PhD, I explored different styles, techniques, and approaches to music composition, working with different types of notation, including graphic notation and text instructions.

Chapter 1 introduces the core themes of the research, detailing the methodological framework that underpins the exploration of tradition versus experimentation in my compositional practice. Chapter 2 highlights a departure from traditional methods in favour of using intuition and experimentation as a source for music composition, emphasising the importance of computer interaction, and showcasing how this departure has resulted in compositions that are both unpredictable and reflective of diverse musical influences and aesthetics, with a focus on the composition *Punto de Partida*. Chapter 3 explores my approach to translating somatic responses into musical sounds involving meditation, piano improvisation sessions, experimentation with string instruments using extended techniques to evoke specific sensations and feelings. Chapter 4 explores collaboration, improvisation, the use of technology, and a connection to movement and gesture as catalysts for musical creation, using the framework of distributed creativity, and discussing the challenges and adaptations faced during the transition to online collaboration due to the COVID-19 pandemic. Chapter 5 focuses on the challenges and methodologies of composing for full orchestra, as exemplified by the pieces *Discurso y Balbuceos* and *El Llamado*.

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Chapter 1 Introduction

Throughout my PhD, and even before then, it became evident how eclectic my compositional output is and how it fluctuates from tonal compositions to experimental approaches to music making. From this tension my research question arose: how does the tension between tradition and experimentation shape the evolution of my artistic voice as a composer? This research question delves into my compositional evolution, the impact of my traditional background, and how the experimentation with various styles and techniques influences my artistic identity. It also highlights the conflict and resolution that arise from navigating these diverse compositional approaches. This commentary is the result of a process of self-reflection, and the cultivation of an ability to adapt to the ebb and flow of the creative process within the constraints and nature of a PhD by artefact. It describes my artistic and personal background, the sources of inspiration for creating music, my different approaches to music composition, and the wide ranges of aesthetic outputs I have conceived to date.

In this commentary, I will answer my research question by explaining and analysing the different approaches of my compositional processes, from conceiving an idea to developing it and putting it into action, which usually manifests in a reluctance to formulate preconceived musical ideas and, instead, to use intuition to create the environment conducive to the emergence of ‘flow’.¹ This state, as described by Mihaly Csikszentmihalyi, is one of complete absorption in the present moment and intrinsic satisfaction that occurs when one is fully engrossed in activities that align with their abilities.² In these moments of flow, the trajectory of the musical process is organically shaped and determined. This is because I am not particularly fond of pre-compositional decisions or processes.³ If I employ them at all, they need to allow room for spontaneous changes. I generate material that comes from within, such as paying attention to my body or to my thinking processes. At other times I look for external sources, such as paying attention to visuals, or to moving images or bodies.

¹ Mihaly Csikszentmihalyi, *Flow: The Psychology of Optimal Experience* (New York: Harper and Row, 1990).

² Jeanne Nakamura and Mihaly Csikszentmihalyi: *Flow Theory and Research*, in *Oxford Handbook of Positive Psychology*, 2nd Ed, Oxford Library of Psychology (New York: Oxford University Press, 2009), pp. 195–206.

³ Veronika Krausas, ‘Some Thoughts about Pre-Composition’, *Context: Journal of Music Research*, 29 & 30 (2005), 69–73.

When I embarked on this PhD, I was an emerging composer for visual media, mainly working for film and dance productions. Making a living as a composer for visual media means becoming adept in using musical libraries, loops, and synthesisers, rather than working with acoustic instruments and performers. At the same time, my music education was deeply rooted in the European classical music tradition. If I were to continue with my educational path, it made sense to choose to master the craft of composition in a more traditional approach. While the decision to adhere to a more traditional approach in music composition seemed logical at times, there were moments when it felt misaligned with my personality, interests, and artistic vision. My diverse artistic interests and evolving vision have led me to embrace multiple working methods and approaches. My PhD portfolio reflects this pluralistic perspective, highlighting my role as a multifaceted music composer who employs diverse artistic approaches, resulting in a rich variety of aesthetics in my creative output.

The four-year PhD journey felt overall like an extended experimentation that stretched my skills as a composer and widened my capacities to engage with different genres, styles, and ways of working on my own and with others. As I wrote this commentary and analysed the music portfolio element, I found that there are some traits that are distinctive to my own music-composition voice. In this regard, I see this thesis as a process of reconciliation and amalgamation of my traditional and experimental approaches to music composition, a dialectic tension between diverse practices that are usually confined to separate schools and niches and which in my case still requires a continuous process of conflict and resolution between them. Reflecting on my PhD journey it became clear that the resolution of the tension between the array of different styles lay in embracing a multistylistic approach.

This resolution does not imply a fusion of styles within individual compositions but rather a broader acceptance and incorporation of different styles across my portfolio, echoing the practices of well-known composers like Ennio Morricone, who made a signature on film music, but he had ample experience in experimental music,⁴ and contemporary composers such as Nico Muhly who collaborates across genres with artists in opera, chamber music, and popular music,⁵ and Osvaldo Golijov whose work is deeply

⁴ Franco Sciannameo, 'Ennio Morricone at 85: A Conversation about His "Mission"', *The Musical Times*, 154.1924 (2013), pp. 37–46.

⁵ Hyunjong Lee, 'The Influence of Pop Music in the Works of Three Contemporary American Composers: Steven Mackey, Julia Wolfe and Nico Muhly' (UCLA, 2014) pp

influenced by his Eastern European Jewish heritage, Argentine folk music, and classical traditions.⁶ Although in the discourse of music composition multistylistic and polystylistic are usually used interchangeably, I argue there could be a distinction between the two terms. The former encompasses the utilization of diverse musical styles across a composer's body of work, as in the case of Morricone, with each piece or group of works potentially drawing from different stylistic traditions. This stands in contrast to the polystylistic approach, which involves integrating various styles within a single composition, often creating a rich, complex interplay of genres within one piece, as in the case of Alfred Schnittke.

My work similarly traverses various musical landscapes, each style informing my compositional language independently yet cohesively. By the end of my PhD, it was evident that both traditional and experimental methods had equally shaped my identity as a composer, not through a synthesis within single works, as Schnittke combined disparate elements into a composition, but through a broader, multistylistic lens. At the end of the PhD, I encountered that the embrace of a multistylistic identity effectively resolves the initial tension posed by my research question. It affirms that my compositional language and identity are informed by an array of stylistic inputs, each holding significant value. This outcome highlights the evolution of my creative process, illustrating how diverse influences amalgamate to form a multidimensional artistic voice. This conclusion underscores the transformative journey of my PhD experience, marking a definitive phase in my development as a composer.

I use an autoethnography methodology throughout my commentary. This means that I get involved in writing about myself and my practice, situating my experiences within my personal, professional, and social context. This PhD by artefact is a creative work that was influenced by its academic nature. The constraint and the set of rules in academia gave me a framework to work and to think, formulate, and ultimately relate to my own work. The portfolio of pieces and my journey throughout this PhD, therefore, have greatly influenced my artistic vision, leading me to embrace the ever-evolving nature of my creative process. This is because the diversity of the PhD artefact helped me to embrace the tension between tradition and experimentation and let this tension shape the evolution of my artistic voice as a multistylistic and multifaceted composer.

⁶ Olesia Platonova, 'La Passion Según San Marcos' by Osvaldo Golijov. From Bach's Tradition to Modern Interpretation. *Music Science Today: The Permanent and the Changeable*. 2019, Vol 11, p 28.

The academic nature of the PhD and the set of specific rules placed upon it helped me to frame and to inform my creative practice. Also, being aware of these constraints help me to think about imposed and self-imposed parameters to create. As Nachmanovitch in *The Art of Is: Improvising as a Way of Life* concludes:

We need to do some fast reimagining of what human life can look like and be. Even more important, we need to accept the realities of our situation. The arts, sciences, technologies—formats of human relations and ethics that have carried us this far— need to be constantly re-examined and recalibrated in relation to the context that surrounds us, in this time, in this place.⁷

In reflecting on the creation of my object as an artist-researcher, it is essential to acknowledge the intertwined nature of making and reflecting that underpins artistic research. The act of creation in artistic research is not merely about producing an artefact but also involves a continuous dialogue between the process of making and the reflective analysis that informs and is informed by this process.⁸ My object, which emerged from the tension between tradition and experimentation in music composition, is a manifestation of this dual process. It embodies the critical engagement with my artistic practice, where each decision in the creative process was not only a response to the evolving artistic form but also a reflexive inquiry into my methods, intentions, and the broader cultural and academic contexts in which my work is situated. This approach aligns with the notion that in practice-led research, the artefact itself becomes a site of knowledge production, offering insights that extend beyond the object to inform both my personal artistic trajectory and the wider discourse in contemporary music composition. Thus, the creation of this object serves as both the culmination of my research and a contribution to the ongoing dialogue about the role of artistic practice within academic research frameworks.

1.1 Methodology

Autoethnography is a form of academic writing characterised by the author's exploration, analysis, and interpretation of their personal experiences.⁹ It involves examining the

⁷ Stephen Nachmanovitch, *The Art of Is: Improvising as a Way of Life* (Novato, CA: New World Library, 2019), 205.

⁸ Maarit Mäkelä and others, 'On Reflecting and Making in Artistic Research', *Journal of Research Practice*, 7 (2011).

⁹ Tony E. Adams, Stacy Holman Jones, and Carolyn Ellis, *Autoethnography* (Oxford: Oxford University Press, 2014).

connections between the author's insights, self-identity, cultural norms, communication methods, traditions, symbols, shared meanings, emotions, values, and broader social, cultural, and political matters.¹⁰ Autoethnography is a qualitative research method that integrates the researcher's personal experiences with cultural analysis and evaluation, emphasizes connections with others, employs deep reflexivity to explore the individual's role within society, depicts personal decision-making and struggles, and balances rigor, emotional depth, and creativity, all while aiming to foster social justice and enhance lives.¹¹ Autoethnography comes from the Greek words *autós* (meaning 'self'), *ethnos* ('people'), and *graphia* ('writing').¹² It emerged from the field of ethnography with the intention of incorporating the researcher's experiences and insights, actively employing writing about themselves within social and cultural contexts to shed light on the intricacies of human social and cultural practices. Comparable to an autobiographical account, memoir, and creative nonfiction, autoethnography employs writing in a self-reflective manner as an essential part of the research process and as a primary method of investigation. In essence, auto ethnographers invoke and embrace the discoveries made through writing, utilising it as a research practice that guides inquiry rather than viewing it as a mere post-research activity.¹³

Autoethnography is deeply rooted in active self-reflexivity, which involves the careful consideration of how researchers past experiences, perspectives, and roles influence their interactions and interpretations within the research context.¹⁴ It is an observational, participatory, and reflective research approach that utilises personal writing and engagement with others to shed light on various aspects of human social, emotional, theoretical, political, and cultural practices. Its goal is to re-establish the researcher's own experiences as essential to the research process. Autoethnography is distinct from memoir, autobiography, or fiction, although certain techniques utilized by memoirists, auto-biographers, and novelists (such as descriptive language, setting and

¹⁰ Tony E. Adams, Stacy Holman Jones, and Carolyn Ellis, *Autoethnography* (Oxford: Oxford University Press, 2014).

¹¹ Ibid.

¹² Christopher N. Poulos, 'Conceptual Foundations of Autoethnography.', in *Essentials of Autoethnography* (Washington, DC: American Psychological Association, 2021), 3–17.

¹³ Laurel Richardson and Elizabeth Adams St. Pierre, 'Writing: A Method of Inquiry', in *The Sage Handbook of Qualitative Research, 3rd Ed* (Thousand Oaks, CA: Sage Publications Ltd, 2005), 959–78.

¹⁴ Cary J.S. López and Sarah J. Tracy, 'Anchoring "the Big Tent": How Organizational Autoethnography Exemplifies and Stretches Notions of Qualitative Quality', in *The Routledge International Handbook of Organizational Autoethnography*, ed. by Andrew F. Herrmann (London: Taylor and Francis, 2020), 383–98.

plot development, pacing, rhythm, character development, dialogue, and action) could be employed to advance the narrative.

Auto ethnographers frequently utilise diverse techniques for data collection and research, like those employed in other forms of qualitative social research.¹⁵ These methods include participant observation, interviews, engaging in conversations, conducting focus groups, analysing narratives, examining artifacts, conducting archival research, journaling, taking field notes, using thematic analysis, providing descriptions, considering context, interpreting findings, and engaging with storytelling.¹⁶ By employing these approaches, auto-ethnographers aim to create captivating narratives that seek to evoke and capture the personal experiences of the researcher (and co-participants, where applicable) in relation to the phenomena being studied. In their exploration of social and cultural phenomena, most auto-ethnographers adopt a multifaceted and layered approach, drawing upon a combination of methodological tools commonly employed in qualitative inquiry.¹⁷ This allows them to conduct research and produce compelling narratives about various aspects of human social and cultural phenomena.

Scheuregger argues that using autoethnography provides an answer to the issues derived from traditional modes of academic writing in music, which frequently emphasize objectivity and analytical rigour, and can inadvertently distance the composer from their personal experiences and emotional engagement with the music.¹⁸ This is because autoethnography offers a valuable alternative by allowing composers to integrate their subjective experiences and personal narratives into their research.¹⁹ This approach enables a more holistic exploration of the compositional process, bridging the gap between the impersonal, analytical expectations of academic writing and the deeply personal, often intuitive nature of music composition. By embracing autoethnography, composer-researchers can craft narratives that are both reflective and analytical, providing richer insights into their creative practices while also addressing the broader

¹⁵ I Christopher N. Poulos, 'Conceptual Foundations of Autoethnography.', in *Essentials of Autoethnography* (Washington, DC: American Psychological Association, 2021), 3–17.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ C. Leedham, and Scheuregger, M., *Notes to Self: How Composers Write about Their Music.*, 1st edn (Routledge, 2024), *The Routledge Companion to Autoethnography and Self-Reflexivity in Music Studies*. pp1-3

¹⁹ Ibid. pp1-3

cultural and social contexts in which their work is situated.²⁰ The focus of my research was primarily introspective, aiming to deeply understand my own creative processes and interactions from a first-person perspective. Thus, the decision not to conduct interviews with collaborators was deliberate. This approach aligns with the autoethnographic method's emphasis on the self within the social context, rather than an external analysis of interactions.²¹

Subjectivity, inherent in autoethnography, brings with it a set of potential biases and issues. The personal experiences of the researcher can colour the analysis, potentially skewing outcomes and affecting the generalizability of the findings. The methodology might also risk an overemphasis on the self, potentially overlooking broader social realities or alternative perspectives. Additionally, ethical concerns arise, particularly regarding consent and privacy due to the personal nature of the narrative. Critics also question the validity and reliability of autoethnography, pointing to its emotive and narrative style as possibly less rigorous. Despite these challenges, I chose autoethnography as a method of research for its distinct advantages. It provides deep insights into the creative process, offering a reflective space to explore how personal experiences, emotional responses, and cultural backgrounds influence artistic creation. This methodology is especially suitable where the personal is deeply intertwined with the cultural, as in musical composition, where it helps illuminate how cultural influences shape artistic decisions. Autoethnography's narrative style, while engaging, enhances the emotional and cultural relevance of academic writing. It connects with readers on a personal level, making the findings more impactful and accessible. Its methodological flexibility allows for a mixed-methods approach, integrating interviews or thematic analysis to strengthen validity and offset subjectivity. To mitigate inherent biases, several strategies were implemented such as ongoing self-critique of personal biases and methodological decisions such as engaging collaborators in both the composition and research process, and detailed descriptions which provide transparency, helping readers understand the context and interpretive angles of the research.

²⁰ C. Leedham, and Scheuregger, M., *Notes to Self: How Composers Write about Their Music, The Routledge Companion to Autoethnography and Self-Reflexivity in Music Studies*, (Routledge, 2024) pp.1–3.

²¹ Carolyn Ellis, Tony E. Adams, and Arthur P. Bochner, 'Autoethnography: An Overview', *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 12.1, p. 4 (2011).

1.2 Somatic Experience

Somatic practices emphasize the importance of bodily awareness and internal sensation as integral to the creative process. In this research, somatic experience is a background element through which I engage with music-making. By prioritizing the body's role in the creative process, I allow physical sensations and movements to guide the development of musical ideas. This approach is aligned with scholars like Deirdre Sklar, who emphasize that somatic knowledge is as essential to the practice of art as intellectual knowledge.²² In compositions such as *Tierra Sellada* (2019) and *Gestos* (2020), my physicality directly informs both structure and content, illustrating how embodied experiences shape my artistic output. The act of creating, performing or imagining the physical movements required to produce sound becomes a fundamental aspect of my compositional process, in line with work produced by composers such as Oscar Mascareñas in *Figures*,²³ where he physicalises sounds from the somatic experience of a dancer.

1.3 Embodied Cognition

Embodied Cognition underpins my compositional approach, providing a framework that connects cognitive processes with physical experiences. Embodied cognition posits that our cognitive functions, including memory, perception, and creativity, are deeply influenced by the body's interactions with the physical world.²⁴ Cognition, or sense-making, is an activity saturated with emotion and unfolds within the intricate interplay of brain, body, and environment.²⁵ Enactivism presents a robust, naturalistic perspective that transcends simplistic explanations by emphasizing the seamless integration of life and cognitive processes.²⁶ This approach, particularly in the vein of Francisco Varela, challenges traditional views that treat the body merely as an incidental factor and the social environment as merely contextual. Instead, Enactivism posits that the body is fundamentally involved in the formation of cognition and that social interactions are

²² Deidre Sklar, 'On Dance Ethnography', *Dance Research Journal*, 23.1 (1991), p. 6

²³ Óscar Mascareñas, *Figures* (2015), online YouTube recording <<https://www.youtube.com/watch?v=eHGBgW8dcpE>> [accessed 28 August 2024].

²⁴ Francisco J. Varela, Evan. Thompson, and Eleanor. Rosch, *The Embodied Mind: Cognitive Science and Human Experience*, 1st Editio (MIT Press, 1993).

²⁵ Massimiliano Cappuccio, Tom Froese, *Enactive Cognition at the Edge of Sense-Making: Making Sense of Non-Sense*, ed. by M. Cappuccio and T. Froese, (Palgrave Macmillan, 2014), pp. 1–33.

²⁶ Evan Thompson, *Mind in Life: Biology, Phenomenology, and the Sciences of Mind*, (Belknap Press: An Imprint of Harvard University Press, 2010).

crucial for the development of higher cognitive functions.²⁷ This framework sets the stage for understanding how embodied cognition, a concept that connects cognitive processes with physical experiences, influences and underpins creative activities such as music composition.

In music composition this means that the physicality of engaging with an instrument—whether through the tactile feedback of keys, the resistance of strings, or the control of breath—can profoundly shape the music created. This perspective challenges the traditional separation of mind and body, proposing instead that cognitive functions are inextricably linked to our bodily experiences. Scholars like Mark Johnson and George Lakoff have argued that the mind is inherently embodied, and our thoughts arise from our physical experiences.²⁸ In my work, this concept is evident in how tactile interaction with instruments often leads to unexpected musical ideas, highlighting the impact of embodied cognition on my creative process. For instance, in compositions like *Postal Notes* (2020), *Fricción* (2019), and *Gestos* (2020), the physical engagement with instruments is not just a medium for expressing pre-existing ideas but a generative force in creating new music.

1.4 Cultural Identity and Personal Musical Upbringing

Cultural Identity and Personal Musical Upbringing are equally significant in understanding the tension within my multi-stylistic compositional identity. My early musical influences were a rich blend of genres, including tango, rock, and electronic music, which shaped my initial approach to music. However, my formal music education was firmly rooted in the European classical tradition, imposing significant constraints on the expression of these contemporary influences. During my BA in piano performance, the curriculum focused exclusively on classical European repertoire, leaving little room for the exploration or integration of other genres. This rigid separation between classical music and contemporary styles effectively prevented any cross-genre experimentation. The tension between my diverse musical upbringing and the restrictive formal training I received was further heightened during my MA in computer music, where the focus

²⁷ Ezequiel A. Di Paolo, Marieke Rohde, and Hanne De Jaegher, 'Horizons for the Enactive Mind: Values, Social Interaction, and Play', in *Enaction: Toward a New Paradigm for Cognitive Science* (Cambridge: MIT Press, 2010).

²⁸ W Jack Rejeski and Lise Gauvin, 'The Embodied and Relational Nature of the Mind: Implications for Clinical Interventions in Aging Individuals and Populations', *Clinical Interventions in Aging*, 8 (2013), pp. 657–65.

shifted entirely to synthesised, computer-generated sounds. Here, too, I found myself constrained by expectations to compose within narrowly defined parameters, without blending the wide range of influences that I had grown up with. These experiences of navigating educational environments that discouraged genre-crossing and stylistic blending created a deep-seated tension in my compositional identity. This tension has become a driving force in my journey toward developing a multi-stylistic compositional voice, one that seeks to blend both tradition and experimentation, and to reconcile the diverse facets of my aesthetic sensibilities.

Through the integration of somatic experience, embodied cognition, cultural identity, and personal musical upbringing, this thesis aims to contribute to the broader discourse on contemporary music composition. By examining how these elements interact to shape my artistic voice, this commentary provides new insights into the dynamics of tradition and experimentation within a multi-stylistic framework. This exploration not only deepens the understanding of my own compositional process but also offers a model for other composers grappling with similar tensions in their work. Lastly, while this commentary argues for the uniqueness of my artistic identity and contributions to contemporary composition, it is also important to broaden the contextualization of my research to highlight its significance within the wider scholarship of contemporary music, particularly in Ireland. My involvement with the Irish Composers Collective, organising over a dozen of concerts and producing three albums featuring over twenty composers from Ireland, and active participation in the cultural and musical life of Ireland as a performer and composer have deeply influenced my compositional voice and the development of my portfolio. This research not only contributes to the global discourse on contemporary music but also plays a crucial role in advancing the understanding and appreciation of contemporary music within the Irish context. By situating my work within the broader framework of Irish contemporary music, I aim to highlight the impact and relevance of my compositions on the national stage. The intersection of my research with the cultural and musical dynamics of Ireland enriches the dialogue surrounding contemporary music, offering new perspectives and fostering a deeper connection between Irish cultural heritage and modern compositional practices.

Chapter 2 Improvising with the Computer: Sensibility and Intuition in Music Composition

Chapter 2 explores the potential of technology and intuition in composition. This chapter demonstrates how digital tools and a focus on internal sensibilities can transform the compositional process, moving it away from traditional methods. The experiences and experiments detailed here with intuitive music-making and the integration of technology set the groundwork for further exploration of physicality in music, leading into the somatic and embodied approaches discussed in Chapter 3.

2.1 Exploring Intuition in the Composition Process

At the early stages of my PhD journey, reflecting on my compositional practice, I realised that one of my major weaknesses as a composer was to include too many ideas in one piece. To overcome this weakness, I instituted a process: take one of my earlier compositions, select a section that I established had potential, and use this section to develop a new work. What was particular about these compositions is that they did not include a preparation or incubation stage.²⁹ I did not set up a form, a compositional structure, or any specific composition techniques as to how I would develop the material.³⁰ Instead, I relied on repeating the original two-bar motive, listening to the result played back by the computer, and allowing my sensibility and intuition to decide what was the next stage in the composition process. The final pieces exhibited an inherent simplicity and uniformity, seemingly derived from the deliberate extension of the thematic material, thereby creating a sense of coherence and unity.

During the composition process, my focus was to engage with the original material in a playful way. It felt like having a small piece of dough, pulling it and stretching it to every side until it could not develop anymore. The techniques employed when engaging with this original material primarily involved incorporating and removing notes, introducing rests, and transposing notes. Occasionally, I used the initial material to explore subsequent iterations, while on other occasions I employed the created adaptations as a foundation for further expanding the material. Although I had in the past

²⁹ Eugene Sadler-Smith, 'Wallas' Four-Stage Model of the Creative Process: More Than Meets the Eye?', *Creativity Research Journal*, 27 (2015), 342–52 (p. 342).

³⁰ Ethan Haimo, 'Developing Variation and Schoenberg's Serial Music', *Music Analysis*, 16 (1997), 349–65.

relied on intuition and sensory experience to affect my composition practice, this felt like the starting point of a new approach. To refine this approach further, I decided to compose a series of pieces that engage in a similar process: emerging from one simple idea, such as a small rhythmic figure, to a fully realised composition. I called the first two pieces in this series *Punto de Partida* (starting point) and *Foco* (focus), signalling both the starting point of my journey within the process and the way both pieces emerge and expand from one motif.

Although I will be discussing both pieces in analytical terms, critical thinking and musical analysis took place after I finished the composition, while reflecting upon the process and trying to look for patterns and ways of thinking about my practice. When composing these pieces, I relied mostly on intuition, which most of the time I found took precedence over a self-conscious process of reflection. I understand intuition as a complex cognitive process that involves the ability to understand or know something without the need for conscious reasoning or analytical thinking. It relies on one's gut feelings, instincts, or a deep understanding of a subject developed over time. Intuition can be seen as a form of knowledge that emerges from past experiences, insights, and subconscious thought processes. The approach of creating a musical work using primarily intuitive processes, of playing and shaping the musical material as the process unfolds, lies in contrast with using a predetermined technique. Predetermined musical techniques have a long history, from the canons of Bach's Goldberg Variations, the 12-note rows of serialism, to Steve Reich's view of the act of composition as the gradual unfolding of a predetermined technique or structure.³¹ Using intuition as a process means that the resulting aesthetic of the work is not consciously predetermined. Like many contemporary composers, I grew up listening to a wide range of music genres and styles. I carry a unique mix of musical interests, influences, and eclectic aesthetics. Working intuitively allows these influences to permeate my work, choosing aesthetics consciously or unconsciously from an eclectic range of music styles and genres.

The process of using intuition in the composition process could be described as follows. I listened to the score played back by the computer to create or modify musical material, which generated an immediate response in me. This response was sometimes verbal, such as 'this is interesting' or 'there should be more movement here', but most of

³¹ K Robert Schwarz, 'Steve Reich: Music as a Gradual Process Part II', *Perspectives of New Music*, 20 (1981), 225–86 (p. 226).

the time my response was pre-conscious and non-verbal. This musical response in connection to what I just heard guided me on what to do next. The action of listening to the computer's playback was instrumental in fostering my role as an active listener within the compositional process. This process enabled me to gain an overview of the musical material, analogous to the visual technique of stepping back from a large artwork to appreciate the entire composition in its full context. Having the music in both printed and audio forms created a sense of playing with tangible material, as if I was able to touch the notes and mould them. This way of approaching music composition resonates with Morton Feldman's statement: 'Having the sounds continually appearing as a physical fact wakens me from a sort of intellectual daydream'.³²

This dialogic interaction facilitated an instant response, thereby establishing a human-computer interaction (HCI) dynamic with the computer. The immediacy of quickly inputting material and immediately hearing it back afforded me a constant flux of iteration and new musical ideas, particularly when I copied material from one instrument to another, to a different pitch, or to a different starting point. Before the advent of HCI, many composers also engaged directly with the physical medium of sound. Igor Stravinsky, in his autobiography wrote: 'It is a thousand times better to compose in direct contact with the physical medium of sound than to work in the abstract medium produced by one's own imagination.'³³ Advancements in technology helped many composers to adopt a sound-oriented, multiscale approach to music composition. Sound-oriented composition refers to a practice that is conducted in the immediate context of sound, where although formal frameworks can offer direction, the decisive factor is always the auditory outcome. As Curtis Roads discusses in his book *Composing Electronic Music: A New Aesthetic*, a sound-direct approach highlights the importance of perceptual rather than conceptual art, focusing on the sensory experiences of sound in music composition.³⁴

The result from these new contrapuntal lines further increased in me the sense that I was playing with malleable material, as I did not transfer a fixed idea of what I had in my mind to the music score. The copied notes were already present on the score, tangible and audible. Making composition decisions when working out of a synthetic

³² Morton Feldman, *Give my Regards to Eighth Street: Collected Writings of Morton Feldman*, ed. by B. H. Friedman (Cambridge, MA: Exact Change, 2001), 206.

³³ Igor Stravinsky, *Igor Stravinsky An Autobiography* (Simon And Schuster, Inc., 1936) p 24.

³⁴ Curtis Roads, *Composing Electronic Music: A New Aesthetic* (Oxford, New York: Oxford University Press, 2015) p xi.

sound that can only be heard through loudspeakers, a term called by Martin Supper as ‘Computer-aided composition’, might raise questions about playability, texture, and sonority with real instruments.³⁵ Having formally studied music composition, instrumentation, and orchestration, I am aware of potential problems that might arise when working with computers, such as timbral discrepancies, where computers may not accurately replicate the nuances of live instrument timbres, leading to a gap between the composed and the executed sound; dynamic range limitations, as the dynamic range of digital instruments can be more restricted compared to acoustic instruments, potentially leading to a less expressive output; temporal rigidity, given that while computers offer unparalleled precision in timing, they often lack the natural rhythmic flexibility achieved by human performers, making the music feel mechanical or rigid; and the lack of artistic interpretation, since computers follow instructions explicitly and might not capture the interpretative nuances that musicians bring to a performance. Recognising these issues has helped me to strategically mitigate them in my compositions.

2.2 *Punto de Partida* (2021)

Punto de Partida is a saxophone quartet piece rooted in intuitive development and thematic exploration, evolving organically through spontaneous decisions and reflecting my dynamic creative process. Prioritising variation, movement, and natural progression, the composition capitalizes on the saxophone quartet’s unique qualities—its homogeneous sound allows for seamless blending, while the agility of the instruments enables precise articulation of intricate rhythmic patterns. Inspired by contemporary works like Marcos Balter’s *Intercepting a Shivery Light* (2012)³⁶, David Maslanka’s *Recitation Book* (2006)³⁷, and Guillermo Lago’s *Ciudades* (2010)³⁸, I sought to explore rhythmically complex interplay within rich, evolving textures. Balter, for instance, employs repetitive rhythms juxtaposed with evolving pitch in *Intercepting a Shivery Light* (see Figure 2.1). Though I applied similar techniques in my orchestral work *El Llamado* through triplets, semiquavers, and quintuplets (see volume 2, bars 92–119), *Punto de Partida* adopts a steady rhythmic structure with expanding pitch, mirroring elements of Balter’s approach.

³⁵ Martin Supper, ‘A Few Remarks on Algorithmic Composition’, *Computer Music Journal*, 25 (2001), 48.

³⁶ Marcos Balter, *Intercepting a Shivery Light*, This is ~Nois, ~Nois, (Independent, 2020).

³⁷ David Maslanka, *Recitation Book*, Iridium Quartet (Blue Griffin Recording, 2014).

³⁸ Guillermo Lago, *Ciudades*, Time in Motion, Fukio Ensemble (Ars Produktion, 2016).



Figure 2.1: Intercepting a Shivery Light, Marcos Balter.

In *Intercepting a Shivery Light*, Baler focuses on a shimmering effect that expands and contracts in pitch and dynamics, almost like a breathing entity. This consistent textural approach contrasts with the dynamic shifts observed in other works such as Maslanka's *Recitation Book* and Guillermo Lago's *Ciudades*. Unlike Baler's piece, these compositions frequently evolve in texture, offering a varied auditory experience. Similarly, in *Punto de Partida*, there is a distinct textural evolution. The piece starts with a monophonic texture, featuring a solo alto saxophone up until bar 13 (see Figure 2.2), then transitions into a homophonic texture at bar 14 (see Figure 2.3), and progresses to a rich polyphonic texture from bar 178 onward (see Figure 2.4). Meanwhile, in *Córdoba*, the opening piece of Lago's *Ciudades*, there is a rapid alternation between homophonic and polyphonic textures, starting right from the first two bars and recurring throughout the piece (see Figure 2.5), which keeps the listener continually engaged.



Figure 2.2 Punto de Partida, monophonic texture

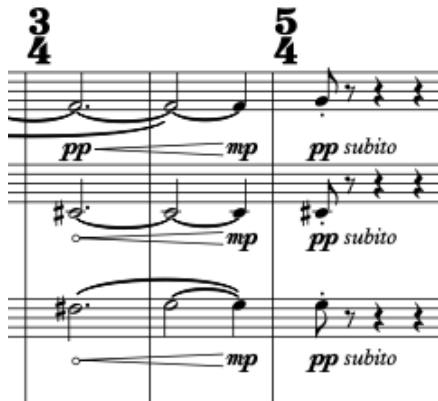


Figure 2.3 *Punto de Partida*, homophonic texture



Figure 2.4 *Punto de Partida*, polyphonic texture

Allegro ritmico con 'duende' (♩ = 120)

Soprano Sax. *p* ben articulado sempre

Alto Sax.

Tenor Sax.

Baritone Sax. *p* ben articulado sempre

f

f

f

The musical score for Figure 2.5, *Shifting textures in Córdoba*, is written for four saxophone parts: Soprano Sax., Alto Sax., Tenor Sax., and Baritone Sax. The tempo is Allegro ritmico con 'duende' (♩ = 120). The Soprano Sax. and Baritone Sax. parts are marked *p* (piano) and *ben articulado siempre* (always well articulated). The Alto Sax. and Tenor Sax. parts are marked *f* (forte). The texture shifts from a homophonic texture in the first system to a polyphonic texture in the second system.

Figure 2.5 Shifting textures in *Córdoba*, from Guillermo Lago's *Ciudades*.

Another shared characteristic between *Ciudades* and *Punto de Partida* is the persistent driving rhythm maintained by most voices except for one which carries the melody on a different register. For example, as depicted in Figure 2.6, the soprano, alto, and tenor saxophones play a short, marked rhythm that contrasts with the lyrical melody in the lower register performed by the baritone sax. In Figure 2.7, the ostinato semiquavers transition from the soprano to the alto saxophone, while the rhythmic foundation remains constant in the other instruments. This shift allows the soprano saxophone to play parts in the altissimo register, freeing it from the repetitive semiquaver pattern. Similarly, in *Punto de Partida*, particularly in bars 304-305 shown in Figure 2.8, the alto, tenor, and baritone saxophones sustain a rhythmic drive while the soprano saxophone delivers a lyrical passage in the alto register.



Figure 2.6 *Córdoba*, from *Ciudades*. Bars 40-41



Figure 2.7 *Córdoba*, from *Ciudades*. Bars 6,7



Figure 2.8 *Punto de Partida*, bars 304-305

Before starting to work on *Punto de Partida*, I had been playing with counting, noticing how accenting one of the numbers of a rhythmic motif would evolve into different patterns and melodies. I performed these counting experiments while doing different activities, noticing how different speeds triggered different rhythmic patterns and ideas. I recorded these samples using my mobile telephone as a voice recorder. One of these recorded patterns occurred while I was waiting for a train to come back home after my residency at Harlaxton Manor in May 2020. The platform was noisy and busy. These surroundings made me feel agitated somehow. Listening back to the recording, I discovered the speed I was counting was very fast, at around 320bpm. Repeatedly counted 1, 2, 3, 1, 2, 3 etc. Then, I started playing with accenting different numbers: 1 2 3 1 2 3 1 2 3 1 2 3. After consistently accenting these numbers, a short melody came into my head. I sang this melody and recorded it on my mobile device. When I arrived home, I transcribed the audio from the recording (see Figure 2.9). Then, I copied the first six notes and pasted them a couple of times before and after the original figure, making some adjustments in the pitches and in the way the accents fall:



Figure 2.9: Audio Transcription

Looking at the score, I imagined a series of quavers and quaver rests one after each other. I imagined a grid of quavers and wondered what would happen if I restricted the rhythm to this unit for the entire piece. To implement this grid-like structure effectively, I opted to use a quaver-based time signature. This allowed me to generate regular and irregular groups of notes, and different beat patterns without implying a succession of strong and weak metrical beats related to regular time signatures. This way of thinking about rhythmic placement made me think of quavers as electrical switches that could be turned on or off. This binary on/off relationship of sound/no sound finds similarities in the way many Digital Audio Workstations visualise time. The image in Figure 2.10 is taken from Logic Pro X. The numbers 1 to 16 at the bottom of the image correspond to the sixteen semiquavers that are contained in a 4/4 bar. Thus, the series is predetermined (four groups of four semiquavers). However, by thinking in a grid of 16 divisions, as opposed to four groups of four, many other subdivisions can be employed.



Figure 2.10: Step FX showing 16 subdivisions. Logic Pro X

After transcribing the score shown in Figure 2.9, I was curious to find out what scale could be built out of these intervallic relationships. I considered a scale using the notes D, Eb, F#, G, A#, B, C#, and D. This scale contains an abundance of possible harmonies using the same root. For example, using Eb as the root, the possibilities available were

E $\flat$ augmented (E $\flat$, G, B), E $\flat$ major (E $\flat$, G, B $\flat$ (A $\sharp$)), and E $\flat$ minor (E $\flat$, G $\flat$ (F $\sharp$), B $\flat$ (A $\sharp$)).



Figure 2.11: Scale and Combinatorial Possibilities arising from synthetic scale.

Although this wide range of options was interesting to explore, after playing with this scale for a while I had the feeling it was too predictable, perhaps because of the semitone / augmented-second pattern between the pitches. I also noted that the scale contained seven notes, like major, minor, and modal scales and this familiarity made me feel a certain constraint. I thought that if I added an eighth note to the scale, I might be able to explore different, less familiar options. I sat at the piano to improvise using eight-note scales and as many possible harmonic combinations using these scales as I could find. While improvising, I noted that instead of using the note D as a tonal centre, as I thought I would, I leaned towards using the note G as tonal centre, and sometimes coming back to just using 7 notes by using the scale G, A $\sharp$, B, C $\sharp$, D, E $\flat$, F $\sharp$, G. When improvising this scale, I started motives on the perceived leading note (F $\sharp$, G, A $\sharp$, B, C $\sharp$, D, E $\flat$, F $\sharp$, G). Then, I noticed that two major triads emerged from using these scales: F $\sharp$ major resulting from playing the 1st, 3rd and 5th notes and G major from using the 2nd, 4th, and 6th notes.



Figure 2.12: Seven-note synthetic scale starting from G and F $\sharp$ major and the triads resulting from this scale.

These two triads are one semitone apart from each other, making any of the notes of the F $\sharp$ major chord a possible leading note towards those ones in G major (F $\sharp$ to G, A $\sharp$ to B and C $\sharp$ to D). I thought I could take advantage of these harmonic possibilities throughout the piece, relying on the interaction and attraction between the artificial leading notes (F $\sharp$, A $\sharp$ and C $\sharp$) to the temporary tone centres (G, B, D). I wondered at this point what

would happen if I were to constrain my composition process to using the pitches contained in this synthetic scale.³⁹ I thought that placing a restriction on the pitches was going to liberate my thinking about possible pitches to use, and instead I was to be able to concentrate on other aspects of the music. To start working on the piece, I repeated the first seven notes (see Figure 2.13). Then, I reworked each repeated figure by deleting a note (bars 3 and 4), leaving the repeated figure intact (bars 5–8), creating a tonal sequence (bars 9–11) one semitone higher and repeating the first four notes, and a mixed sequence transposed up a major 3rd containing some augmented intervals, creating an arpeggiated figure going up and a scalar figure going up and down (bars 15 to 18). In bars 23 to 24, I started a tonal sequence one semitone down and then repeated it in bars 25 to 26 but without the last note.

The musical score is written in 5/8 time with a tempo of 320 bpm. It is divided into four staves, each containing a series of musical figures and sequences. The first staff (bars 1-6) includes a 7-note figure, a 7-note figure with the last note deleted, and a repeated 7-note figure. The second staff (bars 7-13) includes a 7-note figure, repeated + last note deleted, a sequence one semitone higher + repeating first 4 notes, and another sequence one semitone higher + repeating first 4 notes. The third staff (bars 14-20) includes a mixed sequence transposed up a Major third with augmented intervals, and a mixed sequence transposed up a Major third with augmented intervals, Repeated. The fourth staff (bars 21-26) includes a Tonal sequence one semitone down, and a Tonal sequence one semitone down, last note deleted.

Figure 2.13: Repeating original pattern.

As counting at 320bpm is not practical for any human performer, I knew that at the end of the process I would need to re-write the score in comprehensible rhythmic groupings. At the same time, I wanted to see each quaver as one individual beat as much as possible, so I continued working with a quaver-based time signature. This gave me the flexibility to adjust the time signature as the writing process evolved. Visualising each beat also

³⁹ Masaya Yamaguchi, *Synthetic Scales for Jazz Improvisation: Two-Octave and Multi-Octave Scales* (Masaya Music, 2013). P 1

allowed me to enlarge or shrink any bars as the process unfolded. Working in this way made me momentarily think of the bar as a container of on/off notes. This could be seen in Figure 2.14, where one bar contains either notes or rests:



Figure 2.14: *Punto de Partida*, Tenor saxophone, bb. 1–7.

The order of how I chose to assemble these figures was not in a serialist, aleatoric, or by chance operations,⁴⁰ but by the process described at the beginning of this chapter: by listening back to the material, trying different arrangements, and allowing my sensibility and intuition to decide the order. This way of working was present or directed throughout the entire process. For example, I moved the original scalic pattern to allow room for the new two-note scalic repeated pattern (Figure 2.15) which I later moved to bar 42 to the alto saxophone (Figure 2.16):

⁴⁰ Marc G. Jensen, ‘John Cage, Chance Operations, and the Chaos Game: Cage and the “I Ching”’, *Musical Times*, 150 (2009), 97–102.



Figure 2.15: Interpolation of Repeated two-note downward scalic pattern.

This process generated a large amount of material. By the time I moved the two-note repeated pattern to bar 40 (Figure 2.16) the piece was over 100 bars long and I had started harmonising it, mainly by using perfect and augmented 4ths and major and minor 7ths. I noticed that some passages sounded as if they were in a minor key and not in the synthetic scale I created. This is because the first tetrachord of the scale could be heard as an F# major with the flat 2nd degree, while the second tetrachord of the scale is the same as a G harmonic-minor scale. I found the major and minor harmonic implications to be too predictable and I decided to try to avoid these implications. Playing these intervals at a relatively fast speed convey a sense of joy and play and movement. This sense of playfulness informed the way I continued to harmonise the piece, using dissonances to create excitement, but lessening dissonances if I perceived that they created too much tension, thereby distracting from the more important melodic processes. At the end of bar 41 and 43, I changed the interval from major seventh to major sixth (Figure 2.9) and in bar 41 to a diminished 5th, taking some of the dissonance out and generating a sense of a calmer ending on each figure. To smooth the intensity of the dissonance of the major

7th and minor 2nd intervals in bars 42 and 43 I fenced these intervals with perfect octaves moving in parallel motion which dissolves the tension (see Figure 2.16):

↩

The musical score for Figure 2.16 consists of three staves: Alto Sax., Alto Sax., and Ten. Sax. The score begins at bar 40. The first two staves (Alto Sax.) play a two-note-repeated pattern, while the third staff (Ten. Sax.) plays a different pattern. The time signature changes from 3/4 to 7/8, then back to 3/4, and finally to 4/4. The pattern is moved to bar 40.

Figure 2.16: Two-note-repeated pattern moved to bar 40.

When preparing the score for the workshop with the performers I needed to make it as easily to read as possible. I started by changing the time signature to crotchet beats at 160bpm (Figure 2.17). Doing this forced me to adapt the bars that contained an odd number of quavers per bar, either by shifting the beat pattern or by adding or deleting one quaver. Simplifying additive and complex time signatures into regular, symmetrical beat patterns made the rhythm sound too predictable. I thought that up to that moment the interest in the piece was in a balance between predictability in the melody combined with certain unpredictability in the rhythm. In my composition practice I endeavour to strike a balance between predictability and uncertainty. This aligns with insights from contemporary research on music perception which indicates that music effectively engages our reward systems by manipulating expectations through both confirmations and surprises.⁴¹ By simplifying the time signature, I believe this interest was lost. To solve this issue, I no longer investigated accent displacement, but instead I opted for adding an extra melody in the first alto saxophone (Figure 2.10). This melody worked as a contrasting response to the first figure. This contrast is created by using a long, four-beat middle note as part of the figure, in contrast to the quaver figures employed everywhere else. This longer note also helps extend the figure to align with the end of the second Alto-Saxophone figure.

⁴¹ Benjamin P. Gold and others, 'Predictability and Uncertainty in the Pleasure of Music: A Reward for Learning?', *The Journal of Neuroscience*, 39.47 (2019), 9397–9409 (p. 9397)

Contrasting response to the first figure

Alto Saxophone

Alto Saxophone

Tenor Saxophone

Baritone Saxophone

6 $\frac{3}{4}$ $\frac{5}{4}$

Figure 2.17: Contrasting response to the first figure.

This new longer figure came into existence when I changed the time signature. When I moved the time signature from quavers to crotchets, it seems that I stopped thinking about the quaver grid. Thinking about crotchet beats offered a new layout and new possibilities, which seemed to have shaped my decisions. Although this longer, contrasting melody worked well within the material, I was no longer achieving my main goal for this composition process: to utilise and explore the original figure. Instead, I now had two distinct figures from the beginning of the piece. I wanted this new, longer figure to evolve and develop. I thought the solution to this issue was to allow room for this figure to expand. For the first time in this composition process, I thought about form. I wanted to introduce this longer figure before the material composed up to that point, expanding it and forming a new section. The solution I found was to create two distinct sections in the

piece: a slow, first section created by expanding the longer figure, and a faster second section with the material already composed.

Figure 2.18.a through 2.18g shows the new beginning of the piece, starting with the slower figure and expanding it in register and length. 2.18a contains three notes, starting with a lower chromatic neighbour note and going back to the starting point. In 2.18b the figure contains four notes, starting in the same way as the original (G $\flat$ to F) and then expanding to an interval of a perfect fourth, up to B $\flat$. 2.18c contain five notes, expanding to a perfect 5th (C $\sharp$ to F $\sharp$). In 2.18d, the original figure extends to seven notes, adding an extension to the figure, before and after. It starts with a C $\sharp$, using a descending scale towards the descending minor second figure (G $\flat$ to F) and finishes by resolving to D (up a semitone from the first note of the figure). 2.18e starts by moving up and down the scale between the notes G4 and D5 emphasising C $\sharp$ and D, descending to the original figure. 2.18f features the first harmonic content in the piece, where the tenor saxophone plays the original figure inverted (F $\sharp$ to G). 2.18g goes back to the original figure on the Alto, its long middle note repeated three times and then moving back a whole tone to G (see figure 2.18 overleaf):

sensibilities of jazz and popular music.⁴² For instance, a significant portion of Westlake's 'Out of the Blue' relies on musical riffs that are both repetitive and energetically executed.⁴³ Like Westlake, who often uses displaced accents and layers parallel or nearly parallel melodic lines to generate momentum, I aim to create a dynamic musical flow. However, my use of these techniques is less about consciously fusing classical music with jazz or pop, and more about allowing a natural absorption of diverse genre elements into my work. This intuitive process, devoid of a rigid preconceived plan, has led to numerous insightful moments during composition. These instances often yield fresh and unexpected musical directions, though they also sometimes result in complex, maze-like pathways and false starts.⁴⁴

2.3 *Foco* (2021)

I composed *Foco* at the beginning of my PhD studies with the primary purpose of reflecting on and refining my compositional skills. This composition had its origins in a previous piece that included too many musical ideas. I made the deliberate choice to distil the composition, taking only two bars as a foundational starting point for further expansion. As in *Punto de Partida*, intuition played a significant role in the composition process, allowing for unexpected and spontaneous developments. I extensively repeated these two bars and explored composition techniques that were utilised to craft the entire piece. I experimented with rhythmic motifs, investigating how different tempos and accent patterns could lead to diverse rhythmic patterns and melodies. I employed the concept of a grid pattern of quavers, restricting the rhythm to this unit throughout the piece. Initially, this grid was realised through a quaver-based time signature, allowing for both regular and irregular note groupings. However, I later transitioned to crotchet-based time signatures to enhance the readability of the piece for semi-professional players. I also used a mobile phone as a voice recorder to capture ideas that emerged during everyday activities, resonating with the original pattern. The use of a mobile phone as a voice recorder allowed me to capture moments of spontaneous musical inspiration that often occur outside the structured time and space I dedicate to my

⁴² Nadia Burgess, 'A Study of Compositional Techniques Used in the Fusion of Art Music with Jazz and Popular Music', (unpublished Doctoral Thesis, Sydney Conservatorium of Music. University of Sydney, 2014).

⁴³ Nigel Westlake, *Out of the Blue*, Tasmanian Symphony Orchestra
<https://www.youtube.com/watch?v=Ybd7vbptLug> [accessed 15 June 2020]

⁴⁴ David Collins, 'A Synthesis Process Model of Creative Thinking in Music Composition', *Psychology of Music*, 33 (2005), 193–216 (p. 195).

composing activity. For instance, during one of these recordings, I captured an idea that included a synthetic scale, which might not have surfaced had I been sitting at a piano.

The scale and harmony employed in the composition were also similar to those in *Punto de Partida*. The intervallic relationships led to the development of a synthetic scale that offered diverse harmonic possibilities. This scale contains mainly alternating tones with semitones. This scale also permeated the harmony. There are numerous examples throughout the piece where minor seconds play a prominent role in the harmony. Typically arranged as chords played in the lower register, with the same chord played a semitone higher in the upper register. For instance, in bar 126, the tuba plays F, the trombone plays D, the horn plays D#, and the trumpets play F#. In the following bar, the harmonic tension of semitones and minor ninths continues as the tuba plays E, the trombone plays F, the horn plays F#, and the trumpets play G. Regarding rhythm, I primarily employed the displacement of accents and various rhythmic groupings throughout the composition to introduce variation to the primarily two-bar repeated motif.

Foco also had its initial performance at Harlaxton Manor, featuring a flute choir. This provided an invaluable opportunity to collaborate with the performers and to test the work in practice. After the performance and upon careful analysis, identifying areas for enhancement, I undertook the task of reimagining the piece for Brass quintet. This decision was to provide a brighter, more powerful, and resonant sound. Brass quintets offer a wide range, dynamic contrasts, and strong articulations, making them suitable for music with bold and rhythmic patterns like *Foco*. In its original flute choir arrangement, the composition featured a melody with accompaniment, where the melody consistently occupied the highest note within the passage. However, in its adaptation for Brass quintet, *Foco* took on a new dimension, where the melody moved across different instruments and registers. I kept the main exploration of the piece to a rhythmic motif (see Figure 2.19) and focused solely on expanding from this. This rhythmic motif served as the foundation for the entire piece, accompanied by the introduction of specific techniques tailored to the brass instruments and embellishments that were not present in the original flute choir version.

There are plentiful of pieces in the classical literature that are built upon rhythmic motifs. Perhaps the most well-known piece is Beethoven's Fifth Symphony where a

simple rhythmic cell passes several alternating downbeats.⁴⁵ The rhythmic motif in Beethoven's 5th Symphony (see Figure 2.20), famously known as the 'Fate' motif, consists of four short notes followed by a long note. This motif serves as a unifying element that runs through all four movements, creating thematic consistency and cohesion. Beyond its structural significance, the motif carries dramatic impact, generating a sense of urgency, tension, and impending destiny, contributing to the symphony's emotional depth and power. Another use of rhythmic motifs can be found in John Adams' *Short Ride in a Fast Machine* (1986)⁴⁶, particularly through the woodblock rhythm that runs throughout the piece (see Figure 2.21). Much like the 'Fate' motif in Beethoven's work, Adams employs a relentless rhythmic figure in the woodblock, which provides both structural cohesion and forward momentum. The woodblock rhythm remains steady and persistent, while the rest of the orchestra builds layers of contrasting textures and shifting harmonies around it. This driving, repetitive pattern not only acts as the backbone of the composition but also generates a sense of excitement and urgency, capturing the essence of a fast ride. In *Foco*, the rhythmic motif also serves as a unifying element. In the original version played at Harlaxton Manor, I repeated this rhythm throughout the piece (Figure 2.22). As I later revised the piece for Brass Quintet, this rhythmic motif expands, contracts, and the rhythmic cell passes several alternating downbeats as exemplified throughout the piece.

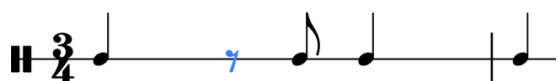


Figure 2.19: Rhythmic motif, *Foco*.



Figure 2.20: Rhythmic Motif, Beethoven 5th Symphony.

⁴⁵ Ludwig Van Beethoven, 'Movement I', in *Symphony No. 5 in C Minor, Op. 67* (London: Chappell, 1971).

⁴⁶ John Adams, *Short Ride in a Fast Machine* (London: Boosey & Hawkes, 1986)



Figure 2.21 John Adams' Short Ride in a Fast Machine: Woodblock, bars 1 to 3

Figure 2.22: *Foco*, arranged for Flute Choir.

2.4 *Marcha de los Soldados Distráidos* (2021) and *Calma...Y Escucho el Fluir de mi Sangre* (2020)

Marcha de los Soldados Distráidos (March of two distracted soldiers) and *Calma...Y escucho el Fluir de mi Sangre* (Calm...and I hear the Flow of my Blood) represent a departure point from traditional composition practices which involves the body and imagery in the composition process. This music composition approach continued to evolve organically as I delved into embodied composition practices, including somatic techniques, which I will elaborate on in Chapter 3. In the case of these two compositions, I worked without any concept or idea, still guided by intuition and improvising using the computer as described at the beginning of this chapter. However, at one point during the composition process, I discovered that when I listened to the playback of what I had created thus far, imagery began to emerge and resonate with the music. In *Marcha de los soldados distraídos*, a flute duet, the composition took on a march-like quality due to its rhythmic elements, but syncopation playing a prominent role. This led me to envision a scenario where two soldiers were marching, but not in perfect synchrony, as if they were

distracted or following their own rhythms. An example of this is shown below in Figure 2.23 where the rhythms are not aligned between both instruments. In *Calma*, I found the ethereal sound of the waterphone to be incredibly relaxing, to the point where its vibrations seemed to soothe me to the extent that I could almost hear the gentle flow of my own blood. These compositions were borne out of an approach that involved using imagery as a tool to aid in the creative process.



Figure 2.23 Marcha de los Soldados Distráidos. Bars 23 to 24.

My intention was not to convey a specific narrative or tell a story through these pieces but rather to employ imagery as a playful framework for generating musical ideas and evoking particular emotions and atmospheres. By using imagery in this way, my compositions take on a programmatic quality. While they may not follow a traditional narrative structure, programmatic music encompasses a broader spectrum of expression. In essence, my compositions can be considered programmatic music, even without a clear-cut storyline. The imagery I employed serves as a bridge between the non-musical ideas or concepts and the musical expressions within the pieces.

Programmatic music fundamentally aims to convey specific moods, scenes, or emotions through musical expression. Defined by the Oxford Dictionary of Music as music that expresses an extra-musical idea, whether of mood, narrative, or pictorial image, traditional programmatic works often narrate explicit stories.⁴⁷ In contrast, my approach diverges by utilising imagery not as a tool to tell a narrative but as a catalyst for generating musical ideas. This approach is akin to the techniques employed by Impressionist composers, particularly Debussy, who sought to evoke atmospheres and sensations through music. The imagery provided in the titles might serve as a stepping stone for the listener to interpret and feel the music. In this sense, my compositions are

⁴⁷ G. M. Tucker G M. Tucker and Kenneth Chalmers, 'Programme Music', in *The Oxford Companion to Music* (Oxford University Press, 2011).

in the vein of Debussy's *Prélude à l'après-midi d'un faune*,⁴⁸ where the music evokes a dreamlike atmosphere without a clear narrative but with an emotional impact. The usage of programmatic elements in my music is also reminiscent of Stravinsky's *The Rite of Spring*,⁴⁹ which, though not strictly narrative, conjures a vivid image of a pagan scene. Although I contextualised these two works by other composers, the composition process emulates and echoes my approach to abstract painting. In my painting method, I begin by intuitively selecting a colour and applying it with whatever technique emerges as I stand before the canvas. As the painting takes shape, it 'speaks' back to me, revealing its essence and suggesting its title. This in turn influences the choice of colours, shapes, and techniques employed in the final composition.

2.5 Conclusion

Chapter 2 delves into the role of technology and intuition in music composition, highlighting how digital interfaces and improvisational methods enable a departure from traditional compositional processes. The text delineates how I navigated the challenges in my compositional journey, explaining the tacit knowledge and non-verbalized cognitive processes that often underpin creative endeavours. The tension between tradition and experimentation, which addresses the research question, permeates this chapter. I explore this dynamic by describing my composition practice and how I try to achieve cohesiveness in my output while experimenting with relying on sensibilities, intuitions, and computer-aided feedback, treading the line between structured methodology and spontaneous creative eruptions, alluding to the age-old dialectic between form and freedom. The juxtaposition of playful elements with rigorous grid-based compositional methodologies and the interplay of technology and human intuition stands out as motifs that find similarities in the larger theme of tension between tradition and experimentation. The emphasis on intuition as a complex cognitive process and how using intuition allowed me to tap into my musical influences and eclectic aesthetics is a central theme throughout this chapter. This departure from predetermined techniques and structures has led to compositions that were to me both unpredictable and resonant with various musical styles and genres. The chapter delved into the composition *Punto de*

⁴⁸ Claude Debussy, *Prelude to the Afternoon of a Faun* (Kassel: Bärenreiter, 1894).

⁴⁹ Igor Stravinsky, *Rite of Spring* (Berlin: Editions Russes de Musique, 1913).

Partida, using it to reveal the creative process behind it, from experimenting with a synthetic scale, shifting time signatures, the introduction of contrasting melodies, and allowing form to be dictated by the process, as an afterthought of the composition process.

The chosen methodology serves the purpose of this chapter as it allows for a holistic blend of subjective experience with broader cultural, social, and theoretical insights. The insights regarding the dialogue-like interaction with technology and the interplay between intuition and analytical reflection are communicated through an autoethnographic approach, valuing narrative and storytelling as potent tools for conveying complex, multifaceted experiences. By anchoring the research in personal experiences and reflections, the narrative conveys a depth of understanding that might be elusive in a detached, objective analysis. The use of autoethnography also helps me to address my internal dialogues, struggles, and breakthroughs enabling me to show insights into the complex interplay of intuition, tradition, experimentation, and technological interface in music composition. Autoethnography's acceptance and acknowledgment of such non-codified forms of knowledge strengthen its appropriateness as a methodological lens. This chapter is an illustration of the evolving voice in my music composition output and about the contemporary music composition landscape, where boundaries between human, machine, tradition, and innovation are increasingly blurred.

Chapter 3 Composing Somatic Explorations

In Chapter 3, the transition from digital and intuitive explorations to embodied and somatic experiences represent a deepening of the inquiry into non-traditional compositional methods. By translating physical sensations and movements into sound, this chapter highlights how bodily awareness can drive musical innovation. The techniques and compositional strategies developed here, emphasizing the physical over the purely intellectual, inform the interdisciplinary approaches and collaborative efforts explored in Chapter 4, merging composition with choreography and performance.

3.1 *Bicicleteando* (2020) and *Gestos* (2020)

Traditionally, the act of composing music is often associated with personal isolation, of long hours spent at a desk, immersed in contemplation. However, this association contradicted my natural inclination towards hands-on, physically engaging activities. This approach aligns with certain contemporary composers like Simon Steen-Andersen, in works such as *Study for String Instrument No. 1*,⁵⁰ and Jennifer Walshe, in *THIS IS WHY PEOPLE O.D. ON PILLS/AND JUMP FROM THE GOLDEN GATE BRIDGE*,⁵¹ where the composers must be physically aware of their own bodies to both compose and perform the piece. It was only through reflection that I became conscious of the disparity between my creative impulses and the conventional approach to music composition. In line with somatic practices, I realised that the body's sensations could be a vital instrument for my artistic expression. My creative journey underwent a paradigm shift as I embraced the idea that the body is an essential conduit for the creation of music. I recognised that, inadvertently, periods of disengagement from music composition correlated with moments when I failed to involve the entirety of my bodily emotions. The following realisation struck me: the act of sitting at a desk for prolonged periods, a stereotype associated with composing, was limiting the full breadth of my creative potential.

This newfound awareness prompted a deliberate effort to infuse movement into my compositional process. I sought inspiration from the very activities that invigorated me: standing, feeling my body in motion, and avoiding the constraints of sedentary

⁵⁰ Simon Steen-Andersen, *Study for String Instrument No. 1* (Frederiksberg: Edition S, 2007).

⁵¹ Jennifer Walshe, *THIS IS WHY PEOPLE O.D. ON PILLS/AND JUMP FROM THE GOLDEN GATE BRIDGE* (Dublin: Contemporary Music Centre, 2004).

composition. The realisation that movement could serve as a catalyst for creativity became a guiding principle in the development of *Gestos* and *Bicicleteando*. In these compositions, the integration of body movement transcends the mere physicality of action; it becomes a dynamic force to shape and propel the composition process. The rhythmic patterns, tonal textures, and emotional nuances within the music are a direct reflection of the bodily engagement that fuelled their creation. Through the intentional fusion of movement and composition, I not only started to break free from the conventional limitations of the compositional process but also discovered a richer, more immersive approach to musical expression.

Building upon the foundations established in Chapter 2, where I explored improvisation with the aid of a computer, with *Bicicleteando* (2020) I also sought to eliminate the conventional practice of sitting in front of a manuscript paper, computer or piano, pondering the next musical step. Instead, I sought to introduce spontaneity and physicality into the compositional process. When faced with creative roadblocks my immediate response was to step away from the computer. I would rise from my desk, let the computer play the music through the speakers, and observe the movement that naturally emerged in my body in response to the music. It was in these moments of physical engagement that I found inspiration and the means to overcome compositional hurdles. These movements would rarely be just stretching to relax the body but instead using my body's reaction to the music as a response to dictate the next move in the composition. If a solution did not immediately present itself, I would choose to go on a walk or a bicycle ride, continuing to listen to the music internally, all the while attuned to the possibility of an inspired response. It was during one of these cycling excursions that the liberation I felt while cycling sparked a flood of musical ideas, illuminating the path forward for the composition. When I came back home from the ride, I called the piece *Bicicleteando*, a made-up word in Spanish, making reference to the act of going for a bicycle ride. From this point onward, whenever I encountered a creative impasse, I turned to moving or cycling and while doing these activities was aware of any musical response than might emerge. From the idea of doing these activities to physically engaging with them unlocked new avenues of musical exploration.

Embodied methods of composition are of course not new. Composers such as Helmut Lachenmann, Mauricio Kagel, Aaron Cassidy, Evan Johnson, Simon Steen-Andersen, and Neil Luck all have pieces that use embodied methods of composition,

specifically centred around physicality.⁵² They focus on the movement-based nature of instrumental performance as a compositional material, separating it from its purely aural purpose. When watching it performed live, one could argue that *Pression* is as much an abstract musical piece as it is a choreographic work. Simon Steen-Andersen also incorporates choreography in his works. In his *Studies for String Instrument No. 1–3* (1976),⁵³ he blurs the line between music and dance and the visuals are an intrinsic part of the work’s experience.⁵⁴

I employ my physical self as a conduit for inspiration. The motions I execute or imagine during the process of crafting music do not necessarily need to manifest in the actual performance. Thus, the body and movement serve as instruments for the genesis of music and creative ideas, though these movements do not need to be necessarily revealed to the audience. This approach aligns with contemporary composers like Meredith Monk and Neil Luck. Meredith Monk is known for her multidisciplinary artistry, where she seamlessly integrates her body and voice into her compositions. Her work often blurs the lines between music, dance, and theatre, using physical movement and vocal expression to generate creative ideas and musical content. Monk’s approach showcases how the body can be a powerful tool for inspiration, even, as in my case, the resulting music does not explicitly display these movements to the audience.⁵⁵ Similarly, Neil Luck incorporates performative and choreographic elements into his compositions. His method involves *augmented instrumental choreography*⁵⁶, where the physical actions of performers play a crucial role in the creation and interpretation of the music. Luck’s work emphasizes the significance of physicality in the compositional process, using the body as a medium to explore new musical possibilities, which may not always be apparent in the final performance.⁵⁷ However, it could be argued that visual is at times

⁵² Elo Masing, ‘Composing Augmented Instrumental Choreography: Investigating Relations between the Physicality of Instrumental Performance and Choreographed Movement’ (unpublished Doctoral thesis, Royal Academy of Music, University of London, 2015).

⁵³ Simon Steen-Andersen, *Study for String Instrument No. 1* (Frederiksberg: Edition S, 2007).

⁵⁴ Simon Steen-Andersen, *Study for String Instrument No. 1 (1976)*, Mondrian Ensemble, dir. by Franz Bannwart, 2020, online YouTube recording [accessed 7 November 2023]

⁵⁵ ‘What Makes Meredith Monk One of Contemporary Music’s Most Original, Individual, and Innovative Figures?’, *Gramophone* <<https://www.gramophone.co.uk/features/article/what-makes-meredith-monk-one-of-contemporary-music-s-most-original-individual-and-innovative-figures>> [accessed 24 May 2024].

⁵⁶ Elo Masing, ‘Composing Augmented Instrumental Choreography: Investigating Relations between the Physicality of Instrumental Performance and Choreographed Movement’ (unpublished Doctoral thesis, Royal Academy of Music, University of London, 2015).

⁵⁷ ‘Corporeal Engagement: An Interview With Neil Luck | The Quietus’ <<https://thequietus.com/interviews/neil-luck-interview/>> [accessed 24 May 2024].

an intrinsic part of an augmented instrumental piece and without the visual element a crucial part of the composition is not present. This is the case in *Points to Self* by Neil Luck,⁵⁸ where not only the visuals accent the musical, but I would argue that the opposite is the case: the visual allows space for the musical to be experienced by the audience.

In contrast, in my piece *Bicicleteando*, incorporating the theme of bicycles into the composition added an extra layer of playfulness that allowed me to go restore to when I needed musical material for the piece. Initially, the intention was to incorporate the literal sounds produced by cycling. However, the recorded sounds, rather than pure bicycle-related sounds, predominantly consisted of ambient traffic noise. To address this, I made the decision to recreate these sounds in a controlled, stationary environment, capturing the distinctive elements of pedalling, wheel movements, and braking. The compositional journey continued to evolve as I contemplated what other sounds could be intertwined with the piece. This led to the inclusion of sounds such as breathing, heavy breathing, and gasping for air—all intimately linked to the physical act of cycling. Additionally, I explored sounds generated by the bicycle itself, like the clanking of a metal stick against the spokes and the deliberate striking of the bicycle frame. These elements served to enhance the sonic landscape of *Bicicleteando* and including some programmatic elements to it. Some other elements associated with cycling were explored in notation form. In the second section of the piece the voice represents the rapid breathing cycling up hill, and the cello intercepting the fortissimo passage at its loudest part (see Figure 3.1 below).

118 5 Sec

Vc. *p*

intense 110 3 +

ff p f ff

When louder allow it to be explosive. When at fastest/loudest (B 117) cello interrupts

f

Figure 3.1 *Bicicleteando*, Bars 118 to 120.

⁵⁸ *Points to Self* (Liverpool Bluecoat Live Performance), by Neil Luck, 2015
<<https://www.youtube.com/watch?v=lqkijGxJm70>> [accessed 23 August 2024].

Originally conceived as a track to be performed live as an electronic part alongside a cellist, Kate Ellis from Crash Ensemble, *Bicicleteando* was scheduled for debut at New Music Dublin 2022. The performance was envisioned with an electric bicycle played live by me, accompanied by the vocalised sounds, while Kate Ellis handled the cello part. The intention was to have a physical bicycle on the stage as an integral element of the performance, symbolising the dynamic fusion of movement and music. Furthermore, *Bicicleteando* was intended to be part of an album release by the Irish Composers Collective, a group of music composers based in Ireland. Regrettably, circumstances took an unforeseen turn. By the time the piece was due to be performed live and recorded in a studio, I fell ill, leading to a modification of the project. In the end, the track was performed for cello only, marking a deviation from the initial vision but preserving the essence of *Bicicleteando*.

The concept of *Gestos*, which translates to ‘Gesture’ in Spanish, revolves around the idea of a specific hand motion (the ‘levantar’), followed by a signal to the performers to commence the music. This notion initially aligned in my mind alongside the imagery of grabbing a dart and propelling it forward, as well as the juxtaposition of a circle transitioning into a straight line. Essentially, the entire composition is founded on this fundamental imagery. The very first bar on the piano encapsulates these two contrasting ideas. The quintuplet notes symbolize the circular, elevated motion (the ‘levantar’), while the B minor chord in first inversion, with extensions in fourths, signifies the downbeat gesture of the conductor or the idea of a line (see Figure 3.2). This duality forms the core of the piece. Much like my creative process with *Bicicleteando*, whenever I found myself stuck in a particular passage, I would rise from my seat, listen to the music, and spontaneously make hand gestures that resonated with the passage of music to which I was listening. These spontaneous physical expressions while listening to the music not only reinvigorated my creative flow, but also led to the emergence of fresh ideas within the composition. The quintet passage is repeated throughout the piece in different registers and instruments, with changes in pitches and note subtractions (see Figure 3.3). The idea of a line propelling forward is also present throughout the piece. For example, in bars 80 to 82 the piano’s trajectory is linear, not offering many changes in pitch but moving forward, against the circle movement of the clarinet, violin and cello (see Figure 3.4).



Figure 3.2 *Gestos*, Bar 1.

71

Fl. *mf* *f*

Cl. *f*

Vln. *mf* *f* *f*

Vc. *f*

Pno. *f*

5 5 5 5 5

(5)

Figure 3.3 *Gestos*, Bar 71.

no pitch: air clicks ad lib ----- pitch

80

Fl. *ppp* *mp* *mp* *p* *ppp*

Cl. *mf* *f* *mf* *p* *mf* *p*

Vln. *mf* *f* *mf* *p* *pizz.* *mf*

Vc. *mf* *f* *mf* *p* *pizz.* *mf*

Pno. *pp* *mp*

Figure 3.4 Gestos, Bar 80 to 82.

3.2 Tierra Sellada (2019)

The piano trio *Tierra Sellada* ('Sealed Earth') explores the devastating impact of plastic in the world's oceans. My aim when composing the piano trio was to articulate in sound my somatic responses about the issue of plastic into sounds. Somatic response refers to allowing our body to move in a way that feels responsive to a body sensation. We feel emotion as sensation in our body before we experience the thought related to that emotion. The somatic call is that sensation in the body. For example, if I feel tightness on one side of my neck, a somatic response might be to move my neck to the other side. This action responds to that sensation of tightness, and it does not respond to a thought.

During the first steps of the composition process, I focused on my somatic experiences to gather musical material and to help me define the dramatic content and character of the piece. I carried out a series of ten meditation sessions followed by a music improvisation session on the piano where I explored the production of sonic material through my somatic experience. During each meditation I focused on the bodily sensations that emerged when recalling the issue of plastic: its ubiquity, the waste generated by it, and the pollution created in the soil and water. The focus of the improvisations was to connect to the instrument both as a mover (a body that is affected

by its surroundings), and as a pianist. In this way, I was able to transcend traditional conventional pianistic techniques and figurations. Connecting to the instrument in a physical way made relevant both the sounds I produced with bodily movements on the piano and the sound generated by the movements.

Mexican composer Oscar Mascareñas uses the term ‘choreosonography’ to refer to the process of the physicalising of sounds and sounding drawn from the somatic experience of a dancer.⁵⁹ In 2015, Mascareñas worked in collaboration with a dance artist to create *Figures*, a collection of piano pieces. The central premise of this work is based on the notion of ‘sound in the logic of movement’.⁶⁰ The focus in Mascareñas work was to ‘transform somatic forces into sounds through an exploration of the relationship between the piano and the body’.⁶¹ The main difference with *Figures* and *Tierra Sellada* is that Mascareñas chose to work with a non-musician to focus solely on sounds created incidentally from the dancer’s movements, henceforth referred to as movement-sound, with the result that the focus of the work was purely on her intentionality as a dancer. Instead, I included the dialogue between these gestural and musical forces since my premise was that my embodied knowledge of playing the piano and creating a music composition would emerge in all the stages of the process.

I chose to carry out these improvisations with the piano for two main reasons: to gather harmonic and melodic material; and as working with an instrument I am intimately familiar with, to investigate the sensory responses and feelings associated to the connection between the instrument and myself. At the same time, I wanted to constrain myself to explore my somatic sensations on the piano, consciously avoiding certain aspects of my embodied pianistic experiences (such as pre-learnt finger patterns), and instead shifting my focus to the physical experience of interacting with the piano. Thus, at times in this improvisation stages, harmony is achieved in a Cagean sense; and melody, rhythm, and dynamics, are constructed through sensation (a characteristic that is also shared with *Figures*). I consciously tried to exclude musical thoughts (such as how the music structure unfolds, how the arc of the piece takes shape, etc.), which I usually do when improvising. This does not mean that I completely blocked or ignored my pianistic

⁵⁹ Óscar Mascareñas, *Figures* (2015), online YouTube recording
<<https://www.youtube.com/watch?v=eHGBgW8dcpE>> [accessed 17 September 2023].

⁶⁰ Ibid.

⁶¹ Ibid.

and improvisation training. I allowed whatever is embodied in me as a pianist and as an improviser to emerge, but I refrained from my usual improvisation inclinations.

The piece was mainly created out of a set of ten improvisation sessions that went through what I call a distillation process. Before each session, aligning with the preparation stage of Wallas' process,⁶² I carefully listened to the material from previous sessions to immerse myself in the existing musical content. As I listened to this, I wrote notes on a journal about my impressions to the material, listing musical gestures, musical passages, textures, or any sonority that I found relevant or interesting. I judged them relevant or interesting if they resonated with the somatic feelings I had encountered when doing the improvisation. In this way, I acknowledged a dialogue between the intuitive experience of sensing, perceiving, and improvising from somatic experiences, and the process of musical thinking. As I paid attention to the journal notes before improvising, each session went through a process of distilling. After I carried out a set of ten improvisations, I felt this distillation process reached an end.

Reviewing my notes in the journal, it seems that at the time I was primarily concerned with the flow and the authenticity of my bodily sensations, continuing a musical direction that was predetermined by the very first improvisation. Through this series of improvisations and reflections, the musical content and intention of the piece started to emerge, although a clear structure was not evident to me at that time. I found many references about a concern for the lack of structure. This concern was unfounded because when I reached my last improvisation there was a clear structure to be developed. Up to that moment I had not paid attention to the task of finding a structure and then I discovered the structure of the work evolved unintentionally from the process. However, since I was not aware of this structure, at a later stage in the composition process I completely changed it. Figure 3.5 shows the MIDI representation of the last improvisation. The dots in blue represent the volume (the higher the dot the greater the intensity that was played). The green part of the image represents pitches. In this example, the entire range of the piano is shown, from A1 at the bottom to C7 at its highest point; the length of the line represents the length of the note.

⁶² Graham Wallas, *The Art of Thought* (Solis Press, 2014).

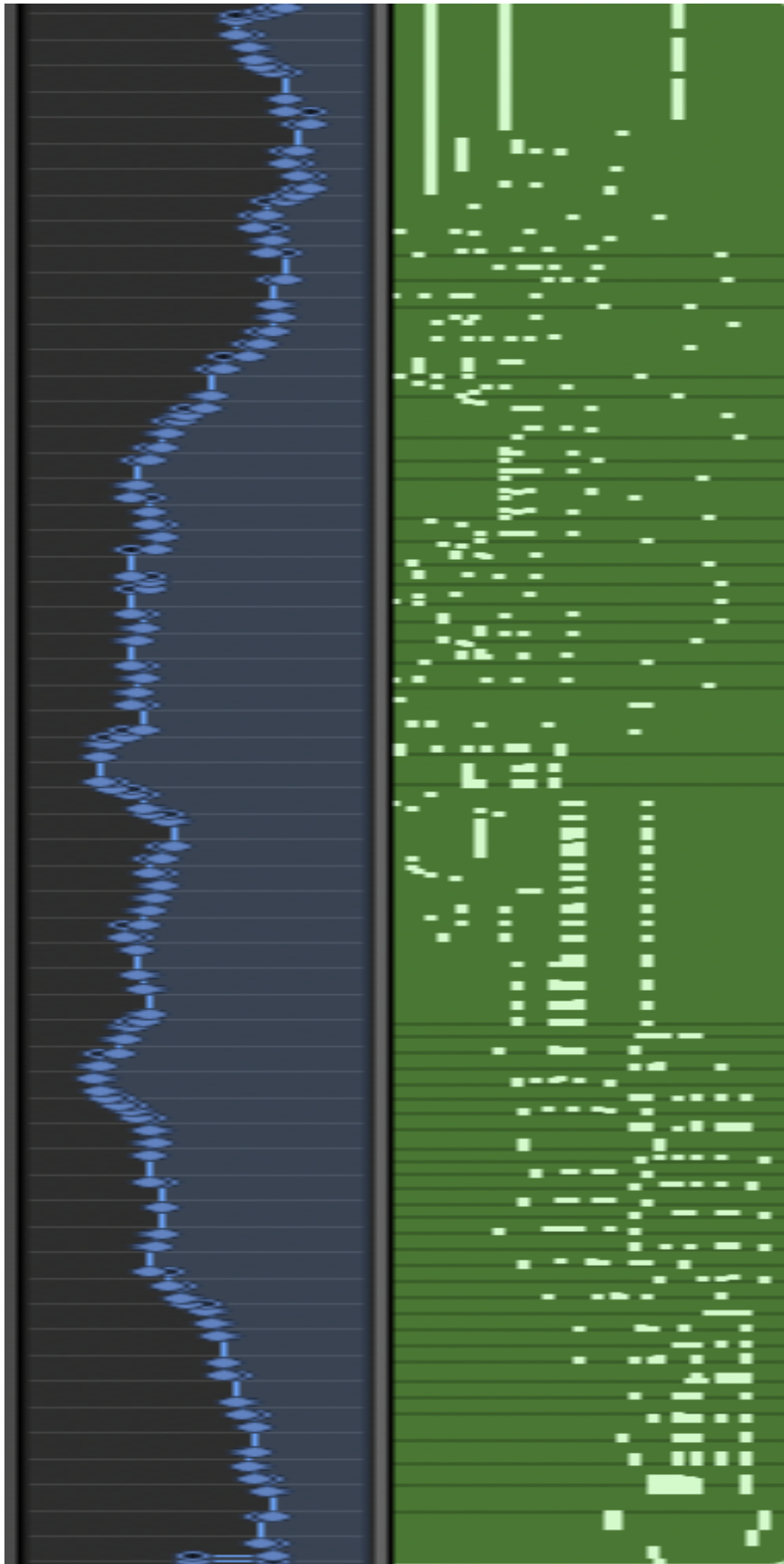


Figure 3.5: MIDI map of the last improvisation for Tierra Sellada

By analysing the horizontal and vertical shape shown in Figure 3.5, it is evident that there was a clear structure present at this point. The piece started with a burst of high notes played vigorously, then it goes to an exploration to the lowest register using dynamics in the middle range. As the piece progresses, the pitches ascend higher, the general range widens, and texture increases in density. Then, there is a middle section with an ostinato in the bass acting as a foundation, and on top of this foundation the range keeps extending higher towards the highest possible register. After this, the texture and range expand dramatically while the dynamics remain almost constant. This is clearly the most dramatic point in the piece. After this section the piece gradually fades to quieter dynamics and the texture and range contract a little. The piece finishes with long, sustained notes.

I shaped the form and character of the piece based on my hands-on experiences of touch, performance, and listening. After analysing both my composition notes and the finished piece, this way of thinking seemed to override the original structure of the improvisation, giving way to an arguably novel way of combining an array of apparently disjointed musical events. While I was composing this piece, I found myself deeply engrossed in George Crumb's *Black Angels*.⁶³ I was especially captivated by its brief, dramatic segments that presented starkly contrasting themes. During this period, I imagined that *Tierra Sellada* could embrace a similar structure, reflecting the broad range of my tactile experiences. To achieve this, I catalogued various bodily sensations I experienced during my meditation and improvisation sessions: feelings of being sealed, contained, suffocated, gasping for air, aggressive, struggling to breathe, sensing plastic floating, itching in the feet, plastic contaminating the soil, the throb of a headache when pondering microplastics in water, and the disintegrating, suffocating presence of plastic on the earth, robbing it of breath. I then sought to align these expressions with distinct sections of the music.

Feeling a need for words to articulate my emotions surrounding this topic, I considered incorporating text into the composition, I thought about using text to go with the piece, although it remained unclear at that time whether I would use spoken text during the piece, either by an actor or by one of the musicians, or whether it was going to be a sort of political statement before the piece started or if it was a text to be written

⁶³ George Crumb, *Black Angels* (New York: Peters, 1973).

and accompanied on the program notes. I contacted Northern-Irish poet Maria McManus, with whom I collaborated in the past, to see whether she was interested in creating a personal response to the issue of plastic in the world. We had a series of conversations about the topic and the meaning of these words and the impact they had on me. After a series of conversations about this piece and the issue of plastic, she started writing a poem. The poem tells the story of a girl, focusing on three different situations through her life and the impact plastic had on her and her surroundings.

Many images in the poem also focus on different body's sensations and reactions. Letting imagery, feelings, and ideas from the poem to influence my composition and creative process, I thought to break down the piece into sections. Thus, *Tierra Sellada* became something that resembles in some ways a programmatic piece. The idea of doing several short contrasting sections, as in *Black Angels*, surfaced again. Listening the last improvisation at the piano, I listed the feelings the music conveyed to me. Along the eleven minutes of improvised, distilled music I envisioned short movements of around sixty to ninety seconds each. The words to divide each of the sections were also going to be related to the story: *Tierra Sellada* (sealed earth), *Bocanada* (*breath of air*), *Desperdicios que vuelven* (*waste coming back*), *Asfixia* (*asphyxia*), *Agresivo* (*aggressive*), *Historia* (*story*), *Interludio* (*interlude*), *Asfixia 2*, *Agua de mar: curadora, calma, serena* (*salt water: calm, serene*).

After finishing the first draft of *Tierra Sellada*, I continued with extended techniques on the string instruments. I am not a string player so holding the instruments in the conventional way did not allow me the freedom I needed for feeling comfortable and confident with the instrument. I decided to hold the violin on my lap so I could freely move my fingers and my arms on top of it. I experimented with different movements on top of the violin, playing it with unconventional techniques such as using the side of a wooden pencil to hit, tap and play with the strings.⁶⁴ After the improvisations, I chose sounds that resembled the timbral quality I was looking for in this composition: low tones that lean towards the 'dark' and low registers. I wanted a clear piano texture. On top of this, I felt that soft, slow, meditative high overtones needed to play on top of the piano to and contrast and complement the texture to the low, dark tones of the string instruments. However, I sensed that there was going to be a clash in timbre between the clear piano notes on top of the extended techniques on the strings, but this is how I am establishing

⁶⁴ Helmut Lachenmann, *Pression* (Wiesbaden: Breitkopf & Härtel, 1969).

my composition process: layer upon layer of improvisation, allowing affective responses to dictate the next layer of improvisation. In this way, the high tone sounds have emerged in the violin improvisation as a response from the piano ones. After the sound exploration with violin and cello, I came up with the following list of sound qualities:

GLISSANDI WITH MOVEMENT:

- whistling
- harmonics and glissandi
- movements with arco around fretboard

PERCUSSIVE:

- con legno: attacca, hit, bounce
- pizzicato

PERCUSSIVE WITH MOVEMENT

- pizzicato glissandi

I connected these musical gestures to the range of movements and feelings I wanted to evoke: stillness, suffocation, fast and slow feelings of movement, going around, meandering, loose. For example, in the violin playing, the stillness was represented by long, sustained notes, suffocation by scratching the pencil against the strings with energy (Figure 3.6), fast and slow feelings of movement by going around the fretboard at different speeds (Figure 3.7), going around and meandering represented by circular bowing (Figure 3.8). The notation in these figures resembles a style similar to that used by Helmut Lachenmann in *Pression*,⁶⁵ where diagonal lines instruct the performer to move their hand around the neck of the cello (figure 3.5). Unlike *Pression*, where Lachenmann's main focus was on varying the levels of pressure with the bow, my focus was instead on employing different playing techniques like scratching, circular bowing, tapping, and using various devices like a pencil to convey the somatic idea into music.

⁶⁵ Helmut Lachenmann, *Pression* (Wiesbaden: Breitkopf & Härtel, 1969).

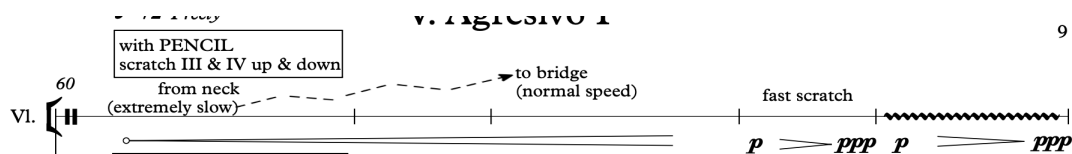


Figure 3.6: Suffocation by scratching the pencil against the strings with energy.

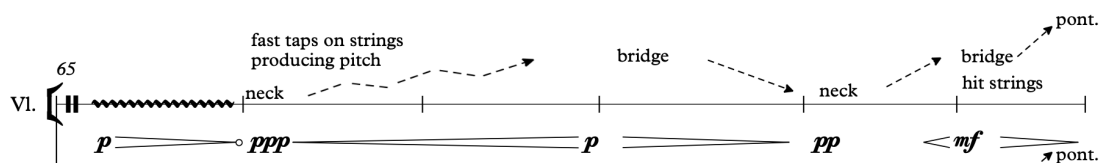


Figure 3.7: Going around the fretboard at different speeds.

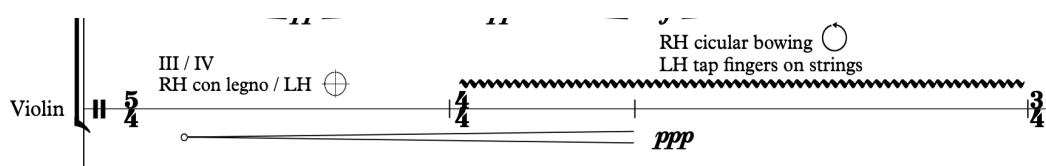


Figure 3.8: Going around and meandering represented by circular bowing.

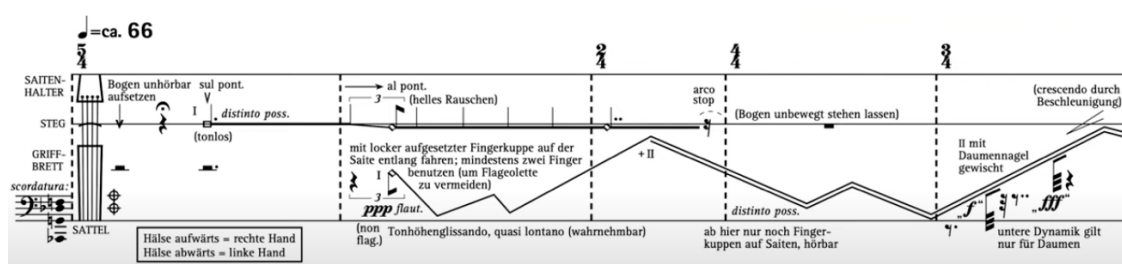


Figure 3.9 Helmut Lachenmann, *Pression* (1969)

By bringing the body to the centre of the music-making process, I discovered that some of the qualities that emerged in the playing resembled an intimate reflex, a direct connection between feelings and bodily sensations, that may be described as a folding together of somatic experience and musical ideas. Using somatic processes to compose a piece of music was mobilised by an enquiry into the personal significance for the novelty of the approach, and for using strong and raw actions for creating and gathering material. This way of working helped me to connect layers of interaction between my body and my surroundings with a sense of flow in the creation process that could imprint raw emotions into the creation of a music composition. I find a personal value in investigating the creation of a piece of music by means of direct involvement with the body and emotions.

Although I value the insights that the approach gave me in departing from traditional ways of thinking and creating music, the issue that arises for me when composing in with somatic processes is that the artistic product that I created produced an aesthetic that I find difficult to relate to as a musician. Judging by the aesthetics of the result, and with a distance in time that enables me to judge the piece more clearly, it seems to me that the development of the piece corresponds to an arbitrary decision making that was detrimental to what could have been a more effective development of musical ideas. In the final work, musical ideas do not evolve in the way I would expect as a listener. Some sections feel too short, slow to develop or they come to a sudden change in character, leaving a questionable point in terms of certain composition decisions, particularly in relation to structure and development.

3.3 *Postal Notes* (2020)

Postal Notes consists of seven individual pieces on postcard format, composed for the contemporary vocal group TONNTA and debuted at New Music Dublin 2020. Each postcard features a painting on one side and performance instructions in text form on the other. My creative process for each piece involved four stages. First, I made an abstract painting and then digitized it. The completed painting inspired me to draft a text, describing how to translate the visual ideas into sound. In the third stage, I revisited the digitized painting to make digital adjustments so that it would complement the text. Finally, I refined the original text to ensure that the performance instructions were clear.

These set of pieces were inspired by *Aus den sieben Tagen* (1968) by Karlheinz Stockhausen,⁶⁶ in the sense that it asks the performer to use their intuition and to connect with something intimate within them, which will result in different interpretations according to whoever performs the piece. Stockhausen described ‘intuitive’ music as that which revolves around spontaneous creation, where there are no pre-established guidelines or rules.⁶⁷ Rather than using a conventional musical score, performers are given verbal or graphic cues and concepts to guide their creation. It is music which emphasises the performer(s) relying more on intuition than on intellectual understanding when executing the piece. According to Stockhausen, certain skills are essential to perform intuitive music. Musicians should transcend self-centeredness and perform

⁶⁶ Karlheinz Stockhausen, *Aus Den Sieben Tagen* (Vienna: Universal Edition, 1968),

⁶⁷ Karlheinz Stockhausen, *Stockhausen on Music*, ed. by Robin Maconie (London: Marion Boyars, 1989), 113–14.

without the need to express themselves, but rather to be in direct conversation with the other musicians and how the music evolves during the creation. In Stockhausen's foundational idea, intuitive music eschews historical musical antecedents and avoids strict compositional rules and stylistic categorisations.⁶⁸ In my practice as composer and performer I have observed that Stockhausen's perspective can be viewed as an ideal to achieve. Performers often inherently reflect the essence of their previous musical experiences and training. In my journey as a composer and performer, I have observed that Stockhausen's perspective can be viewed as an aspirational ideal. This was evident in the group TONNTA, a modern vocal ensemble familiar with experimental and new music. When they started rehearsing the piece *Postal Notes*, the interpretation unmistakably echoed Stockhausen. It was only by offering my guidance that the piece became my own work.

A more relevant and contemporary example of a text-based composition that parallels the improvisatory and interpretive nature of *Postal Notes* is Jennifer Walshe's *THIS IS WHY PEOPLE O.D. ON PILLS / AND JUMP FROM THE GOLDEN GATE BRIDGE* (2007)⁶⁹. This piece, also uses only text as the score, providing verbal instructions that guide the performers toward an improvisatory response. As in *Postal Notes*, in Walshe's work, the performer is asked to engage with the text, interpreting its meaning through sound and personal expression, and using their somatic and lived experience in the world outside music to connect with the work and to be able to perform it. For example, in the piece *Clothes*, which is part of the *Postal Notes* collection, I invite the performer to feel and sense their clothes and how this sensing affects their body. From this lived experience I ask the performer(s) to sing their lived experience. Similarly, in *THIS IS WHY PEOPLE O.D. ON PILLS / AND JUMP FROM THE GOLDEN GATE BRIDGE* Walshe invites the performer to interact with a skateboard, to learn how to skateboard, to do a few tricks and to react musically to this lived experience. This approach is inherently linked to somatic practices, which emphasize the integration of body and mind, fostering a performance that is as much about internal experience as it is about external expression. Here, the performer's interaction with the score is transformed into a somatic dialogue where the text becomes a medium through which they explore

⁶⁸ Karlheinz Stockhausen, *Stockhausen on Music*, ed. by Robin Maconie (London: Marion Boyars, 1989), 113–14.

⁶⁹ Jennifer Walshe, *THIS IS WHY PEOPLE O.D. ON PILLS/AND JUMP FROM THE GOLDEN GATE BRIDGE* (Dublin: Contemporary Music Centre, 2004).

and express their embodied knowledge. This method of composition resonates with the principles of embodied cognition, which suggest that cognitive processes are deeply rooted in the body's interactions with the world.⁷⁰

Another point in common between *Postal Notes* and Walshe's work lies in their shared focus on the subjective interpretation of text, as both pieces require the performer to navigate open-ended prompts rather than adhere to traditional musical notation. In both cases, the text acts as a flexible, non-prescriptive guide, giving the performer a high degree of agency and creative freedom. The interpretation of the text is key to creating a performance that is, by nature, different every time. This focus on openness and collaboration reflects a broader trend in contemporary composition, where works are seen not as fixed objects, but as evolving practices shaped by performer agency and interaction, aligning with what Umberto Eco described as an open work⁷¹.

In both works, the performers are given a significant degree of autonomy in determining how to interpret the textual prompts. In Walshe's piece, each performer is asked to create their own individual path (see Figure 3.10), allowing for personal exploration and the development of a performance rooted in the performer's unique interpretation of the text. Similarly, *Favourite Things*, one of the pieces in the Postal Notes collection, encourages performers to choose a regular activity and interpret the sensations and rhythms of that activity through their voice (see Figure 3.11). Furthermore, both pieces embrace the concept of open-ended performance duration. Walshe specifies a minimum length for solo and group performances, but beyond that, the performers are free to begin and end their paths at their discretion within the chosen performance duration. Similarly, *Favourite Things* provides no strict time limits, allowing performers to explore the rhythms and sensations of their chosen activity for as long as they see fit. When performed by multiple performers, both works encourage interaction, but leave the nature of this interaction up to the performers. In Walshe's piece, performers can begin and end their paths at different times, creating overlapping layers of sound without the need for strict synchronization. In *Favourite Things*, performers are explicitly encouraged to 'interact in every possible way,' actively listening and responding to each other. While the nature of interaction varies slightly, both pieces share a focus on the relationship between the performers, allowing for

⁷⁰ Martha Eddy, 'Somatic Practices and Dance: Global Influences', *Dance Research Journal*, 34.2 (2002), pp. 47.

⁷¹ Umberto Eco, *The Open Work* (Cambridge: Harvard University Press, 1989).

spontaneous collaboration and engagement in a way that ensures each performance is unique.

This piece is performed by 1-10 performers performing on any instruments (including voice). Each performer prepares and practices their own individual "path" according to the directions given below. The piece consists of the performance of this/these "path(s)."
If the piece is performed by a soloist, it should be a minimum duration of 5 minutes long, and is called "THIS IS WHY PEOPLE O.D. ON PILLS."
If the piece is performed by a group, the group should agree on a performance duration (minimum 10 minutes). Each member of the group's path should be a minimum duration of 5 minutes long, and a performer can begin/end their path anywhere within the chosen performance duration. A performance by a group is called "/AND JUMP FROM THE GOLDEN GATE BRIDGE."

Figure 3.10 Jennifer Walshe's THIS IS WHY PEOPLE O.D. ON PILLS / AND JUMP FROM THE GOLDEN GATE BRIDGE (2007)

Favourite things (for 1 or more performers)

Pick one activity you do regularly: cut nails, wash dishes, make tea, playing a musical instrument. Pick one. Using your voice, perform a piece that captures the sensations of doing your chosen action. Try to incorporate the rhythms that are included in this activity.

If there is more than 1 performer, aim to interact in every possible way. Listen to each other.

**Tonnta
c/o Smock Alley Theatre,
6-7 Exchange Street Lower,
Dublin 8,
D08 PX27,
Ireland.**

Figure 3.11 Favourite Things, from the Postal Notes collection.

Postal Notes (2020) represents a significant departure from the earlier work *Tierra Sellada* (2019), reflecting an evolution in both compositional approach and conceptual framework. While *Tierra Sellada* explores the somatic translation of environmental concerns into a piano trio format, relying heavily on improvisation and physical engagement with the instrument turned into fixed notation, *Postal Notes* moves towards a more abstract and multimedia-oriented expression. This piece utilises a combination of graphic scores and intuitive performance instructions. The shift from a more structured, instrument-based exploration in *Tierra Sellada* to the open-ended, performer-driven format of *Postal Notes* was a deliberate move towards embracing ambiguity and multiplicity in interpretation, broadening the expressive potential of the

work and addressing the existing tension between control and spontaneity in my compositional practice. By allowing performers to interpret visual and textual cues, *Postal Notes* aimed to reconcile this tension, offering a space where the structured and the intuitive coexist, pushing my work towards a more integrated and holistic artistic language.

3.4 Conclusion

This chapter contributes to the research question by exploring how somatic responses challenge conventional composition techniques, promoting a deeper integration of bodily intuition into the creative process. The juxtaposition of bodily knowledge and musical creation illustrates a novel form of experimentation that significantly influences my development as a composer. Central to all elements is the dialogue between the body and its external environment, interpreted through sound. From *Tierra Sellada*'s exploration of the devastating effects of plastic pollution via somatic expressions to the *Postal Notes* directive to performers to connect intimately with the world outside of music, the overarching theme remains consistent: the embodiment of external stimuli and inner sensations to create music. *Tierra Sellada* is an embodied reflection, an intersection of sensory experiences and environmental concerns. The essence of the composition is derived from somatic experiences, where I transcribe bodily sensations, emotions, and intuitions into sound. The interaction between the body, the piano, and the issue of plastic pollution is intricate and personal. The meditation and improvisation sessions I undertook, rooted in somatic awareness practices, aims to bring forth a raw, unfiltered connection between emotion and sound. Somatic responses, the embodiment of emotions felt before they become conscious thoughts, played a pivotal role in guiding the improvisation and eventual composition process. The somatic exploration, which transcends traditional pianistic techniques, delved into the core of sensory experiences, showcasing a sonic picture of the physical sensations evoked by the plastic issue. By connecting with the instrument both as a mover and a pianist, I tried to forge a bridge between intuition and analytical reflection.

The *Postal Notes* compositions embody an immersive experience that bridges musical intent with the external world. Emphasising a somatic connection, each piece becomes a journey of self-discovery and introspection for the performer. Drawing parallels with Stockhausen's intuitive music and Walshe's text-based pieces, *Postal*

Notes challenges performers to transcend conventional expressions and channel raw, primal sensations. Yet, these compositions are also a testament to the fluidity of interpretation, as evidenced by TONNTA's performance, which bore distinct echoes of Stockhausen's music. Both pieces demonstrate how an autoethnographic approach, rooted in personal and embodied experiences, could highlight the journey and the process of compositions and themes that are simultaneously idiosyncratic and universal. This reflects the research question's, delving into the tension between tradition and experimentation in shaping my voice as a composer. The method amplifies the personal, bridging the gap between individual experiences, such as somatic responses to environmental concerns, and broader musical knowledge. Through its personal narrative and reflective analyses, this adds depth to the understanding of how external realities and internal sensations can converge in music composition. Through a balance of intuition and structure, tradition and innovation, this commentary advances the discourse in music composition, emphasising the dynamic relationship between the composer, their environment, and their inner world. Unfortunately, the recording of the premiere of the piece was lost, so it couldn't be included in the portfolio. However, the discussion is retained in this thesis because it is pertinent to this PhD commentary as it showcases a facet of my composition practice that includes somatic practices.

Chapter 4 Composer as Choreographer: Interdisciplinarity in the Composition Process.

Chapter 4 delves on the previous explorations of body and movement by integrating these elements into interdisciplinary and collaborative contexts. This chapter examines how the blending of movement, technology, and collaborative creativity can generate new compositional ideas and formats, delving further about the tension between tradition and innovation in my music composition further. The learnings from this chapter about distributed creativity and the impact of physical and digital collaboration spaces influence the orchestral composition discussed in Chapter 5, where these ideas are applied within more traditional settings.

One of my interests as a composer is generating alternative approaches to music creation that depart from a traditional approach to composition, from the way I create and gather music material to the way I put these materials together. What keeps me interested in this process of creation is focusing on approaches that consist of seeing and sensing movement as stimuli to generate musical responses. What I consider to be at the core of this practice is an improvisation practice that is in tune and in dialogue with my emotions, my surroundings, and with the way I interact with the world. When working with others, I engage with performers as creative collaborators in the creation of music material for a new piece. I give performers a music task, ideas, and concepts for them to play, interact, and improvise with, in order to generate music material. I call this process of creation a *choreographic approach to music composition*, as it shares similar characteristics with the creation process used by many contemporary choreographers. For example, Ohad Naharin, the creator of the Gaga movement language, extensively uses structured improvisation to allow dancers to freely explore their physical sensations and movements within set parameters, resulting in highly dynamic and organic choreography.⁷² William Forsythe, renowned for his innovative approach to ballet and contemporary dance, incorporates structured improvisation to push the boundaries of classical ballet by setting specific tasks or movement prompts for dancers, allowing them to explore and expand on his ideas within a defined framework.⁷³

⁷² Meghan Quinlan, 'Gaga as Metatechnique: Negotiating Choreography, Improvisation, and Technique in a Neoliberal Dance Market', *Dance Research Journal*, 49.2 (2017), pp. 26–43

⁷³ Ariel Osterweis, 'Difficult Fun: The Racial Politics of Improvisation in William Forsythe's Ballett Frankfurt', in *Body Impossible: Desmond Richardson and the Politics of Virtuosity*, ed. by Ariel Osterweis (Oxford University Press, 2024), p. 1

Contemporary working practices in the music industry often afford limited time for collaboration with performers, making it difficult for composers to engage in experimentation. The fast-paced nature of production schedules restricts the opportunities for composers and performers to interact extensively. This constraint on time can significantly hamper the ability to explore creative possibilities and refine compositions through iterative processes. Research highlights that these limitations are a prevalent issue in professional settings, affecting the depth and quality of collaborative creative work in music.⁷⁴ On the other hand, contemporary choreographers such as Ohad Naharin, Wayne McGregor, and William Forsythe generally comprise task-based methodologies that involve direct experimentation with dancers. From my experience working with contemporary choreographers and from reading from academic literature about contemporary choreographic practices, the choreographer brings a concept to the dancers, the genesis of an idea, that will unfold as they engage with performers as creative collaborators in the creation of movement material for a new dance piece.^{75 76}

The choreographer Wayne McGregor uses an extremely similar process to mine as a composer. Each day, the choreographer collaborates with the dancers in the rehearsal arena, experimenting, iterating, and perfecting concepts. This interaction predominantly involves structured improvisations, allowing the choreographer to gather, try, create, and polish material. While dancers engage with and expand upon the choreographer's vision, the process is not purely collaborative, as the choreographer retains control over most creative decisions. The choreographer guides the improvisation, setting tasks, emphasising certain movement qualities, intentions, and durations. Following these improvisations, a plethora of movements take form. The choreographer then discerns which portions to enhance, adjust, elongate, or abbreviate, and which to discard. This evolution is fluid, flowing as dialogue. Ideas would quickly materialise in time and space, and it is up to the choreographer to capture these for further use. For example, in his work *Tree of Codes*, McGregor collaborated with the dancers to explore movement inspired

⁷⁴ Eric Clarke and Mark Doffman, *Distributed Creativity: Collaboration and Improvisation in Contemporary Music* (Oxford University Press, 2017), p 1.

⁷⁵ James Leach and Scott Delahunta, 'Dance Becoming Knowledge: Designing a Digital "Body"', *Leonardo*, 50 (2017), p 461–67.

⁷⁶ Stephanie Jordan, 'Choreographers and Musicians in Collaboration, from the Twentieth to the Twenty-First Century', in *The Oxford Handbook of the Creative Process in Music*, ed. by Nicolas Donin (Oxford University Press), p. 1

by Jonathan Safran Foer's novel, using structured improvisations to develop the choreography while maintaining his overarching artistic vision.⁷⁷

I use a similar approach described above in the creation of a musical piece when working with other performers, composers, and improvisers. Through this approach I devise tasks and activities that are generally associated with the way some choreographers approach creating work. Through layers of improvisation, and dialogue before and after the tasks, I select and distil material. By archiving these interactions and engaging with them, a further selection of musical ideas takes place, and a musical structure begins to unfold. This process of creation evolved in my artistic practice to complement a more traditional way of working. Using these methods for creating a music composition allow me to feel more immersed in the creative process. If I were to sit in front of a paper or computer, the process of creating a piece of music would radically affect the process, the output, and how the finished work relates to my artistic identity.

Video recording plays a significant role in the choreographic process. Choreographers such as Wayne McGregor and Crystal Pite often video the rehearsals and make shorthand notes as the process unfolds.⁷⁸ This video material is crucial as it allows for the easy gathering of material for use in future rehearsals. It also provides a space for the choreographer to reflect on the material, enabling further conceptual and aesthetic decisions. This stage occurs later in the process, where decisions about the order of movements, timing, and textures are articulated in the piece's development. This approach helps see the big picture, maintaining an ongoing dialogue between the original idea and its evolution. For instance, Wayne McGregor utilizes video technology extensively in his rehearsals. He records sessions to analyse the dancers' movements and refine his choreographic ideas later. This method allows him to experiment with complex, detailed movement sequences and make precise adjustments. Similarly, Crystal Pite integrates video recordings into her creative process.⁷⁹ By reviewing rehearsal footage, she can observe the interplay of movements and make informed decisions about the choreography's direction and structure. These technologies facilitate a deeper exploration of movement and ensure that the choreographer's vision is fully realised.

⁷⁷ Wayne McGregor, 'Tree of Codes', 2015 <<https://waynemcgregor.com/productions/tree-of-codes>>

⁷⁸ Lyndsey Winship, 'Wayne McGregor, Tree of Codes, Review: A Feast of Stars and Spectacle', *Evening Standard*, 2017 <<https://www.standard.co.uk/culture/wayne-mcgregor-tree-of-codes-dance-review-a-feast-of-stars-and-spectacle-a3484166.html>> [accessed 12 June 2024].

⁷⁹ Lucía Piquero Álvarez, 'On Physicality and Narrative: Crystal Pite's Flight Pattern (2017)', in *The Oxford Handbook of Contemporary Ballet*, ed. by Kathrina Farrugia-Kriel and Jill Nunes Jensen (Oxford University Press, 2021), p. 1

4.1 *PUMP – Perfectly Used Mic Power* (2022)

In March 2022 I collaborated with Brazilian choreographer Ricardo de Paula and six dancers from the University of Malta to create the piece *PUMP - Perfectly Used Mic Power*. The concept behind this project was to foster a truly collaborative piece, intertwining the worlds of dance and music improvisation throughout the entire creative journey. The objective was to utilise improvisational elements not only to craft and perfect the artistic work but also to establish a relationship between music and dance where music would serve as a catalyst for the dancers' movements, while the dancers' movements, in turn, would inspire and inform the evolution of the musical composition. One of the main premises for this work was that all the material must be conceived through collaboration, so music composition was required to unfold in the shared presence of others.

As time was limited, everyday rehearsals for a period of two weeks, this also meant that work had to be produced quickly. The University of Malta commissioned this piece, and they flew me and Ricardo to Malta to do this work so we could only collaborate for this allocated time and the piece needed to be finished at the end of the collaboration. Although I did do work in between sessions, staying over break and lunch periods to define a particular direction of the music, load sounds in the computer, getting a greater idea of workflow and loading programs and apps to use with the interactions with the dancers, ideas needed to be generated on the fly, maintaining a 'primitive intuition'.⁸⁰ Owing to time limitations it was impossible to over-craft, meaning to overly revise and lose the initial spontaneity. This way of working echoes composer Visa Tapani Kuoppala in his 2010 piece *Torque*: 'I wanted to work with the lightness and speed of an abstract expressionist painter – throwing paint on the canvas, generating ideas on the fly, painting over previous ideas, maintaining a primitive intuition and avoiding over-craft'.⁸¹ In practice, Kuoppala's and my way of working can be distilled into the following guidelines:⁸²

1. Start without explicit compositional ideas or concepts, let form evolve organically, moment by moment.

⁸⁰ Visa Tapani Kuoppala, 'Composition in No-Mind's Land: A Portfolio of Electroacoustic Music' (unpublished Doctoral thesis, University of Birmingham, 2017), 10.

⁸¹ Ibid.

⁸² Ibid.

2. Aim at creating with flow, effortless.
3. Cultivate and maintain mindful awareness of the dancers' bodies – avoiding overthinking and prioritise intuitive decision-making over analytical deliberation.
4. Avoid excessive refinement or prolonged fixation on perfecting a specific section.
5. During the refinement process, focus predominantly on the sequencer timeline, initiating composition from the section's beginning and progressing linearly.

Starting pieces without set compositional ideas and maintaining a mindful, nonconceptual focus during composition ensures that ideas do not necessarily become verbal or explicitly thought-based at any point in the creative process. While elements of this approach to music composition are evident in all pieces within the portfolio, the clearest examples of this workflow are found in the collaborative pieces detailed in this chapter. Despite the apparent speed and informality of certain aspects of this process, the impression of haphazardness or randomness may be misleading. My aim is to heighten my intuition and, when working with others, to heighten my emotional receptivity, which in turns speeds up the collaborative process considering that cognitive processing is naturally slower than intuitive and emotional responses, especially in fast-paced work situations. As noted previously in this commentary, I tend to place trust in these intuitive reactions, particularly when they arise from a state of unselfconscious, mindful concentration, more than in thought-based ones. Echoing Visa Tapani Juoppala, the elusive and enigmatic moods and emotions to which I am drawn resist easy rational intellectualisation.⁸³ My primary consideration in judging my art revolves around the subjective sense of how profoundly I identify with the work and, even more crucially, how deeply I am connected to the process of its creation. In terms of measurable criteria, I could point to the interrelation between sound and movement, as well as visuals and music, the level of technical craftsmanship, the time invested in a piece, the time spent on mixing the final product, along with other indicators of professional skill. This aligns with Feldman's perspective that '[w]ork is used to justify art – give it some degree of legitimacy'.⁸⁴

⁸³ Visa Tapani Kuoppala, 'Composition in No-Mind's Land: A Portfolio of Electroacoustic Music' (unpublished Doctoral thesis, University of Birmingham, 2017), p 10.

⁸⁴ Morton Feldman, *Give My Regards to Eighth Street: Collected Writings of Morton Feldman*, Illustrated edition (Exact Change, 2004). p 78

Due to the immediacy required in the creative process, the use of synthetically generated sound material became a foundational element of my approach to composing music for this project. By utilizing tools such as my iPad and Ableton Live, I was able to control these synthetic sounds in real-time, mirroring the dancers' movements with precise finger gestures. This method established a symbiotic relationship between sound and movement, which was integral to the piece's overall structure and aesthetic. Such an approach is reminiscent of the interaction paradigms where the use of gesture-capture technologies enables performers to interact dynamically with digital media, thus enhancing the choreography's expressive potential.⁸⁵ The ability to modify every parameter on the fly—from sound quality to timbre and envelope—enabled immediate adjustments in response to the dancers' movements, creating a fluid and adaptive soundscape. This capability reflects the tension between premeditated control and the spontaneous responses that characterise live performance and which is crucial to the expressiveness of electronic music.⁸⁶ This dynamic interaction created distinct sonic objects that provided the dancers with auditory cues, guiding the improvisational aspects of their performance. The reliance on technology-mediated sound reflects a deliberate choice to expand the language of musical composition.

The integration of technology through tools like Ableton Live, MIDI controllers, and the iPad allowed for a level of real-time sound manipulation that would be unattainable with purely acoustic instruments. For example, using the Launch Key, I could record, play, loop, and manipulate basic sound parameters such as timbre, reverb, and envelope. Meanwhile, the iPad enabled a kinetic interaction with the dancers, where my finger movements on the screen mimicked and responded to their gestures in real-time. This aligns with the concepts discussed by Bevilacqua et al., where technology-mediated interactions are not merely convenient tools but essential components of the creative process, facilitating a fluid and responsive exchange between sound and movement.⁸⁷ The rationale for using technology over acoustic instrumentation in "PUMP" is also rooted in the desire to explore these expanded sonic possibilities. While acoustic instruments offer a rich tradition and established vocabulary, they are inherently

⁸⁵ Frédéric Bevilacqua, Norbert Schnell and Sarah Alaoui. "Gesture Capture: Paradigms in Interactive Music/Dance Systems." In 'Emerging Bodies: The Performance of Worldmaking in Dance and Choreography', pp. 184-185.

⁸⁶ Simon Emmerson, *Living Electronic Music*, 1st edition (Routledge, 2007). p62

⁸⁷ Frédéric Bevilacqua, Norbert Schnell and Sarah Alaoui. "Gesture Capture: Paradigms in Interactive Music/Dance Systems." In 'Emerging Bodies: The Performance of Worldmaking in Dance and Choreography', pp. 190-191.

limited in their ability to produce the wide range of timbres, textures, and real-time manipulations that synthetically generated sound material can provide. This choice is not merely a rejection of traditional instrumentation but a considered decision to embrace the expanded sonic palette that technology offers, enabling a more nuanced and flexible response to the demands of the choreographic process.

Until this point in the commentary, I have employed the term improvisation in connection with intuition and non-conceptual thinking. As I further engaged in collaborative processes with both musicians and dancers, a more precise term for improvisation becomes necessary, given the diverse interpretations associated with the term. Improvisation is a broad term that usually includes idiomatic and non-idiomatic styles or genres.⁸⁸ Moreover, authors and musicians often interchange the term improvisation and its derivatives (such as free improvisation, open improvisation, and instant composition), using them to convey varying meanings. In this commentary, and more precisely in this chapter, I refer to improvisation as associated with the concept of Open Improvisation, as discussed by musician and academic Simon Rose.⁸⁹ Open Improvisation defines improvisation as a more embodied, shared, and transdisciplinary approach.⁹⁰ It is a term increasingly being employed by academics and music and dance artists to refer to improvisation that refers not to a particular idiomatic expression but instead it focuses on the performers' attitude towards oneself and others: the openness to the discovery of oneself and the other's presence and practice, the willingness to be vulnerable and adaptable to how the other's practice may call upon one to respond, an open-mindedness in creativity that can be developed through building confidence in one's self and others.

In PUMP, this openness is reflected in the live performance aspect, where the dancers and musicians engaged in a continuous feedback loop. The performers were not merely reacting to a predetermined structure but co-creating the sound world in real time, embodying the concept of Open Improvisation. Discussing Open Improvisation, Rose discusses the concept of sharedness in the context of interdisciplinary improvisational performance practice, particularly in music and dance collaborations. The term open

⁸⁸ Stephen Nachmanovitch, *The Art of Is: Improvising as a Way of Life* (New World Library, 2019). p 18

⁸⁹ All information in this paragraph, unless otherwise stated, is derived from Simon Rose, 'Improvisation in Dance and Music', in *Bodies and Sounds in Motion* (Berlin: Zeitgenössische Musikwissenschaft, 2022).

⁹⁰ Simon Rose, *The Lived Experience of Improvisation: in Music, Learning and Life* (Bristol: Intellect, 2016), 121.

improvisation refers to a deep level of mutual understanding beyond mere collaboration, involving a commitment to development and trust. In the context of PUMP, the improvisational elements were crucial in maintaining a dynamic interaction between the live electronics and the performers. This allowed for a more fluid, responsive compositional structure, where the boundaries between premeditated and spontaneous sound production were intentionally blurred. This quality of attention, which is often shaped by awareness and active listening, reflects in principles found in practices like meditation, mindfulness, and Pauline Oliveros's Deep Listening⁹¹ and also echoes Feldman practice when he stated that 'it is the concentration you're after and not ideas'.⁹²

The somatic aspect is also emphasised, with a focus on bodily awareness and the incorporation of somatic practices from movement. This somatic approach challenges traditional notions of music as a cerebral, written-score-based art form, opening possibilities for a more holistic and transdisciplinary engagement. Somatic movements, comprised of diverse intellectuals and artists from the 1960s onwards, embraced the goal of legitimising the body as a source of creativity and selfhood, calling this body an intuitive body, possessed of its own native intelligence and capable of acting of its own accord.⁹³ In PUMP, this somatic approach was embedded in the performers' engagement with their own movement and how the music impacted in their body and emotions. The dancers and I were responding intuitively to the physical sensations generated by sound and movement, mirroring the principles of somatic practices. This allowed the performers to create a seamless integration of body and sound, reflecting the concept of the 'intuitive body' in real-time interaction.

In PUMP a 'not-pre-determined' open improvisation is also explored.⁹⁴ Derek Bailey's definition of non-pre-determined improvisation places an emphasis on the dichotomy of idiomatic vs non-idiomatic and breaking free of boundaries. In my practice, I find the dichotomy of idiomatic versus non idiomatic practices is paradoxical and problematical. Idiomatic improvisation needs to adjust to a set of rules or parameters that make the music sound distinctive to a music genre. By contrast, non-idiomatic improvisation could fall into the trap of being idiomatic by trying not to be idiomatic. Musician Davey Williams encapsules this paradox in the following words: 'soon enough,

⁹¹ Pauline Oliveros, *Deep Listening: A Composer's Sound Practice* (Bloomington, IN: iUniverse, 2005).

⁹² Feldman, *Writings*, 207.

⁹³ John Kapusta, 'Pauline Oliveros, Somatics, and the New Musicology', *Journal of Musicology*, 38 (2021), 1–31.

⁹⁴ Derek Bailey, *Improvisation: Its Nature and Practice in Music* (Boston, MA: Da Capo, 1993), 15.

the absence of idiom becomes an idiom.⁹⁵ This issue was present when creating pieces with other performers-composers as in the case in PANIC ensemble. However, as I was a solo composer creating this piece I had more control on the aesthetic output. This control was instinctive, ‘not-yet-knowing’.⁹⁶ The concept of ‘not-pre-determined’ aligns with the concepts of ‘not-yet-knowing’ in artistic research and the necessary state of unknowing in transdisciplinary performance studies.⁹⁷ Artistic research diverges from conventional theory building and knowledge production, emphasising not-knowing or not-yet-knowing, creating space for the unthought and unexpected, and fostering the idea that all things could be different.

Engaging in this open improvisation practice, deeply intertwined with emotions, the body, and somatic, helps me to establish a common ground for discussing the interactions between music and dancers and to situate my line of work. The increasing prominence of the development in Improvisation in Dance and Music (IDM) is driven by factors that usually arise in collaborative endeavours such as affinity, engagement quality, and commitment, nurturing collaborative development.⁹⁸ IDM provides a distinctive opportunity for sharing tacit disciplinary knowledge, fostering an expansion of understanding through heightened awareness of oneself and the other. In IDM, knowledge primarily evolves through practical experience, challenging prevailing modes of thinking that prioritise concepts over actions or craftsmanship. Engaging with IDM triggers a profound learning process, offering an opportunity for self-reflection and a reassessment of one’s own work, particularly through the recontextualisation of practices in interdisciplinary settings. Working in improvisation across different disciplines necessitates adopting an inquisitive attitude to comprehend the nuances of the other’s discipline, tapping into a rich reservoir of new artistic knowledge shaped by decades of disciplinary experience and achievement.⁹⁹

In the wider context, these embodied perspectives emerge in the work of Antonio Damasio, who wrote: ‘We are not thinking machines that feel, we are feeling machines that think’.¹⁰⁰ Damasio postulates that a mind devoid of emotion is non-existent,

⁹⁵ Davey Williams, *Solo Gig: Essential Curiosities in Musical Free Improvisation* ([n.p.]: Createspace, 2011), 77.

⁹⁶ Henk Borgdorff, *The Conflict of the Faculties: Perspectives on Artistic Research and Academia* (Leiden: Leiden University Press, 2012), p 173.

⁹⁷ Ibid.

⁹⁸ Rose, ‘Improvisation’ p 1.

⁹⁹ Rose, ‘Improvisation’, p 10.

¹⁰⁰ Antonio Damasio, *Descartes’ Error: Emotion, Reason and the Human Brain* (London: Vintage, 2006).

highlighting the inseparability of the two. Emotions result from physiological changes in response to stimuli, influencing decision-making. In improvisation, immediate embodied responses are crucial, engaging both cognitive and emotional systems.¹⁰¹ Unlike written composition, improvisation demands moment-to-moment decision-making. This is the case in *PUMP* and in my practice more broadly, where embodied decision-making extends beyond improvisation. In my composed works, I often rely on somatic awareness to guide the development of musical ideas, allowing the body to inform the music. By attending to bodily sensations during composition, I create a bridge between cognitive planning and physical intuition, ensuring that the music emerges organically. This is also in line with Oliveros's 'body first' concept, initially discussed in perception processes, applies to this cognition/emotion link in improvisational decision-making. The intertwining of cognitive and emotional systems is vital for effective, not-predetermined improvisation, stressing the significance of their interrelatedness in the immediacy of the improvisational process. This was achieved in *PUMP* as the real time creation and decision-making was driven by both physical sensations and emotional reactions to the movement and the soundscapes, making the somatic practice, the music, and movement an inseparable unity.

In *PUMP*, live electronics, movement, and improvisation create a dynamic, interdisciplinary performance where the body is central to the production of sound. This integration of physicality with sound manipulation places *PUMP* in conversation with other works that blur the lines between music and dance. Meredith Monk's *On Behalf of Nature* (2013)¹⁰² exemplifies the seamless integration of music, movement, and improvisation, similar to the interdisciplinary approach seen in *PUMP*. In *On Behalf of Nature*, Monk blurs the lines between music, dance, and theatre, creating a deeply immersive experience where the body is central to the production of sound and movement. Like *PUMP*, Monk's work is built on a foundation of improvisation, where performers rely on their intuitive responses to one another, allowing the performance to evolve organically. The emphasis on the physicality of sound-making and the performers' interactions with one another mirrors the core principles of *PUMP*, where live electronics and movement work together to create an unpredictable and responsive

¹⁰¹ Rose, *Improvisation*.

¹⁰² Pwyll ap Siôn, 'What Makes Meredith Monk One of Contemporary Music's Most Original, Individual, and Innovative Figures?', *Gramophone*, 2022
<https://www.gramophone.co.uk/features/article/what-makes-meredith-monk-one-of-contemporary-music-s-most-original-individual-and-innovative-figures> [accessed 24 May 2024].

performance. Both pieces challenge traditional distinctions between music and dance, creating a unified, holistic event. Additionally, *On Behalf of Nature* shares *PUMP*'s focus on somatic awareness, where the performers' physical sensations and movements are directly tied to the sonic landscape.¹⁰³ This thematic concern with human connection to the natural world is also explored in *Tierra Sellada*, where environmental fragility is evoked through sound, embodying the sense of urgency in addressing ecological crises.

4.2 PANIC Ensemble

I formed PANIC Music Ensemble in 2018 with fellow composer and performer Anselm McDonnell, vocalist Patrick Moore, and myself as a composer and performer on piano, keyboards, and electronics. My main intention in forming the ensemble was to foster collaboration among its members. However, during its initial stages, we found ourselves navigating uncharted territory, lacking a clear roadmap for how to collaborate effectively. With all of us possessing academic music backgrounds, our initial inclination was to follow the traditional model of composer-performer interaction where the composer considers others during their creative process but create in isolation, with no direct participation from others and thus, the final work reflects the composers' personal knowledge, experiences, and immediate surroundings at that particular moment.¹⁰⁴ In the first phase of the ensemble we engaged in low-level collaboration: the composer would bring a composed piece to the ensemble, which would then be performed, allowing for adjustments and refinements based on the interaction between composer and musicians. This methodology resulted in the creation of pieces like 'The House that Stood for Happiness,' where the primary creative process was centred around the composer's pre-conceived musical ideas. As time went on, the ensemble recognized the need for a more profound and organic form of collaboration. We began to explore alternative avenues, moving away from the one-sided approach that had initially dominated our creative process. Our journey toward a higher level of collaboration marked a turning point for PANIC Music Ensemble, and it led to a more dynamic and innovative period in our musical evolution. In the subsequent phases of our ensemble's development, we started experimenting with new ways to generate musical material collectively. We opened

¹⁰³ Meredith Monk: *On Behalf Of Nature*, *ECM Records* <<https://ecmrecords.com/product/meredith-monk-on-behalf-of-nature-meredith-monk-vocal-ensemble/>> [accessed 26 September 2024].

¹⁰⁴ Alan Taylor, "Collaboration" in *Contemporary Music: A Theoretical View*, *Contemporary Music Review*, 35 (2016), 562–78.

ourselves up to improvisation, experimentation with extended techniques, and the integration of electronics and technology as integral components of our compositions. These explorations allowed us to break free from the confines of traditional composition and performance, enabling us to harness the collective creativity of all members to shape our music.

4.2.1 *The House that Stood for Happiness* (2019)

The House that Stood for Happiness is a poem by Maria McManus that navigates themes of nature, memory, loss, refuge, and hope.¹⁰⁵ The poem is divided into four sections, each one addressing a different idea or topic. The first section explores themes of belonging and home; the second one is about loss, and the fragility of life; the third section about resilience and the fourth about hope. My first step when creating this composition was by focusing on the text. I sang each of the sections in as many ways I could think of, taking into consideration the meaning of the text, the emotions it conveyed to me, and the way I would intuitively phrase each verse. I worked section by section, recording several improvisations for each section by using my phone as a voice recorder. I first recited each of the sections and when I had a sense of having internalised the meaning of the text, I improvised singing it. After several iterations of these improvisations I kept the singing lines that I thought they were the most appealing for the original text, conveying the emotions of the text and serving a narrative and a compositional arch, going from the first section which is tender, the second one in a recitative style, with a declamatory tone in an affirmative with a hint of anger, the third one forte and with pride, creating a climax into the last section, which starts quietly after the middle climax of the third section, working to the biggest climax in the finale.

The composition is mainly tonal, in the sense that it gravitates towards certain chords, but the focus is in shifts of the tonal area, and not in the exploration of the regions of a single basic key. Although there is a tonal centre, this changes all the time and for this reason, I did not write a key signature at the beginning of the score. Accidentals are utilised primarily for notational convenience rather than establishing a key. This approach mirrors Benjamin Britten's use of tonality in his five song cycles for voice and piano.¹⁰⁶ Bartok's String Quartet is noted for its use of tonal centres, but within these

¹⁰⁵ Maria McManus, *Available Light* (Syracuse, NY: Syracuse University Press, 2018).

¹⁰⁶ Benjamin Britten, *Collected Songs* (London: Boosey and Hawkes, 2013).

tonal centres harmonic progressions are not used in the sense of harmonic functions but by reflecting tonal contrasts.¹⁰⁷ This piece resembles my way of working described in earlier chapters. The reason it is mentioned here is to highlight the shift in working within a collaborative setting in PANIC music ensemble, moving from a lower level of collaboration towards a higher level of collaboration.

4.2.2 Higher-Level Collaboration

In high-level collaboration, composers' collective work experiences a few distinctive impacts compared to when an artist creates in solitude. There are three main characteristics featured in this high-level collaboration which distinguish them from traditional views on traditional collaboration.¹⁰⁸ Firstly, the creative process may be constrained by the need to identify intersections or consensus amidst their varied knowledge and influences. This often initiates negotiations, pushing them to discover shared perspectives while potentially sidelining certain ideas or techniques not universally accepted among the collaborators. Secondly, collaborative efforts can give birth to novel ideas—concepts that would not have sprouted in individual settings. This shared or interactive method of creating meaning starkly contrasts with the solitary artistic process, where one draws solely from personal experiences and understanding. Finally, the artwork that springs from such a partnership will, to some extent, bear the signature of multiple artists. When various individuals infuse their creativity into a project, it naturally raises the question about authorship and ownership, given that the resulting piece will be an amalgamation of thoughts and inspirations from more than just one contributor. Although each improviser contributed to the creation of the work, the ultimate authorship resides with me as the director of the project and the final decision-maker. While collaboration inherently involves a blending of ideas and influences from multiple contributors, the role of the director or lead composer in such settings is crucial in maintaining coherence and direction within the creative process.¹⁰⁹ Even as the collaborative effort produces a work enriched by diverse inputs, it was me as the director of the project who synthesized these contributions, making critical decisions about what to include, refine, or discard. This role ensured that the final piece not only reflected the

¹⁰⁷ Arnold Whittall, 'Tonality in Britten's Song Cycles with Piano', *Tempo*, 96 (1971), 2–11. p 2

¹⁰⁸ Alan Taylor, "'Collaboration' in Contemporary Music: A Theoretical View", *Contemporary Music Review*, 35 (2016), 562–78.

¹⁰⁹ Paul Williamson and Johannes Luebbbers, 'Expanding Models of Music Composition: Exploring the Value of Collaboration', *International Journal of Music Education*, 41.1 (2023), pp. 111–28.

collective input but also aligns with the overarching vision and objectives set out at the project's inception. Thus, while the collaborative process enhanced the work with a variety of creative perspectives, the authorship remains distinctly mine.

When working with PANIC music ensemble, I employed simple, group-based tasks to create and develop music material. These tasks usually helped my collaborators to produce a distinctive sound that was in dialogue with the task at hand. I had an idea, a shape, theme, or a topic I wanted to investigate. From these, I derived tasks for the musicians to perform, usually in the form of clear brief verbal instructions that invite them to use their imagination to make links between the instructions and sound. On day one in the rehearsal space, my collaborators began to create sounds and musical phrases based upon and responding to these tasks. After this I will listen the material and either refine the instructions to play with if more material was needed, making notes of what worked and discarding what did not. I recorded every collaborative session. Each session was a process of creating and refining material, and then listening and watching the recordings to choose what ideas to follow, structuring material already created, choosing material that needed to be refined, and discarding unproductive material. The creation of each piece lasted for around ten working days. Time was spent both in the rehearsal space and at home, in a reviewing process of watching and analysing material. The first three to four days were merely used to gather material, the next three to four to distil and refine and the last three to four to work on structure, and refining timing, musical and physical gestures.

4.3 *Fricción* (2019)

This process shares similar characteristics with the way PANIC music ensemble approached music creation. When working with the piece *Fricción*, I just had this concept related to tension: friction. I was drawn to this word because it implies movement in both a physical and a social dimension, as defined in the *Oxford English Dictionary*:

1. The action of chafing or rubbing (the body or limbs
2. The rubbing of one body against another; attrition.
3. The resistance which anybody meets with in moving over another body.
4. Jarring or conflict of unlike opinions, temperaments, etc.¹¹⁰

¹¹⁰ 'Friction', *Oxford English Dictionary*, <https://www.oed.com/dictionary/friction> [accessed 21 September 2023]

I brought this concept to two performers. In a rehearsal space, I asked the performers to generate different degrees of friction with their instruments using a wide range of techniques and objects of different materials and shapes. I set short explorations of two to five minutes where I gave the performer an object and asked them to generate sounds with it. I took note of the sounds I found interesting, stimulating, and that resonated with the idea of friction. After these short exercises, I took notes and videos of the performers creating these sounds. To explore different nuances of these sounds I set two further tasks:

1. to let the performer play and explore the sound, and
2. to give specific instructions to the performer on the technique, dynamic range and texture.

After several days of rehearsals, a bank of sounds and techniques started to emerge, which were organised in the form of two tables:

OBJECT	TECHNIQUE/S
Plectrum	Hit strings. Rub strings. Use side and emblem with texture (slow, vigorously, medium, generate rhythm)
Violin bow	On strings: Arco, con legno, staccato, sul pont, sul tast On body: arco on different parts of the body
Glass object	Close to the pickup microphones and away of them: Hit, glide, rub strings
Finger drumming	Finger drumming on strings
Voice	Different shapes of mouth, playing with different tension in the vocal cords

Table 4.1 *Fricción*: Guitarist's sounds and techniques

OBJECT	TECHNIQUE/S
Fingers, nails, plectrum	Scratch microphone capsule
Exhaling	Different shapes of mouth offering more or less resistance, playing with different tension in the vocal cords.
Growling	Different shapes of mouth offering more or less resistance, playing with different tension in the vocal cords.

Table 4.2 *Fricción*: Singer's sounds and techniques

These two aforementioned tasks were also used to create the whole structure of the piece, including phrases, cadences, and climaxes. The first task was mainly used at the early stages of the composition process. For example, I asked the performers to improvise using techniques described in Tables 4.1 and 4.2 for a set time, usually five minutes. I was in charge of controlling the time and give some verbal instructions before so the performers could concentrate on the flow of the music and the task at hand. At the end of the improvisation, I made some comments, describing and reviewing the performance that just took place, remarking the elements that I liked, the ones that I wanted to discard, the ones I thought needed some adjustment or further exploration. After this I asked the performers to play with opposites. For example, if the beginning of the improvisation was quiet and building up slowly to a climax, I would ask them to start loudly and to avoid climaxes. This allowed me to gather contrasting material while exploring the range of the techniques and sounds used.

As I started to have a feeling that enough material was being accumulated, I considered the elements of the improvisation I felt had most resonance with the concept of friction. From there, three new tasks emerged:

- I asked the performers to refine a particular sound, technique, or interaction between them. For example, to shorten or stretch a sound, to change its dynamics, texture, or their playing technique.
- I tried to facilitate ideals in the form of verbal instructions, prompts and debate so that the performers explore different relationships with the sounding material, their natural inclinations as performers, and their way to relate to the sounding objects.
- I asked the performers to write down how they made a specific sound. Later on, we used these notes to create the score.

After these processes took place, I started writing sections of the score using conventional notation and extended techniques. The white noise created by the vocalist suggested to me that this was a good starting point to begin the piece. The texture was coherent with the rest of the sounds, and the nuances that could be created were appealing as the opening of the piece.

4.4 Muted Duet Improvisations

In this section, I will analyse the creative journey of a collection of music compositions created online using collaborative processes. I will describe how I worked collaboratively before the pandemic and how this differed from an online interaction. Then, I will describe the technical and creative challenges posed when moving from an in-person collaborative endeavour to an online interaction. I will further describe and analyse the different stages of my collaborative online creation process using the composition *Grá* as a case study. I will use the framework of ‘Distributed Creativity’ as a tool to analyse both my creative collaborative process and the music arising from it. Finally, I will address how the exploration of muted improvisations and somatic experience within my research contributes to the discourse on innovative practices in the fields of somatic studies, improvisation, and embodied cognition.

4.4.1 Transition to Online

Up to the beginning of 2020, I worked with my music ensemble PANIC to create collaborative pieces that derived from a series of distilled improvisations. The collaborative endeavours employed in the ensemble required in-person interaction because of the highly engaged, responsive style of improvisation and collaborative composition processes we were using. In this approach of collaborative group creation, it is imperative that the performers/composers are present in the same room and at the same time. In March 2020 the COVID-19 pandemic made this level of in-person interaction impossible. With PANIC member Anselm McDonnell, I decided to move our process of collaborative composition online. In the act of engaging with the limitations and strengths of online working we fragmented various elements of our creative process into distinct stages. Examining each stage of the improvisational methodology in isolation allowed for a more detailed analysis and thus, revealed the knowledge that is being created in each of its constituent parts. The various aspects of improvisation we

found important were spread across several software applications: the visual aspect was confined to an online video conferencing application, the aural aspect to a digital audio workstation (DAW) including Ableton etc., and finally the discursive aspect to a shared online document. The content created using these applications also served as a record of each element of the collaborative improvisational process.

4.4.2 Technical and Creative Challenges in Transition to Online

In our collaborative process we aimed that each of the participants contributes equally to the composition and, as per the framework discussed below, that the interactional effect of any given action could be changed by the subsequent actions of other participants. This is because collaborative improvisation could be a suitable approach that could embrace latency issues and allows for dynamic, moment-to-moment interaction.¹¹¹ However, this dynamic was not always present in our first attempts as we were confronted by many technical challenges. Since our first meeting, it became obvious that audio latency was going to be a major issue in creating collaborative music compositions online. In an in-person situation the performers receive extensive aural and visual feedback with ease. In contrast, in an online interaction there are added visual and aural constraints that make this exchange difficult.

In an online interaction, the audio feedback is received with a few milliseconds of delay (latency) as the audio travels from the performer to the interface, through the computer, and is received back to the receiver's computer and sent back to their audio interface to be played out of their computer. Human ears are quite sensitive to this latency, typically anything around six milliseconds will be audible as a delay meaning it can be difficult to play or to interact if we are a few milliseconds out.¹¹² This audio latency, coupled with the poor audio quality of the online meeting made real-time interaction difficult, potentially impossible. The visual feedback also constrained to whatever frame the camera is capturing. Once the camera is set up, the camera frame is fixed throughout the performance. Video also suffers from latency issues so what one performer does in front of the camera is received by the other interlocutor some milliseconds after the event takes place. This type of interaction greatly differs from an

¹¹¹ Raymond MacDonald et al, 'Our Virtual Tribe: Sustaining and Enhancing Community via Online Music Improvisation', *Frontiers in Psychology*, 11 (2021), 1–19.

¹¹² Juho Liski, 'The Human Ear Detects Half a Millisecond Delay in Sound', 2021
<<https://www.aalto.fi/en/news/the-human-ear-detects-half-a-millisecond-delay-in-sound>> [accessed 3 October 2023].

in-person improvisation session where one can choose where and what to look at, at any point in time. Owing to these limitations, we started to investigate alternative ways of responding and interacting with each other.

To overcome these difficulties, the idea emerged of focusing and responding to each other's physicality while improvising emerged. This provided an interesting starting point for our collaborative process, and it was reflected in our first entries in the Dropbox paper document:

Martin: ... there was a great sense of connection, the interaction worked very well... very interesting musically, how it changed when different gestures arose.¹¹³

After seeing that we were effectively responding and interacting to each other's physicality, we started to gradually interact more by relying on visuals. We started by lowering the volume of the other performers' output while emphasising our facial expressions and body movements. After seeing that this level of interaction was conducive to our way of collaboration, we agreed to delve deeper into the visual and physical aspect of our interaction and thus, decided to remove any audio stimuli from subsequent online interactions by muting each other's audio.

4.4.3 Stages in the Creation Process

Collaborative processes in the creation of music compositions often involve dynamic interactions among composers. In my experience, when I collaborate with other composers to create music compositions, the process often unfolds in three distinct stages: the 'documenting and sharing' stage where a member of the group shares an interest or concept for a music composition and the other members respond to this by sharing their opinions and viewpoints; the 'listening and editing' stage, where we listen to the audio file of our combined improvisation and make comments in real time during this and the 'decision-making stage', where we agree on what to do next. Rooted in theories of collaboration, these processes can be seen to echo the stages of ideation, iteration, and decision-making described above.¹¹⁴ In the ideation phase, as John-Steiner has noted in her examination of creative collaborations, the initial stage often involves a synthesis of multiple ideas, much like a composer sharing an initial concept and receiving

¹¹³ 1st Meeting, 28th April 2020. Unpublished personal material.

¹¹⁴ R. K. Sawyer, *Group Genius: The Creative Power of Collaboration* (New York: Basic Books, 2007).

feedback.¹¹⁵ This is followed by the iteration stage, which can be likened to the rehearsal process in musical contexts, where ideas are refined in real-time.¹¹⁶ Finally, culminating the collaborative process is a phase of decision-making. This stage ensures the project's forward momentum and can be compared to the conclusive stages in other collaborative endeavours, where a final product or direction is agreed upon.¹¹⁷

In the first stage of our creation process, which corresponds to Wallas's preparation stage¹¹⁸, we focused on the seeing aspect, responding to each other's physicality and gestures. In this stage we were reacting to visual stimuli as opposed to live audio information, particularly the physical movement of the other performer. To achieve this, we decided that we would perform 'to the camera' as if it was the other person's eyes. Playing our instrument while trying to look at the camera to get visual information from each other was not immediately familiar to either of the performers, and this presented a problematic hurdle in the early stages of developing our process. To achieve better familiarity and interaction with this visual method of improvising, we recorded our Zoom meetings and used this material to refine the camera's position so it could capture physical gestures. It was important that the camera's eye allowed us to see points of contact with our instruments, hand gestures, and our facial expressions - specifically head movements, which we use extensively to mark intentionality, tempo, and structural transitions. This adjustment process echoes the focused preparation in Wallas's stage where foundational work is laid out.¹¹⁹

Responding to the physicality of our performance allowed us to achieve a high level of visual interaction and cohesion despite the lack of audio information. This created a sense of performative ease, where each performer felt free to investigate materials as it felt like interacting with tangible material. Although we were not listening to each other while playing, each of us recorded our own audio output from the live improvisations. To achieve a synchronicity in the audio files, we both started and stopped the recording at the same time. While muted, we indicated the starting and the stopping point in the recording with a hand gesture. Stopwatches linked to our recording devices

¹¹⁵ V. John-Steiner, *Creative Collaboration* (Oxford: Oxford University Press, 2000).

¹¹⁶ B. J. Kenny and M. Gellrich, 'Improvisation', in *The Science and Psychology of Music Performance: Creative Strategies for Teaching and Learning*, ed. by R. Parncutt and G. E. McPherson (Oxford: Oxford University Press, 2002), 117–34.

¹¹⁷ P. B. Paulus and B. A. Nijstad, eds., *Group Creativity: Innovation through Collaboration* (Oxford: Oxford University Press, 2003).

¹¹⁸ Eugene Sadler-Smith, 'Wallas' Four-Stage Model of the Creative Process: More Than Meets the Eye?', *Creativity Research Journal*, 27 (2015), 342–52 (p. 340).

¹¹⁹ Ibis.

provided a means of aligning the audio from each of the performers. After each improvisation session, we unmuted ourselves to arrange the exchange of files. After the exchange of files took place, we both imported the audio tracks and aligned them in our DAWs.

In the second stage, which aligns with Wallas's incubation stage, we delve into the editing of ideas, incorporating the aspects of hearing and speech and discussion. During this phase, just as in Wallas's model where the subconscious mind works on the problem, we work on our material by listening to the aligned improvisation simultaneously in our DAWs while having a written discussion of our findings in a shared Dropbox page document. Listening to the performance in synchronicity and writing about it in a shared space helped to retain some of the fluidity of the live, in person interactions. As these shared online documents updated immediately, each performer could see and respond to comments in real time. In these shared pages we documented anything we thought important: our interactions and intentions, our synchronicity or lack of it, the texture generated in the material, moments of success or uncertainty, etc.

The final stage of our process, decision-making, aligns with Wallas's illumination and verification stages. This is when the 'aha' moment or breakthrough occurs (illumination) and the ideas are then critically evaluated and refined (verification). Although the visual image captured by each other's camera is also subject to latency issues, our visual interaction helps us match the intentionality of our instrumental performances. With better results achieved in video interaction, we rely on these stimuli, deciding to mute the audio of our performances while improvising. This decision-making and refinement process mirrors Wallas's verification stage, where the idea is fully developed and polished. From this point onwards, we perform by listening to our own performance while watching the other person playing their instrument, but with their audio muted. This reliance on video rather than audio helps us avoid being aurally distracted by the lack of synchronicity of audio events. Later in the process, ideas emerge about responding to other sources of visual stimuli, such as images or films. Reviewing the video footage and listening to the resulting audio track of our performance reveals how many physical gestures are translated into musical ones. This reflective process and realization are reminiscent of the illumination stage in Wallas's model, where insight and clarity emerge. It was as if we were listening through each other's body movements,

generating a visual and aural discourse from this interaction. This reflective practice is documented in our journal:

‘Martin: From 3 minutes onwards, it is surprisingly synchronous!’

‘Anselm: ... we were breathing together where each gesture arrived. The start grove grew very nicely... the interaction was quite obvious because we were doing similar gestures.’

4.4.4 Distributed Creativity

In this next section I will briefly examine how the framework of ‘Distributed Creativity’ is a useful tool to reflect on both my creative collaborative process and the music arising from it. In this regard, this type of work can be contextualised by the creative processes of artists such as Australian composer Liza Lim, who co-authored a 2013 article with Eric Clarke and Mark Doffman examining ‘Distributed Creativity’ and ecological dynamics in a performance of her song cycle *Tongue of the Invisible* by Ensemble Musikfabrik.¹²⁰ The term ‘Distributed Creativity’ arose from psychology and cognitive-science literature, part of a growing understanding that creativity cannot fully be understood by focusing upon the personality or mental processes of an individual creator, and that there are many different types of creative relationships which do not conform to the stereotype of a lone artist. The term was first used in a 2009 study by and DeZutter, to describe shared creative outcomes generated by collaborative groups.¹²¹ In this study, interaction analysis was used to isolate creative decisions in the work of an improvisatory theatre group. This analysis documented the group process to examine how it developed and progressed. The study showed that most developments could not be attributed solely to one individual but arose out of a network of collaborative contributions.

4.5 Collaborative Decision-Making: *Grá* (2019)

Because our working method was extensively collaborative, there are many decisions in our work which cannot be attributed solely to one of us. I will mention one musical example from *Grá* which shows how the route of an idea was tracked as it was moulded into its eventual form. On our first meeting, I opened our discussion by talking about our

¹²⁰ Eric Clarke, Mark Doffman, and Liza Lim, ‘Distributed Creativity and Ecological Dynamics: A Case Study of Liza Lim’s “Tongue of the Invisible”’, *Music & Letters*, 94 (2013), 628–63.

¹²¹ R. Keith Sawyer and Stacy DeZutter, ‘Distributed Creativity: How Collective Creations Emerge from Collaboration’, *Psychology of Aesthetics, Creativity, and the Arts*, 3 (2009), 81–92.

past collaboration, *Stutter*.¹²² I pondered upon the intriguing nature of lines and the gestures that give birth to them, especially while inscribing a character. Anselm responded by proposing that we explore Ogham script as a source of inspiration, a historic Irish written form characterised by scratches through a central line. Separately, we both ventured into producing video content centred around the Ogham character for ‘Grá’, which means love in Irish. This character was among the initial word recommendations on an Ogham translation platform. My video¹²³ showed the digital drawing of the Ogham symbol Grá. I drew the symbol in a digital format, using an Apple Pencil and an iPad. I consciously created a rhythmic audible gesture for each line in the drawing, trying to represent the chipping of the stone. My idea was that in a subsequent interaction we could respond both to the actual drawing and to the sounds emerging from the video. Anselm also produced a video¹²⁴ which shows the fully formed Ogham symbol for Grá flickering.

During our second meeting, I proposed that we retain the flickering element present in the video I had shared. In response, Anselm introduced two improvisations: the first resonated with the flickering present in my footage, while the second was a melodious interpretation aligned with the softer visual elements I created. Following this, I crafted an improvisation inspired by the audio Anselm had shared, highlighting the muted guitar tremolo that intermittently surfaced in his improvisation. This sound found its complement in an electronically generated pan drum sound from my side. As a part of our exploration, I layered my improvisation over my initial contribution and observed a pleasing sequence: the pan drum gesture leading into the emergence of the guitar's flickering. This flickering effect evolved into an ostinato bass, becoming the pivot for all subsequent elements. This was mainly because we realised that much of our repertoire heavily relied on a rhythmic foundation, and to create contrast, we decided to focus on producing a melodious and softer piece.

In the videos there were multiple elements we could possibly respond to. In terms of the periodicity and the rhythmic aspects of the graphic, we both chose one element to respond musically: the slow, gentle gestures of the line drawing from the first video and the rhythmical on/off flickering from the second video. We chose to freely respond to

¹²² First meeting, 28th April 2020, unpublished personal material.

¹²³ Martin Della Vecchia, *Grá*, video, YouTube, 6th May 2020, <https://www.youtube.com/watch?v=dsu42noYIS8&feature=youtu.be&themeRefresh=1> [20th June 2024].

¹²⁴ Anselm McDonnell, *Grá*, video, YouTube, 6th May 2020, <https://www.youtube.com/watch?v=Sqws6tMvBi0&feature=youtu.be> [20th June 2024].

our impression of each video. The structure is free and is not micky-mousing the video (which will create an unintentional comedy effect), but instead it captures an impression of the visuals. This meant that the length of the music and video do not necessarily match.

During our third meeting, I suggested that we further explore the dynamic interaction between the muted piano and the repetitive harmonics of the guitar. I also proposed that the lines running through the Ogham character could symbolise deviations, perhaps manifesting as silences, breaks, or changes in pitch. To synergise our performances, we tried performing live together on Zoom. However, facing challenges, I then suggested that we experiment by performing very softly to discern the interplays between our contributions. Concluding the meeting, I proposed that we each record separately without listening to one another, essentially aiming for a telepathic musical piece relying chiefly on visual cues. This approach parallels the innovative methods used during the COVID-19 pandemic, such as the work of the ensemble Remote Conducting, which created performances without relying on synchronous audio interaction. Instead, they used visual cues and pre-recorded segments to synchronize their performances, demonstrating how musicians adapted to the constraints of remote collaboration by prioritizing visual over auditory stimuli.¹²⁵ The plan was to subsequently merge the two improvisations. During our fourth meeting, having previously improvised without auditory prompts and subsequently combining our recordings, we resolved to craft a text score. This was stored in our shared Dropbox page (represented below in Table 4.3). This collaborative endeavour spotlighted certain musical components, notably the soft, recurrent guitar harmonics, which evolved into a pivotal structural element of our piece (see Table 4.3).

Prepared Piano	1 pan drum	pan drum with gentle percussion sounds (around C4). Dreamy and very sparse piano sounds.		Piano low note arrives at 2:30"	detuned sounds (between C4 and C5)		
Muted Guitar		Sparse steady cells using only one pitch. (cresc. and dim) < > Repeat cell in different registers up to written D4 (loop)	Interact with loop. simple short melodies (single gesture)		Harmonic melodies.		
TIME	0	0:05"	1'00"	2'00"	3'00"	4'00	5'00"

¹²⁵ Jane Smith, *Remote Conducting: Visual Cues in Musical Performance during COVID-19* (New York: Music Press, 2021).

Table 4.3 *Grá*, first draft

During following discussions and analyses both verbally and in text, I identified a significant moment of musical interplay that particularly resonated with me. The segment from 3:00 to approximately 4:30 minutes struck me as especially compelling, and I pondered the possibility of transcribing it for further examination. In the earlier sections, my contributions were notably minimalistic, providing a stark contrast to the subsequent evolution of textures. While we played with similar textural elements, the distinct piano pitch provided an interesting juxtaposition. I recommended adjustments to the dials on the Akai midi controller, envisioning a broader spectrum for element manipulation. Anselm appreciated the piano's entry following the solo, to which I responded, highlighting the congruence in the gestural approach and the proximate pitch selection. I also drew attention to the slow warbling sound that Anselm produced, noting its timely introduction, speculating on the feasibility of incorporating this warbling sound towards the end and suggesting it as a potential counter to the sharpness of the repeated piano note in the concluding segment. Additionally, I expressed reservations regarding a particular dull thud emanating from the piano and proposed a touch of reverb, speculating that this could soften its impact. Conclusively, I commended the overall shape and structure of the piece, emphasizing its plateau-like progression marked by a gentle and gradual development.

The analysis of our own decisions, and the ability to trace those decisions through our process, gives a sense of shared ownership of material, and allows us to be slightly more objective in our editing decisions than certainly I am as a sole creator. It is more difficult to feel that something was ‘my’ idea, and that brings with it the freedom of critiquing decisions without feeling like our artistry is being attacked, because ‘failure’ is not seen as a creative dead end. A psychological study provides a suggestion for why this is the case: a 2003 study, ‘Cognitive Stimulation and Interference in Idea-Generating Groups’, found that the inability to generate ideas influences brainstorming persistence and satisfaction, and since group members face fewer failures than individuals, they often feel more successful, whereas individuals experience more failures and think that they have performed poorly.¹²⁶ Our shared creativity reduced the fear of failure. By exploring

¹²⁶ Bernard A. Nijstad, Michael Diele, and Wolfgang Stroebe, ‘Cognitive Stimulation and Interference in Idea-Generating Groups’, in *Group Creativity: Innovation through Collaboration*, ed. by Paul B. Paulus, and Bernard A. Nijstad (New York: Oxford Academic, 2003), 151–53.

this creative relationship online, we opened out the building blocks of our creative process: the aspects of seeing, hearing, speech, and discussion, to detailed reflection and questioning.

4.6 Solidifying collaboration: *Io Io* (2020)

Io Io was the last music composition I created for my PhD, embodying the culmination of my approach to composing with objects and collaborators. The composition process is divided in the stages described in *Grá*, documenting and sharing, listening and editing, and decision-making stages, showcasing a dynamic reliance on technology, particularly video conferencing and shared documents. The shift to visual-centric improvisation allowed for a unique exploration of physical gestures and facial expressions, compensating for audio constraints. This is because online music improvisation has the potential to engage both conscious and unconscious processes, facilitate emotional expression, and offer social and creative interaction.¹²⁷ The concept of distributed creativity also framed this collaborative endeavour, emphasising shared contributions over individual efforts. The essence of the collaboration lies in the adaptive use of technology, the emphasis on visual and physical cues, and the intricate, shared decision-making that shaped the creative process and its musical outcomes.

As in *Grá*, to examine our own creative methods in our collaborative endeavours, we worked in a shared Dropbox Paper page, one for each piece we create, so we could reflect afterwards on how we reached our decisions. Our written interactions can be broadly grouped into three categories: firstly, documenting our conversation as we share ideas; secondly, a listening/editing step where we listened to the audio file of our combined improvisation and made comments in real time during this; thirdly, a decision-making process of what to do now and what we should do next. This makes the inner creative process visible for examination in a way that an individual's imaginative decisions cannot. As Moran and John-Steiner comment in their 2004 article on identity and motivation in collaborative work: 'Because collaborators must communicate with each other, collaborators' inner speech—their condensed stream of thought that generates creative associations ... must be shared'.¹²⁸ The sharing of this inner speech resulted in an observable process.

¹²⁷ MacDonald, 'Tribe', p1.

¹²⁸ S. Moran and Vera John-Steiner, 'How Collaboration in Creative Work Impacts Identity and Motivation', *Collaborative Creativity: Contemporary Perspectives*, 2004, 11–25, 15.

I also collaborated with the technology itself. I view my interaction with objects—whether it is composing on a computer or playing an acoustic instrument—as a mutual collaboration. It is a dance between me and the tool or instrument I am using. This was apparent in *Io Io*, where I was playing with found objects, Ableton Live on the iPad, and an acoustic piano. All these objects were not assembled for any specific meaning, rather were the tools I had at hand, and I wanted to play with. Recognising and respecting this interplay lends authenticity to my work. In improvisation in live and art, Stephen Nachmanovitch delves deep into the concepts of impermanence and imperfection, drawing parallels between Buddhist practices and the realms of musical creation and improvisation.¹²⁹ Embracing the concepts of impermanence and imperfection is vital to my music aesthetic, as it allows for a fluid and organic creative process. As Anselm also introduced unexpected elements like the megaphone into our collaboration, I felt compelled to challenge my internal constraints regarding what qualifies as a musical instrument. This led to an exploration of unconventional sound sources, pushing my boundaries of traditional notions in my musical endeavours. As Nachmanovitch suggests, true improvisation demands the shedding of pre-existing notions so we can genuinely engage with others and in the present moment.¹³⁰

In this collaborative music project, we explored various sonic elements, pushing the boundaries of repetition, physicality, and improvisation. We mainly experimented with repeated two-note patterns, layering sounds using different techniques, and incorporating vocal and instrumental textures. Throughout the process, we reflected on the impact of physical gestures on sound production and consider the hypnotic effect of repeated patterns. Our discussions involved technical challenges, such as dealing with latency and exploring limitations creatively and how we can maintain inner and outer connection during performances to enhance creativity. As in previous explorations online, interestingly noted in studies with adults diagnosed with Intellectual and developmental disabilities, our communication and connection is enhanced when maintained through body movement and facial expression and a felt sense of being united in an experience.¹³¹ As in previous pieces, it took a visual turn as we explore Ogham-inspired visuals resembling sunrays and how could they convey the idea of repeated but

¹²⁹ Stephen Nachmanovitch, *Free Play: Improvisation in Life and Art* (New York: G.P. Putnam, 1991).

¹³⁰ Stephen Nachmanovitch, *The Art of Is: Improvising as a Way of Life* (New World Library, 2019).

¹³¹ Katelyn Beebe, 'Significant Moments in Improvisational Music Therapy: Composite Case Examples of Improvisation With Adults Diagnosed With Intellectual and Developmental Disabilities', *Voices: A World Forum for Music Therapy*, 21(2021), 1–14, p 1.

not identical patterns. We discussed the potential inclusion of video elements, considering bright and colourful visuals, overlaid videos of clouds, and beams of light representing the most significant gestures. As in previous cases, the creative journey involved analysing recordings, addressing personal and musical concerns, and suggesting specific elements to be incorporated into the score.

In concluding this chapter and providing an arc to this commentary, the transition from approaching music composition as an individual pursuit to composing with others presents a unique set of challenges that redefine the notion of artistic individuality. Stephen Nachmanovitch, in *The Art of Is: Improvising as a Way of Life* (2019) emphasises creation and the notion that our influence extends only to the present, with the core of our impact stemming from the relationships we foster.¹³² While outcomes remain elusive and unpredictable, it's the process and the relationships that matter. To cultivate such a partnership, one must be both present and receptive. As cited by Nachmanovitch, Gregory Bateson, whom he considers a mentor, aptly mentions in an epigraph: 'it takes two to know one'.¹³³ This profound observation suggests that understanding any entity, animate or inanimate, is possible only through its relationship with us or another entity. Despite dedicating hours, days, or even years to create art, I find it slightly unsettling when fellow artists label their creations as 'my piece'. To me, both knowledge and art are relational dynamics, transcending individual ownership.

4.8 Conclusion

The exploration of composer as choreographer, muted improvisations and somatic experience within my research contributes to the discourse on innovative practices in the fields of somatic studies, improvisation, and embodied cognition. The concept of muted improvisation challenges traditional paradigms of musical interaction by foregrounding non-verbal communication and embodied awareness in performance. This aligns with emerging scholarly discussions in embodied music cognition, particularly in the work of Cox (2016), who argues that musical understanding is deeply rooted in bodily experience, with performers' movements and gestures playing a crucial role in the communicative process of music-making.¹³⁴ This approach not only enriches the

¹³² Stephen Nachmanovitch, *The Art of Is: Improvising as a Way of Life* (New World Library, 2019). p14

¹³³ Ibid., 36.

¹³⁴ Cox, A. (2016). *Music and Embodied Cognition: Listening, Moving, Feeling, and Thinking*. Indiana University Press.

improvisational framework but also offers a new perspective on how these embodied interactions can be utilised in both live and remote settings. In the context of a remote setting, musicians must adapt their timing and coordination, often developing new gestures or playing techniques that account for delay and other interferences created with the technology employed, effectively integrating the network's properties into their embodied practice.¹³⁵ The adaptation of improvisational techniques described in *Io-Io* and *Grá* to remote and non-auditory contexts during the COVID-19 pandemic underscores the resilience and adaptability of contemporary artistic practices. This evolution in practice is not only practically significant for future remote collaborations but also contributes to the expanding research on telematic performance. Pauline Oliveros (2009) discusses the potential of telematic music-making to foster new forms of interaction that transcend geographical limitations, creating a global collaborative environment.¹³⁶ My exploration of muted improvisation within this context can be seen as a valuable addition to this discourse, demonstrating how embodied and somatic experiences can be effectively translated into digital and remote environments.

This chapter addresses the main research question by showing how the fusion of different art forms enriches the compositional process and broadens the expressive capabilities of my musical identity. This chapter highlights the evolving dynamics of tradition, experimentation, technology, and collaboration in music composition, amplifying the personal experiences and transformations of my career but also advances the academic discourse around the relationship between choreography and music. The juxtaposition of personal experiences, such as interactions with performers and engagement with technology, against larger thematic contexts, exemplified by parallels drawn with choreographers like Wayne McGregor, adds depth and breadth to the narrative of this PhD. I coined the term 'composer as a choreographer' when drawing a parallel with contemporary choreographic practices, adopting a similar approach when working with performers, composers, and improvisers that what many contemporary choreographers employ. This collaborative process involves layers of improvisation and dialogue, resulting in the selection and distillation of musical ideas and the development of a musical structure and providing a broader perspective on the creative process and fosters an ongoing dialogue between the initial concept and its evolution.

¹³⁵ Atau Tanaka, 'Telematic Music Transmission, Resistance and Touch', *International Journal of Performance Arts and Digital Media* (2024), p. 6

¹³⁶ Pauline Oliveros and others, 'Telematic Music: Six Perspectives', 2009.

The chapter also delved into specific examples of collaborative projects, specifically with PANIC Ensemble, where I employed group-based tasks to create and develop music material, I used tasks that were designed to elicit a distinctive sound that aligned with the chosen concept, as it is the case with the piece *Fricción*, which I used as a case study for this chapter. The piece highlights the use of the concept of friction as a stimulus for two performers to generate sounds with their instruments. I employed various techniques and objects to explore different degrees of friction, creating a bank of sounds and techniques over time. The composition process involved refining sounds, experimenting with different relationships between performers and sounding objects, and creating a score based on the accumulated material. By recording each session, this enabled a process of refining and structuring the material over several days. Later in the chapter I also discussed the transition to online collaboration, necessitated by the COVID-19 pandemic. Here I unfold the challenges that were present using this modality, such as latency and the limitations of online platforms that led to a shift in the creative process, which I found that with time emphasize visual interaction and gesture-based communication. To analyse this online interaction and the creation of a piece by means of collaboration I used throughout the chapter the concept of distributed creativity, highlighting how collaborative decision-making and the sharing of inner thoughts and creative processes contribute to the composition process. The dominant themes throughout Chapter 4 revolve around the tension between tradition and experimentation within my artistic voice as a music composer. This tension is exemplified through the juxtaposition of traditional music creation methods and the choreographic approach to music composition. The chapter illustrates my evolving path as a music composer using diverse creative methodologies, improvisation, and collaborative practices. The influence of contemporary choreography on my process and the response to limitations imposed by technology, particularly during the pandemic, serve as integral themes that weave the narrative.

Chapter 5 Composing for Full Orchestra

Chapter 5 synthesises the learnings from all previous chapters by applying them within the context of full orchestral composition. The orchestral work included in this portfolio, *El Llamado* (2021), has its genesis in a chamber piece composed for brass quintet. Arranging, expanding, and orchestrating a previously composed piece was an intentional strategy so I could fully concentrate on my arranging, composing and orchestration skills. The starting point for my composition and orchestration process was a work for brass quintet called *Discurso y Balbuceos* (2021). In this chapter, I am going to describe the composition process of *Discurso y Balbuceos*, before detailing the process of arranging this work for orchestra in distributing the melody, harmony, and bass functions into the orchestra. Then I am going to analyse the use of instrumentation and orchestration as described by Ertuğrul Sevsay:¹³⁷ choice of instrumentation (to create different colours and contrast), choice of instrumental registers (to blend or to further enhance the choice of colour and contrast), Orchestral Registers (to see the orchestra as a whole, sounding body), Dynamics (to define the general volume of the section and to create balance among individual instruments or group of instruments), Articulation (to generate variation in the material and also to produce different colours), and the Methods of Sound Production (how different instrument techniques are employed and to what effect they are being employed).

5.1 *Discurso y Balbuceos* (2021)

In *Discurso and Balbuceos* there is an initial short, declamatory idea followed by a lyrical, longer melody (Figure 5.1). The first idea employs the horn in a melody, playing with minor and major thirds. The second phrase expands this shorter passage to a longer phrase with wider intervallic leaps. These two phrases form the ‘discurso’ (speech) part of the piece. They are contrasted by a short, incessant staccato motive, the ‘balbuceos’ (stammer) part of the piece. The entire piece is built from these two ideas. It starts with an initial gesture, the interval of an ascending minor third. Then, this gesture is repeated twice: the first time with the same intervallic relationship but with a change in the rhythm, and the second repeat with the same rhythm as the first but raising the last note. This

¹³⁷ Ertuğrul Sevsay, *The Cambridge Guide to Orchestration* (Cambridge: Cambridge University Press, 2013).

results in two minor thirds followed by a major third, which in the final score is written as a diminished fourth to keep a consistent use of flats instead of sharps (see Figure 5.1).



Figure 5.1 *Discurso and Balbuceos*, bb. 1–7

This small phrase was the first part of the discurso (speech), then proceeded by a repeated single note (stammer) and immediately after by the second part of the speech: a lyrical line (Figure 5.2). These initial short melodic and rhythmic cells of between three to six notes were then restated in several different ways (inverted, retrograde, rhythmical displacement, etc) throughout the piece. The pattern of repetition is reiterated and then adapted with different combinations of pitch and rhythm. The exploration of these iterations was not to exhaust all the different possibilities enclosed in this idea (as, for example, in Ligeti's *Musica Ricercata*), but more as a personal sonic exploration of where this initial gesture would take me when developing it.¹³⁸

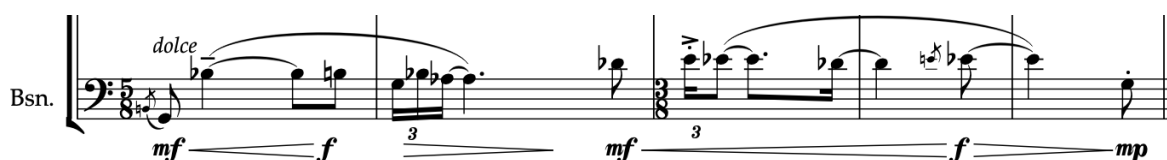


Figure 5.2: *Discurso and Balbuceos*, bb.8–12

In my composition process, I am usually drawn to repeated ideas and patterns when there is enough silence and variation in between to keep me engaged with the piece. In the composition process, whenever I felt that the morphing of an idea resulted in something I was still satisfied with, but it was too far removed from the original source, I placed this fragment either at the start or at the end of the score, placing a new rehearsal mark at this point, or in the 'ideas' panel, a feature included in the Sibelius software that allows for storage of a collection of notation 'snippets' for later use. This morphing of the original

¹³⁸ György Ligeti, *Musica Ricercata per pianoforte, 1951–53* (Mainz: Schott, 1995).

idea then became part of a new section of the piece. Using this method, I started to develop a sense of form and structure. Ideas became the beginning of a new section, to then be developed and subsequently lead to another idea. This way of structuring the piece felt like an organic way to develop structure and process, balancing the old ideas with the new ones, and by introducing a new idea when I felt the previous one was repeated enough. This, of course, resulted in a piece that contains a high degree of variation and repetition.

By reading the notes on my logbook I realised that I seldom reflect on polyphonic textures. This is because, by analysing my own work, I noticed that I tend to rely heavily on homophonic textures, although I was at times unaware of this during the composition process. In the case of *Discursos and Balbuceos*, the original piece, not having a harmonic instrument in the woodwind quintet helped me to expand my polyphonic ideas, as I thought less about melody with accompaniment and more about independent lines. By analysing the development of this piece and the composition notes I took throughout the process, I could summarise the composition process as an initial gesture which serves as the genesis for everything that follows and that is repeated almost incessantly throughout the piece. This same approach is evident in other compositions included in this portfolio, such as *Punto de Partida* (2021) and *Foco* (2021).

These pieces start with a homophonic line and light in texture, growing in complexity as the piece progresses. This reliance on homophonic textures shows one of my compositional interests: how a repeating idea may be juxtaposed at different times and across different instruments to interact with one another, and how this can create texture, dynamics, and a sense of rhythmic impetus. Therefore, the harmony employed in the piece could be said to be a result of this *ad libitum* juxtaposition, instead of pre-established harmonic progressions.

5.2 *El Llamado* (2021)

Discursos and Balbuceos served as the foundational material for the orchestral piece, 'El Llamado'. In this composition, I employed familiar material at the outset, allowing me to focus primarily on the orchestration process, rather than on creating new musical content from scratch. I took the opportunity to write for a full orchestra to expand my use of polyphony and experiment with acoustic instruments to create different colours and textures. The size of the orchestra provided a chance to explore these elements

extensively. With so many possibilities at hand, I naturally began making changes in the score to expand to a more elaborate musical discourse. Also, when I started working on orchestrating *Discursos y Balbuceos*, I felt my ambition for the piece had evolved. After spending further time working with it and analysing and starting to orchestrate it, I found many inconsistencies within the musical discourse, so I took the opportunity to improve these imperfections before and during the orchestration process. The orchestral piece was not originally conceived with this title. When I orchestrated the beginning of the piece, with the horns playing the first six initial notes, it was clear to me that this piece was about this initial gesture. I did not fully conceive *Discursos and Balbuceos* as emanating from this gesture and I did not intend to write programmatic music. I felt, however, that the piece was about gathering members of a tribe and then going into the different elements of a tribal dance. It was at this time that I decided to call the piece ‘El Llamado’ (*the call*).

5.2.1 Stages of Orchestration

The first stage of the orchestration process was to divide the original material into four broad categories:

1. Foreground/Melody: to be distributed across all orchestral families
2. Counterpoint/Second melody: to be distributed across selected orchestra sections
3. Middle ground/Harmonic function: usually played by the strings
4. Background/Bass: usually played by the brass and percussion

In the figure below we can see the first seven bars of *Discursos and balbuceos* distinguishing the melody (in red), the middle ground or harmonic function (in green) and the bass (in blue).

Figure 5.3 shows a musical score for five instruments: Piccolo, Oboe, Bass Clarinet, Horn in F, and Bassoon. The score is in 4/4 time with a tempo marking of quarter note = 132. The Piccolo part has a green staccato passage starting in bar 4, marked with a green *f* and *meccanico*. The Oboe part has a green staccato passage starting in bar 4, marked with a green *f* and *meccanico*, and a red triplet in bar 5. The Bass Clarinet part has a green staccato passage starting in bar 4, marked with a green *f* and *meccanico*. The Horn in F part has a red triplet in bar 4, marked with a red *f*, and a green staccato passage starting in bar 5, marked with a green *f* and *meccanico*. The Bassoon part has a blue staccato passage starting in bar 4, marked with a blue *f* and *meccanico*.

Figure 5.3: *Discursos y Balbuceos*, bb. 1–6

Some questions emerged after applying this scheme for the first bars. Is the staccato passage (green) a middle ground or it is a (very static) second melody? Is there overall enough harmonic material to be transferred to a larger ensemble? A series of questions I asked myself during the orchestration process led me to question if the initial piece was perhaps weak in terms of texture, harmonic content, and driving force. The image below (Figure 5.4), which shows the passage from bar 8 to bar 13 best exemplifies this issue: of the five available instruments there are three playing a rhythmic displacement of the second melody. Thus, there were sections of the piece that were not balanced in forces (see Figure 5.4):

Figure 5.4: *Discursos y Balbuces*, bb. 8–13

Being conscious of this issue helped me to balance the foreground, the middle ground, and the background when orchestrating. Below are the first twelve bars of the orchestrated version (Figure 5.5). Different sections of the orchestra play these four different functions (melody, countermelody, harmony, and bass): the brass section plays the melody (red), which then moves to the woodwind section; the strings (green) play the harmony; the flute, clarinet and trumpet play a second melody line, and the tuba and the timpani provide the bass line, creating different colours and thus, interests. This segmentation of functions by colour not only helped me to speed up the orchestration process; it also aided me to see how the different functions interact and balance each other.

Figure 5.5: *Discursos y Balbuceos*, Orchestral Version, bb. 1–12

5.2.2 Orchestration Tools

When working on the process of assigning the melodic, countermelodic, harmonic, and bass functions to parts of the orchestra. I concentrated on what Ertuğrul Sevsay described as the six elements that are used as tools when orchestrating: instruments, instrumental registers, dynamics, articulation, and methods of sound production. According to Sevsay, ‘instruments are the most important of these six elements since

they are the primary source of colour in instrumentation'.¹³⁹ I varied the instrumentation of the same musical theme to create contrasting colours. For example, in the opening of *El Llamado*, I used the brass section to introduce a horn-like calling gesture (Figure 5.6). Following this, the woodwind section plays the same melody but with a softer and less intense tone (see Figure 5.7). John Adams' *Short Ride in a Fast Machine* provides an example of a contemporary orchestral score where a passage played by the brass in bars 35–42 (see Figure 5.8) is later echoed by the woodwinds starting at bar 52 (see Figure 5.9) to achieve a mellower tone.



Figure 5.6: *El Llamado*, bb. 10–13



Figure 5.7: *El Llamado*, bb. 1–4

¹³⁹ Ertuğrul Sevsay, *The Cambridge Guide to Orchestration* (Cambridge: Cambridge University Press, 2013).



Figure 5.8 John Adams: Short Ride in a Fast Machine. Bars 35 to 37



Figure 5.9 John Adams: Short Ride in a Fast Machine. Bars 52 to 54

All instruments, but particularly woodwinds, have different register colours depending on what octave the melody is being played.¹⁴⁰ In bars 33 to 36, the clarinet plays the melody in the chalumeau register, which is deep and mellow. In contrast, the cor anglais, oboe and flute are playing in their most used registers which is more penetrating across the orchestra. A very different sound colour would be achieved if the instruments played those same notes in a different register. For example, in bars 61 to 65 the colour drastically changes as the clarinet moves towards the more piercing clarion and alto register, carrying better across the orchestra with a colour that is closer to a trumpet, while the flute is in a lower, more airy register. Orchestral registers refer to the placement of instruments and their functions (melody, countermelody, harmony, and bass) and how these different functions are pitch-wise: overlapped, close, separated or widely separated.

¹⁴⁰ I Ertuğrul Sevsay, *The Cambridge Guide to Orchestration* (Cambridge: Cambridge University Press, 2013).

In a usual passage, the different melodic, harmonic and bass functions are stacked one below each other at a distance of less than an octave between the melody and harmonic content and up to one and a half octaves between the bass and the harmonic content. However, there are times when there is room to play with these parameters, adding a more significant contrast. For example, in section B in *El Llamado*, bars 95 to 101, the piccolo and flutes are playing ascending and descending figurations in their high register, contrasting with the low, almost rumbling sound of the double bass playing at the lowest of their register.

Although dynamics should be considered after achieving balanced instrumentation, they can also be used to emphasize a specific phrase by assigning a higher dynamic level to a particular instrument or group of instruments. In bars 51 to 56, the trombones, bass trombones, and tuba are playing at a forte dynamic. The trumpet cuts through these instruments for various reasons. Primarily, it carries the melody at the highest pitch, and additionally, increasing the dynamic to fortissimo further accentuates the melody. Dynamics also control the overall volume of the orchestra. Bars 12 and 28 contain a similar number of instruments playing at the same time. However, in bar 12, they are playing at fortissimo and in bar 28 most of the orchestra is playing piano and other instruments *al niente*. The result in volume is striking. Although I have used this articulation technique sparingly there are still some places where I used it to create interest and variation. For example, in bar 136, the flute and the piccolo play the same melody as the trumpet except for the piccolo and flute which play this melody staccato and the trumpet which plays it legato. Different methods of sound production are applied within the same group of instruments. For example, in bar 123, contrast is created by playing violin I, II and violas arco and the celli and double bass *pizzicato*.

5.3 Identified issues in Compositional Process

During the orchestration phase of this piece, I encountered several issues that required careful consideration and resolution. One significant challenge I faced was the continuous repetition of a motivic idea without a clear sense of purpose or direction. To address this concern, I introduced variations and permutations of the motivic idea to infuse freshness and dynamism into the composition. I experimented with different lengths and colours within the music, ensuring that each repetition carried a unique sonic character. Another crucial issue was the absence of harmonic depth and contrast within

the composition. This was particularly evident in two aspects: long ostinato passages and large sections played in octaves or at unison. To overcome the monotony of long ostinato passages, I strategically inserted dissonant interjections on top of the ostinato, creating moments of tension and release. Sections featuring octaves or unison playing lacked the desired diversity. To rectify this, I employed techniques such as gradually introducing and removing instruments, altering the orchestral colour palette, and adjusting the intervallic relationships to enhance harmonic variety and textural contrast.

Throughout the piece there were many instances where there was an incessant repetition of motivic idea, usually restricted in terms of duration (for example a semiquaver passage of notes) and pitch content. To solve this issue, I changed some of the semiquaver runs to make them less regular, just leaving them as they were in the tutti, climactic points. The continuous repetition of ideas, though not intended to align with process or minimalist music, resulted in a piece that felt stagnant and uninteresting, lacking a clear driving force or purpose. The main motive became overly repetitive, which contributed to a restrictive feel. To address this issue, I implemented various strategies. For instance, the original passage in bars 110 to 113 involved the continuous repetition of the notes G, G#, A#, and B. After revising this passage, it now features a similar motif played at varying speeds. This change creates a juxtaposition that produces a shimmering effect.

Upon drafting the piece, I realised that there was not enough harmonic content. It was only at the very end of the piece there was a dramatic shift in harmonic material. The overall result was a lack of tension until the very end. Understanding what the piece's intention was, helped me to further develop the piece without deviating from its character and enhancing the elements, trying to offer some small variations to the passages that started to feel tiring to the ear, as they produced the same intervallic relationship or chord structure. When composing the piece, I was influenced by film music, and I was unintentionally imagining visuals that could go along with the music. In other words, if this piece were a film score, it would have been effective as I could imagine many visual scenes for which this could work, it would have also not distracted the audience from the visual narrative image. However, at that stage in time the piece would not work as a stand-alone orchestral piece. To fix this issue I added greater harmonic tension and used harmonic contrasts from the beginning of the piece. Furthermore, I used the percussion as an integral and independent feature, not just to colour the other sections. Sometimes the texture was homophonic, and instruments were merely doubling at the unison or at

the octave. To add different colours, I employed compositional devices such as altering the starting interval and adding small variations in the rhythm which produced variations of the starting material (

Figure 5.10). In

Figure 5.11, the double bass, cello and viola were doubling in octaves, the three instruments spanning across three octaves. By introducing chromatic inflection in different passages (i.e., altering some of the notes in the double bass and the viola by a semitone), a completely different harmony is produced (Figure 5.12). In these cases, the harmony is dictated by the number of the horizontal lines playing at the same time. Another strategy I used to employ interest in octave passages, adding a different colour and more force to the passage, was to add another instrument playing a tritone in between the octaves, sandwiching the octave passage with a reinforcing, more piercing note, adding harmonic content and colour to the passage (see Figure 5.13):



Figure 5.10: Changing the initial interval.

This image shows a musical score for Viola, Violoncello, and Double Bass. The Viola part is in alto clef, the Violoncello part is in bass clef, and the Double Bass part is in bass clef. All three parts are playing the same melody in octaves. The music consists of eighth notes and quarter notes, with a key signature of one flat (B-flat). The dynamics are marked as *f* (forte) and *mf* (mezzo-forte). The instruction *f* is placed above the first measure, and *mf* is placed below the first measure. The instruction *f* is placed above the first measure, and *mf* is placed below the first measure. The instruction *f* is placed above the first measure, and *mf* is placed below the first measure.

Figure 5.11: Octave passage spanning three octaves.



Figure 5.12: Alternating the double bass and viola by semitones.



Figure 5.13: Sandwiching the octaves with a tritone.

Another composition technique I used to create rhythmic variation was note subtraction, deleting some of the notes of the repeated rhythm pattern creating ‘punch holes’ in the rhythmic grid. Many other composers use note subtraction to create rhythmic variation. For instance, in Philip Glass's piece *Two Pages*, he repeats a pattern while omitting the last note of that repetition (see Figure 5.14).¹⁴¹ Every time he introduces a new repetition, he removes the last note from the preceding one. In contrast to Glass's use of subtraction, I employed it without using a specific pattern, and by leaving a silence instead of moving on to the next note. In the figure below the notes in grey are the ones that were originally

¹⁴¹ Philip Glass, *Two Pages* (New York: Dunvagen, 1968).

written (the grid) and then deleted afterwards to create rhythmic interest (see Figure 5.15).



Figure 5.14 Philip Glass: Two Pages

Martin Devek
Viola – Bar 47:
Punch holes in this pattern in an irregular way

mf

firmly

mf

firmly
arco

mf

G/B Gm/Bb G°/C#

harmony by tones and semitones displaced by octaves

Figure 5.15 Note Subtraction.

To captivate the listener's attention across various instrument sections, I incorporated sonic embellishments by adding additional musical elements on top of an ostinato section. In Figure 5.16, the highlighted area indicates a two-note pattern that introduces a sonic element distinct from the ostinato. This ultimately leads to a climactic moment in the music when the highest note of the passage transitions to the note A.



Figure 5.16 sonic embellishments.

5.4 Conclusion

This chapter addresses the main research question by demonstrating how the tension between established practices and innovative approaches not only challenges the status quo but also enriches my artistic identity. By juxtaposing conventional orchestral techniques with novel compositional strategies, I interrogate how adherence to and deviations from the canon inform my musical expression. In this chapter I provide an insight into my compositional journey, ranging from my background and sources of inspiration to my compositional approaches and the evolution of my artistic vision, capturing the ever-evolving nature of my creative process within the constraints of a PhD by artefact. My eclectic compositional output, moving from tonal compositions to experimental approaches, highlights a willingness to embrace various musical styles and methods. This exploration between traditional and experimental approaches in music composition is a recurring theme embedded throughout this PhD thesis, reflecting the continuous conflict and resolution underplaying in my composition practice. The implementation of autoethnography as a research methodology was adopted to add to the academic nature of a PhD a personal and reflective dimension to the narrative. This allowed me to contextualize my work within my personal, professional, and social context. This approach provides valuable insights into the thought processes and decision-making that shaped my creative journey. The chapter focused on the orchestral piece *El Llamado*. Throughout the chapter, I demonstrated how I tackle issues related to repetition, harmony, and texture in this work, the analysis of orchestration tools, including instruments, registers, dynamics, articulation, and methods of sound production. At its core, this research provides a deeply personal exploration into the journey of a composer, shedding light on the nuanced interplay between traditional music

making and experimental approaches to music composition. The amalgamation of film, dance, and classical-music traditions in my work also underlines the potential for cross-disciplinary collaboration, advancing the conversation about the future trajectory of music composition.

Chapter 6 Overall Conclusion

The guiding research question for this PhD “How does the tension between tradition and experimentation shape the evolution of my artistic voice as a composer?” has been a persistent theme across this commentary. When I began this journey, the interplay between these forces felt unresolved, a source of creative friction without a clear path forward. However, through the process of creating this portfolio and critically engaging with my practice, I have come to recognise this tension as not only productive but fundamental to the ongoing evolution of my artistic voice as a composer. The completion of this PhD has offered new perspectives on the tension between tradition and experimentation and also deepened my understanding of how these two forces are inseparable in shaping the evolution of my compositional voice. At the outset of this journey, tradition and experimentation appeared as distinct, sometimes conflicting paths. However, through critical practice, theoretical engagement, and reflection, I now view them as complementary. This relationship has become central to my research journey and creative practice, enabling me to navigate, negotiate, and synthesise these forces that made me conclude that the tension between these poles does not demand resolution, but rather, it functions as an ongoing dynamic that fosters growth, innovation, and complexity in my compositional work. Far from being a dichotomy that requires resolution, I have found that the interplay between these two forces has led to the emergence of my multistylistic compositional voice as a composer.

When I began this research, the primary focus was on how to reconcile my engagement with established traditions in Western classical music and my desire to explore new, experimental methodologies. My early exposure to various musical traditions, such as tango, rock, and electronic music, initially seemed to exist in stark contrast to the formal classical music education I later received. Over the course of this PhD, I have come to realise that this tension itself is the driving force of my creative practice. The juxtaposition of traditional techniques, such as harmonic structures, thematic development, and orchestration, with experimental approaches like indeterminacy, open-form notation, and digital sound manipulation, has resulted in a multifaceted compositional style that embraces contradiction and multiplicity. Rather than seeking to harmonise these disparate elements into a singular style, I have allowed them to interact dynamically, each influencing and shaping the other. One of the critical insights gained from this process is that tradition, far from being a restrictive force, can

serve as a foundation from which innovation and personal style can emerge. My initial apprehension regarding tradition stemmed from a fear that adherence to established forms and techniques might limit my capacity for creative experimentation. However, I have since come to understand that tradition provides a set of tools and conceptual frameworks that can be reimagined and repurposed in innovative ways. In *Punto de Partida*, for example, I engaged with traditional harmonic structures and motivic development while simultaneously allowing for intuitive, body-led processes to shape the trajectory of the piece. Drawing inspiration from minimalist composers and their use of shifting textures, I applied these techniques to the saxophone quartet in a way that highlighted both the ensemble's timbral unity and its potential for dynamic, rhythmic interplay. While the piece is structurally grounded in traditional methods—employing a steady rhythmic pulse and thematic coherence—the process by which the material was developed was deeply experimental, driven by my embodied engagement with the instrument and an improvisational approach to thematic expansion. This duality is emblematic of the broader research question, as *Punto de Partida* illustrates how tradition can provide a structural foundation that supports experimental exploration.

The influence of embodied cognition has been pivotal in shaping my approach to composition. Embodied cognition posits that cognitive processes are not abstract phenomena confined to the brain but are deeply influenced by the body's physical interactions with the environment. This concept resonates with my practice, particularly as I reflected on how my own physical engagement with musical instruments informed my creative process. In works like *Gestos* and *Bicicleteando*, I explored the ways in which bodily movement, the body's interaction with the environment and physical sensations could become a source of musical ideas. The tactile feedback of the instrument, the rhythmic patterns of cycling, or even the gestures of conducting all became sources of inspiration, guiding the development of the music in ways that were rooted in my somatic experience. This approach allowed me to move beyond purely intellectual or theoretical compositional strategies, integrating physicality as a core component of the creative process. In *Bicicleteando*, for instance, the physical act of cycling became a metaphorical and literal source of rhythmic and melodic material. The repetitive motions of pedalling, the changing pace of breath, and the sensation of wind resistance all found their way into the making of the piece. This physical engagement, however, did not negate the influence of traditional musical forms; rather, it allowed me to reinterpret and recontextualise these forms through a bodily lens. This embodied

approach has significant implications for the field of contemporary music composition, particularly in how it challenges the traditional separation of mind and body in musical creation. Historically, music composition has been framed as a predominantly intellectual activity, with the composer's role defined by their ability to manipulate abstract musical materials according to established theoretical principles. However, by foregrounding the role of the body in the generation of musical ideas, I have been able to develop new strategies for composition that engage with sound as a physical, sensory phenomenon. This approach aligns with the work of composers like Pauline Oliveros and Meredith Monk, who have explored the intersections of sound, movement, and embodiment in their work, and contributes to ongoing discourses in contemporary music about the relationship between mind, body, and sound.

The use of autoethnography as a research methodology has also been central to this PhD, providing a framework through which I critically reflect on my own compositional practice and situate it within a broader cultural and theoretical context. It also enhanced my ability to explore the interplay between tradition and experimentation and integrate this to the wider discourses around embodied cognition and somatic practices. By integrating personal narrative with scholarly analysis, autoethnography has allowed me to situate my compositional practice within the broader cultural and social contexts that have shaped it. This reflexive approach has been particularly important in understanding how my personal experiences - whether rooted in my cultural background, musical upbringing, and embodied engagement with sound - have influenced my work. By documenting these experiences and critically reflecting on them, I have been able to trace the evolution of my compositional voice over time, identifying how different influences and tensions have shaped my artistic identity. By engaging in self-reflection and embedding my personal experiences within the academic narrative, I have been able to document how my compositional voice has evolved over the course of this PhD.

This reflexive approach has been particularly important in understanding and in highlighting how the tension between tradition and experimentation is both a technical and stylistic and personal concern rooted in my ongoing negotiation of identity as a composer. For example, my early training in European classical music, with its emphasis on formal rigor and harmonic clarity, initially felt at odds with my desire to explore more experimental, intuitive approaches to composition. Through the process of autoethnographic reflection, I was able to recognise how these seemingly opposing forces could coexist within my work, each offering valuable insights and possibilities.

This realisation allowed me to embrace a multistylistic approach, where different musical traditions and practices could inform and enrich each other without needing to be reconciled into a single cohesive style. By acknowledging the multiplicity of influences that shape my work, I have developed a compositional voice that is both adaptive and expansive, capable of engaging with a wide range of musical genres, techniques, and cultural contexts.

This multistylistic approach is particularly evident in works like *Fricción* and *Postal Notes*, where I combined elements of traditional chamber music with more experimental techniques, such as graphic notation and extended instrumental techniques. In *Postal Notes*, for example, I used open-ended prompts and graphic scores to encourage performers to engage with the music in a more interpretative, improvisational way, while still providing a structural framework grounded in traditional compositional techniques. This balance between freedom and control is central to my multistylistic approach, as it allows for both the stability of tradition and the fluidity of experimentation to coexist within a single work. This is not to suggest that these two forces are always in harmony; rather, the tension between them is what drives the creative process forward, generating new ideas and possibilities. This multistylistic approach has been a key outcome of my research, and it represents a significant contribution to the field of contemporary music composition. Throughout the portfolio, I have demonstrated how a composer can navigate between different musical genres, techniques, and influences without attempting to fuse them into a singular, homogenised style. Instead, I have allowed these elements to coexist in dialogue with one another, creating works that reflect the diversity and complexity of the contemporary musical landscape. This approach challenges the notion that a composer must adhere to a single stylistic identity and instead embraces the multiplicity of influences that shape contemporary music practice.

In addition to the theoretical and compositional insights gained from this research, the collaborative, interdisciplinary nature of my practice has been another key area of development. Throughout the PhD, I have increasingly worked with performers, choreographers, and visual artists, exploring how sound, movement, and space can be integrated into a unified artistic experience. In pieces like *Grá* and *Io Io*, I have developed a collaborative compositional process that involves real-time interaction between sound and movement, allowing for a more fluid and dynamic relationship between composer, performer, and audience. This interdisciplinary collaboration has opened new possibilities for composition, expanding the role of the composer beyond the creation of

a fixed score and into performance and interaction. The integration of technology into my compositional practice has further expanded the possibilities for interaction and collaboration. In works like *PUMP* and the work carried out with the PANIC Ensemble and the duet online collaborations, I have explored the use of digital interfaces, real-time sound manipulation, and telematic performance as ways of creating forms of musical expression that expand the traditional notions of music composition. By continuing to engage with these technologies, I aim to push the boundaries of my compositional practice even further.

The central research question, ‘How does the tension between tradition and experimentation shape my compositional voice?’ has guided my work across a wide range of compositions, performances, and theoretical inquiries. Rather than seeking to resolve this tension, I have embraced it as a dynamic force that drives my creative practice, pushing me to explore new musical territories while remaining grounded in the traditions that have shaped my musical identity. Through my engagement with embodied cognition, autoethnography, interdisciplinary collaboration, and technology, I have developed a multistylistic compositional voice that reflects the complexities of my own voice as a composer and reflecting on the complexities shared in contemporary music. Throughout this research I have developed a multistylistic compositional voice that is versatile, adaptive, and open to new influences, capable of navigating the complexities of contemporary music while remaining grounded in the rich history of the art form. This research has not only deepened my understanding of my own creative process but has also contributed to the broader discourse on contemporary music composition, offering new insights into how composers can engage with the evolving musical landscape in meaningful, innovative ways. This research has not only deepened my understanding of my own creative process but has also contributed to the broader discourse on contemporary music composition, offering new insights into how composers can navigate the evolving musical landscape. Thus, one of the key contributions of this research is the development of a compositional voice that is inherently multistylistic, capable of moving fluidly between different genres and traditions without sacrificing artistic coherence. This tension, which has been the central focus of my PhD research, is not static; it evolves with each composition, performance, and collaboration, offering new challenges and opportunities for artistic growth. This multistylistic approach reflects the hybrid nature of contemporary music, where composers are increasingly drawing from diverse sources to create works that reflect the richness, diversity, and tensions

within the individual and its sociocultural context. By embracing this multistylistic approach, I have been able to develop a compositional practice that is not constrained by the boundaries of a single genre or tradition but is instead open to new influences and ideas from across the musical spectrum.

The implications of this research extend beyond my own compositional practice to the broader field of contemporary music composition particularly at the intersection between embodied cognition, somatic practices, multistylistic composition, interdisciplinary collaboration, and the use of technology. By demonstrating how tradition and experimentation can be productively combined, my work offers a model for other composers who may be grappling with similar tensions in their own creative practice. Furthermore, the use of embodied cognition, somatic practices, and interdisciplinary collaboration opens new possibilities for how music can be created and experienced. This provides a model for how composers can engage with the evolving musical landscape in meaningful and innovative ways. Looking ahead, I see significant potential for further research and exploration in several areas. The integration of embodied cognition into the compositional process offers new possibilities for how music can be conceived and created, particularly in terms of how physical experience can shape and inform the generation of musical ideas. Similarly, the use of technology, particularly digital interfaces and real-time sound manipulation, in collaboration with artists from other disciplines such as dance, visual arts, and performance, challenges traditional notions of the composer as a solitary creator. Instead, it positions the composer as part of a collaborative, interactive process that involves real-time engagement with sound, movement, and space. I believe this approach has the potential to significantly expand the possibilities for contemporary music composition.

In addition to embodied cognition, I see significant potential for further exploration of how cultural identity informs musical creation. Throughout this PhD, I have reflected on how my own cultural background, with its diverse influences, has shaped my approach to composition. This reflexive engagement with identity has allowed me to challenge and expand my understanding of what it means to be a composer in the contemporary world. As I move forward, I am interested in exploring how other composers from different cultural contexts negotiate the tension between tradition and experimentation, and how these negotiations can contribute to a more inclusive, diverse understanding of contemporary music. My exploration of somatic practices in composition has been a fruitful area of inquiry, and I believe there is much more to be

uncovered in this domain. By continuing to engage with the physicality of music-making, I hope to develop new compositional strategies that emphasise the role of the body in generating and shaping sound. This could lead to further collaborations with dancers, choreographers, and movement-based artists, exploring how the body can become an integral part of the compositional process, not just as a performer but as a source of musical material.

Appendix

Diary Entries: 10 meditation sessions (*Tierra Sellada*)

Day 1: January 25, 2019

As I settled into my first meditation session, my thoughts immediately turned to the image of plastic floating and drifting through the air. I pictured it disintegrating slowly, covering and suffocating the soil beneath. The earth seemed unable to breathe, a sensation that crept into my own chest, causing a subtle tightness as I breathed in and out. Seated at the piano, I felt an urge to translate my morning's discomfort into sound. My fingers found themselves drawn to dissonant chords and sticky, lingering notes that seemed to echo the clinginess of plastic. Each keypress felt like touching something unclean, and the sounds that emerged were just as unsettling as the images in my mind.

Day 2: January 27, 2019

I focused on the ubiquitous nature of plastic. Initially, the connection to my meditation was deep and unbroken, but as the session wore on, my mind began to wander. I caught myself drifting towards thoughts of musical structure rather than staying anchored in the somatic experience. I experimented with rhythmic counterpoints that felt chaotic, much like the disruptive influence of plastic in the natural world. My left hand consciously avoided repeating any note, mirroring the unpredictability of plastic pollution.

Day 3: January 29, 2019

Emotions surged as vivid colours and an overwhelming sadness washed over me, reflecting the catastrophic impact of plastic. It was a profound moment of connection with the issue at hand. As I played, I was so immersed that I lost track of time. Only towards the end did I begin to gravitate towards a dominant tonality in the chords, signalling a shift from emotional to musical reasoning.

Day 4: January 30, 2019

Listening back to previous improvisations, I was struck by a section with heavy bass chords. They felt alien and detached from my emotional state, and initially, I disliked them. However, as they continued, they evoked a sense of suffocation—an echo of my feelings about plastic pollution. I explored the theme of breath. I tried to capture the

rhythm of breathing—inhaling and exhaling through the piano keys. The experience was somatic, and it opened new avenues for musical exploration.

Day 5: February 5, 2019

I spent the morning contemplating my physical interaction with the piano. I aimed to break away from traditional playing patterns, which felt restrictive and too familiar. My improvisation involved using different timbres and incorporating my voice, which allowed me to deepen the exploration of physical responses to the music.

Day 6: February 6, 2019

Today's focus was on mimicking the slow, relentless spread of plastic through physical movements. I explored how these movements could translate into sound. The sounds I chose today were darker, intended to mirror the oppressive quality of pollution. The low, dark tones were a direct response to the feelings of suffocation and oppression.

Day 7: February 9, 2019

I contemplated the structure of the improvisation, thinking about how to turn it into a coherent musical narrative that accurately conveyed the story of plastic pollution. I felt a surge of ideas for aggressive musical sections that would contrast sharply with the calmer sections, embodying the conflicting emotions evoked by plastic.

Day 8: February 17, 2019

Today, I envisioned the piece as a series of movements, each one representing a different aspect of the lifecycle and impact of plastic. It felt like constructing a story, piece by piece. Considered expanding the piece, using different ensembles to convey various stages of the narrative. The idea was ambitious and filled me with a mix of excitement and apprehension.

Day 9: February 20, 2019

Today's meditation focused on the broader thematic elements of the piece. The emotions that emerged guided the tempo and dynamics of my subsequent improvisations. I started to view the music as programmatic, with each section designed to evoke specific emotional responses. The music began to take shape as a narrative of its own.

Day 10: February 28, 2019

Today, I slowed down to reflect on the overarching message and emotional weight of the composition. I allowed myself to absorb the gravity of the environmental message I hoped to convey. I finalised the structural and emotional trajectory of the piece.

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