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Chapter 10

The "self" particle: A time traveller's account of how one doctorate in music composition would have benefitted from a better awareness of autoethnography

Bartosz Szafranski

This chapter uses creative non-fiction to present a reflexive account of elements of my work on a practice-led, Doctor of Music degree in composition between 2015 and 2019. With the aim of recognizing and embracing the benefits of a fully non-linear approach to research and composition, I have used aspects of fiction and fact (i.e., faction, see Gouzouasis, 2008, pp. 45-48) to reimagine myself as a time traveller. While it is inspired by scientific inquiry, the concept of time travel is implemented only as a vehicle for a more vivid and engaging presentation of my experiences as a composer-researcher striving for a healthy relationship between theory, practice, and poiesis ("the making production of art;" see Gouzouasis, 2006, p. 25). A key reason for this narrative design is to explore, as a post mortem, how my doctorate could have been improved had I been more aware of autoethnography and its purpose to communicate in a style more direct, imaginative, and engaging—from a more personal point of view. I imagine that I traverse time in order to speak directly to several prominent composers, even though four of them are now dead, as a means of connecting to the wider context of composition (see Hollingworth, 2020, for a more extensive application of a similar dialogue). My imaginary conversations are presented in italicized text. Assuming a conversational style is also a statement in support of including in autoethnography-guided research ideas sparked by looser, though not entirely free, association with the main topic. They have the potential of making the story less sterile and more vivid, as well as more personal. I refer to two of the compositions in my DMus portfolio to connect theory to practice: Eight for piano, string quartet, and electronics (2017) illustrates the origins of research problems (being the first composition of the project), while *Intensity X* for soprano saxophone, electric guitar, two violins, and electronics (2019) gives me access to moments of breakthrough and fulfilment.

The scores and recordings, including synchronized videos, are available online at bartoszszafranski.com.

If you go to a higher dimension, it's not unrealistic to think that you step out of the time dimension and now you look at time as though we look at space ... so the very questions that we have, the very statements that we make about our lives, make no sense in that higher coordinate system. You can ask: "When was I born?" Well, you are always born.

(Neil deGrasse Tyson in StarTalk, 2014)

I don't know when this started, or will start, or if it's long gone, yet still here and always continuing. I can see all elements of my project laid out in front of me. It's a collection of parts coexisting and connected to the point of blurring together in constantly shifting arrangements. It hasn't always been this way—or rather, I haven't always been able to step out of the dimension of my project to look at it from my current point of view. I've felt the discomfort of being locked in time by this lack of awareness, but it took a long time for me to realise that time travel was my true calling.

Giacinto Scelsi, your treatment of the chronology of your output points to an idiosyncratic relationship with time—an artist projecting an instant. According to Sciannameo and Pellegrini (2013), you "attached no importance to dating your written compositions in an orderly fashion." You also left behind an impressive collection, or "mazes," of disorganized tape recordings of your composition sketches for scholars to untangle. Did you want the researchers to succeed? I have my doubts.

I'm suspended in this universe, expanding around me into infinity, and I reflect on shapes, lines, textures, flashes of light, and patches of color. As I try to understand their potential, I'm reminded of the words of a prominent traveller of the previous generation, Morton Feldman, wondering if these elements could be considered the "surface plane" (Feldman & Friedman, 2001, pp. 84–85). His inability, or lack of willingness, to conclusively answer what "surface" was had a reassuring resonance and allowed me to rekindle a failing passion at a critical moment, which is a moment buried somewhere in this story.

There is no conclusion. The loop bends back towards the question and the current flows round the closed circuit: "The artist reveals himself in his surface," as you, Morton Feldman, once concluded (Feldman & Friedman, 2001, p. 89). Is "surface" a higher dimension?

My project (Szafranski, 2020), similarly to many I've done before and since, involved manipulating the shapes, lines, textures, and colors that make up my surface, joining them together in bundles of particles—compositions—discrete yet part of a larger whole. Usually, I find it satisfying simply to arrange these elements in ways which make the surface before me more elegant, more engaging, and more reflective of who I am. This mission wasn't going to be quite so straightforward. I'd been so engrossed in the patterns emerging out of the compositions that I hadn't noticed a nearby singularity, unstoppable in pulling me ever closer to its event horizon.

Finally, I gave into the magnetic pull of timbre. Landing at 50 minutes into *Intensity X*, I was submerged under waves of undulating wide vibrato, a piercing trill, and restlessly pulsating drone surfaces. The guitar was distorted and dynamically exuberant, the violin harshly *sul ponticello*, which were tell-tale signs of "intensity" level 6 (see Figure 10.5 for an explanation of this). The saxophone waited for the right moment, but when it came, nearly every note was trembling, breaking up, spinning out of control. In spite of this hectic micromovement, the glacial pace of the textural block form had remained unaltered since the beginning. Everything had transformed, but nothing had changed. Familiar rules of time didn't apply.

Stretched to their limits, the melodic modules were turning casual polyphonic interactions into heated debates.

In the wider universe, there are compositions which seem to suspend the everyday experience of passage of time. This speaks to me as an imagined time traveller. Their authors have designed such musical contexts that draw the listener close to the tiniest details of timbre and microtonal beating, perhaps even pulling the ear inside the sounds themselves: Anahit, Pranam II by Giacinto Scelsi (1905–1988); Lux aeterna and Lontano by György Ligeti (1923–2006); Piano and String Quartet by Morton Feldman (1926–1987); Repetitions in Extended Time by Bryn Harrison (b. 1969); Borderlands by Monty Adkins (b. 1972)—only a few examples. I wanted to know how they've achieved it, and how I could play my small part in making this universe expand. Time travel feels very isolating at times.

Witold Lutosławski, you saw composition as a channel of communication with others, and you found in it "medicine for loneliness, that most human of sufferings" (Lutosławski quoted in Stucky, 1981, p. 106). In this moment, I don't understand why this is important to my project, but I feel that I will ... or I once did, perhaps. Loneliness and time are intimately connected.

When creative isolation becomes too heavy a burden, I seek a sense of connection to other time travellers. To understand how these connections could be established, it is helpful to put aside the tools of practical work and undertake theoretical research to gain a better understanding of the wider context of the journeys undertaken by composers into the "surface" dimension.

Later in your life, Giacinto Scelsi, you seemed secretive and private, an "enigmatic figure" (Anderson, 1995, p. 25), but your mystifyingly idiosyncratic approach to music didn't develop in isolation. In your written output there is evidence of "a lucid consciousness of sound's emancipating movement, born over the course of two centuries" (Montali, 1998, p. 53). Did theory come before your practice? Were your ondiola improvisations (Klangforum Wien, 2013) the beginnings or the culminations of your composition projects? For you, "the instant is always present and unchangeable, albeit pulsating" (Montali, 1998, p. 57)—stages don't exist.

In this case of a practice-led project, devoting attention to theory didn't come easily to me. I found the practical part of my project came naturally and led, quite directly, to fulfilment and satisfaction. Research into the literature surrounding other travellers' work often felt like an unnecessary detour which distracted and delayed the creative activity. However, coming across observations as valuable as the following by Tim Rutherford-Johnson, on the importance of seeking connections, makes it clear that I need to embrace more completely this non-practical side of my endeavours:

as economic, political, and technological forces conspire to create a world that is more homogenous and interconnected, it should not be a surprise to find composers responding—albeit in very different ways—to common sets of questions. As our world is reconfigured in terms of flows (and resistances), perhaps the way past this fragmentation is to turn things on their sides, to seek out the continuities across relationships and networks at the same time as we relish the differences between individuals.

(Rutherford-Johnson, 2017, p. 263)

Flows and resistances, continuities and differences—the categories are interdependent and indispensable. Could they also be part of the "surface," Morton Feldman?

The quotation from Rutherford-Johnson reads like a promising starting point for an inquiry into the relationship between practice and theory during my latest expedition into the higher dimension. Similarly, the words quoted below, by Bryn Harrison, the time-travelling composer of several works I've found influential, would seem like a potent source of inspiration for my creative project concerned with the distribution of sound events in time. I came across both of these references, similarly to many others here, and in my project's written component, once much of the core activity had been completed. I started off crippled by anxiety about the appropriate sequence of events—clumsily adhering to linear stages of

work. It never felt right, and I had to wrestle with my instincts, but I will free myself now and the key to open my prison cell will be my relationship with time.

You are here, too, reader. We glance at each other, suspended in spacetime. As you write your story, in words or in music, I am your reader. There are many who, like us, have had to reconcile practical composition with a written element (Leedham and Scheuregger, 2020, p. 66). We are here, because to experience something once is not enough to achieve this reconciliation. Autoethnography "asks that we rethink and revise our lives" (Ellis, 2013, p. 10), so we revisit those moments, peel off layer after layer, and "create new meanings" (Gouzouasis, 2020).

Having crossed the event horizon, I gazed along the full timeline of Intensity X and jumped in at 45 minutes and 26 seconds, closer to what I had once, before time travel, considered the end. A distorted electronic drone was growling in the depths of the texture—mildly, with authority, like a tiger having a bad dream. The frequency range of the growl, approaching the highest level achievable by the instrument, was a warning against the imminent awakening in the next section. The beginning of subsection EB (see Figure 10.1) was placed between two bright, soft-edged pad chords, conceived as a stretched and slowed down version of the role I had given to the piano in Eight. The sharp attack of the piano had provided an effective textural countermeasure to the horizontal lifecycle of drones in that composition, but the punctuation had been too much like a ticking clock. Such a clear manifestation of structural calculations betrayed my insecurity about the value of my formal conceit. Intensity X didn't need a clock. It needed to let time be.

A slow violin tremolo was urging me to stay ...

Bryn Harrison once engaged in a discussion with James Saunders about the importance of placing material carefully within time:

For me, time can be viewed on a moment-to-moment basis as a space in which to contain musical material. I would say that my whole motivation to compose and the subsequent working methods that I've chosen to use has come directly from my response to that situation. If time seems suspended, or at least slowed down in my music, as you suggest, then this may be to do with the way in which I'm trying to place the material into a sort of time-continuum in which the repeated figures can be expanded, contracted or subtly varied from one moment to the next. I try to work with material that will allow for a degree of flexibility or manipulation.

(Bryn Harrison quoted in Saunders, 2009b)

Is there a paradox to be found here, Bryn Harrison? Material is manipulated in a time continuum, a moment-by-moment basis, but time seems suspended—it is a space. In the "surface" dimension this is natural.

Little did I know, at the start of this story, how important the issue of time would prove in reaching a better understanding of the ways the relationship between theory and practice was affecting my ability to manipulate the shapes, lines, textures, and colors to achieve the desired results. During the upcoming four years spent in the "surface," I was to experience much of research into other composers' practice, excluding score analysis, as uncomfortable external pressure, which was—considering the uncanny fluidity of the higher dimension—often detrimental to the effectiveness of my navigational instruments. This was going to be

the journey at the end of which I would grow to understand that I was trying to apply the familiar laws of linearity from a three-dimensional world to events originating beyond these limits. Out of fear of the unknown, I had allowed my understanding of the structure of my project to become my understanding of its unfolding in time. The aims, the repertoire review, and the methodology were supposed to be formulated before composition took place, after which I should evaluate and draw compelling conclusions. I couldn't work that way, and I didn't, but I was conflicted, and my anxiety was growing.

Giacinto Scelsi, you thought a sound to be a sphere. Time is not horizontal. A composer creates a connection between "relative time" and "absolute time," and "fuses" them. Was your symbol—a circle above a line, the Sun rising over the Earth (Montali, 1998, pp. 55 and 73)— also the primacy of absolute time over relative time? I knew your music very well before composing Intensity X, but the droplets of knowledge of research work about you are only coalescing now. Are grammatical tenses of importance to this process?

Floating outside of time, I noticed one of the many instants of myself struggling with the project. There I am: viewing the task ahead of me as a narrow path along a timeline—a line starting at my feet, leading to the point of completion. I'm hoping that goal, far in the distance, will combine creative fulfilment with academic accomplishment; but, whenever I think of my theoretical research needs, the path starts to meander wildly, trying desperately to lead me to the various sources of knowledge. As a result, with every new query, it becomes longer and more challenging to navigate, pushing the point of creative fulfilment back beyond my range of vision.

If I could just change the image and swap the line for a sphere, with research queries appearing naturally on its open surface, creative fulfilment and academic accomplishment would simply exist—undisturbed by the complexity of research and always within reach, like Giacinto Scelsi's instant, "always present" (Montali, 1998). This sphere's surface would be a higher dimension, making it possible for me glide smoothly in any direction, between any instances of theory and practice, as required by my thought process. Theory could no longer delay my access to practice, which would also allow me to glide to evaluation at any time, rather than wait for a large amount of a thick mixture of practice and theory to funnel down the line to a sludgy bottleneck.

A wider and freer scope of research would have helped me then, as it's helping me now. Had I picked up Relating Theory, Practice and Evaluation in Practitioner Research (Edmonds & Candy, 2010), I would have discovered strong arguments and evidence for rejection of a linear stage-based approach to my project. This discussion is based on four case studies from creative practitioners in a broad area of interactive art, including music-centred elements, and offers unique insights into a diverse range of artistic activities. It is of additional interest that the case studies are complete practice as research processes undertaken within an academic context—time travellers not unlike me—and this observation is another way of looking at my spherical "surface" dimension:

It is important to note that a trajectory of practice and research, while a timeordered path, is far from a linear, step-wise set of activities that moves inexorably toward an intended goal. In reality, even under the time constraints of a research program, practice is interwoven with the other two elements: theory and evaluation. Sometimes the theory comes first, but often the need for it emerges as the practice process continues. This is not a "time-ordered path." I'm painstakingly re-encoding Intensity X as a notated full score (Szafranski, 2019), which noone is going to use for performance. I've been at it for two months now, but the musicians have already played from their part scores to pre-recorded electronics, and the resulting recording is very accurate. I know I will be challenged on this redundancy of the full score during my doctoral viva and the best I should say is: "I need this to travel freely within the universe of the music." What I will actually tell the examiner, to my disappointment, is a sloppy "It's an analytical tool." This won't even sound like me speaking.

My dissertation doesn't reflect the way I thought and felt about the project. It looks at Eight and Intensity X with a dry, matter-of-fact stare and presents their formal plan and musical devices in a style which is highly organized, focused, logical ... and lifeless. I don't reveal myself in the surface of my writing—in the process of bullet-proofing the discourse against specialist scrutiny, I've sacrificed openness regarding my genuine relationship with the music.

Matt Zoller Seitz, you once suggested ... No, you're not a composer. Yes, I am breaking my own system (and I'll break it again), but I really need your words here. You once suggested that critics shouldn't try to write the way they've been taught they're "supposed to write." You said they shouldn't try to "impress anyone with erudition." It may be a temporary position, but I'm being a critic of my own music, so allow me to quote some of your exact words (Zoller Seitz, 2014).

So to Hell with the outline. Just puke on the page, knowing that you can clean it up and make it structurally sound later. Your mind is a babbling lunatic. It's Dennis Hopper, jumping all over the place, free associating, digressing, doubling back, exploding in profanity and absurdity and nonsense. Stop ordering it to calm down and speak clearly. Listen closely and take dictation. Be a stenographer for your subconscious. Then rewrite and edit.

Thank you, Matt Zoller Seitz, I really needed that. You may have arrived at this station from the origin of "wrongheaded educational conditioning," but your train called at "boringly linear and predictable" along the way (Zoller Seitz, 2014). This is about more than style or register, isn't it? It's about embracing the non-linear nature of creativity, about moving around a sphere and letting this exhilarating freedom shape the writing. Could your words also apply to music composition?

Soon after embarking on this composition project, I started struggling to maintain a disciplined stage-based approach, where I would establish theoretical foundations to guide my application of practice, which would then lead to self-evaluation. Experiencing this under pressure—the waves of a major non-obligatory commitment crashing against the rocky shore of livelihood and family responsibilities—it made me seriously doubt my academic ability and the relevance of my practice to valuable research.

Even at the time, I knew the need for theory wasn't the root of the problem. As I was placing it sequentially before practice, I was inadvertently limiting the angle of my theoretical research to outside sources and ideas. Eventually, it was the moments when, resigned, I would force myself to push through or skip over this self-imposed stage, and start applying myself to practical composition, that brought clarity and enthusiasm back to the process. This was an unnecessary internal conflict, and I had the option to free myself from it with a change in approach to the flow of ideas. The simplicity of the solution can be understood from this observation regarding a core element of autoethnography by Peter Gouzouasis (2019):

Traditionally speaking, autoethnography focuses on the researcher as "self" (Ellis 2004). Many researchers (Eisner and Barone 1997; Ellis 2004; Irwin and de Cosson 2002) note how placing one's self within the research can be mutually beneficial to the author and reader alike (i.e., "self" and "other").

(Gouzouasis, 2019, p. 4)

Wolfgang Rihm, you once praised the expressive power of music which comes from "a highly personal situation or stance" (Floros, 2016, p. 169). I find it natural to implement this in my practice, but can I apply the same principle to my writing? Will it yield similar results?

Applying my "self" to my work while focusing on practical activity came naturally, but to ensure it became a consistent element of my theoretical research would have made the process more unified, personally meaningful, and streamlined. Therefore, the solution was right there: to embrace the fact that practice could influence theory, effectively breaking down the fossilized concept of a linear, stage-based project structure.

While the project was practical at its core, it also required me to write extensive documentation on the origins, the process, and the outcome of my work—30,000 words. Scholarly writing had never been a major problem for me but maintaining what I'd been taught to consider appropriate academic style would often result in slow and overwrought output, as stylistic restrictions would get in the way of communication. The reality of having to do it on a scale I'd never attempted before quickly became a burden and a detrimental influence on practice.

I gave my dissertation a dreadful title ... I thought it made me seem more advanced academically, but the result is a dry, dull, and overlong barrier between my ideas and the reader: "Identification and application in original composition of the devices required to construct and maintain a coherent musical form with a very slow distribution of structural sound events." The most lifeless 27 words ever written about music, but I can't change it now. As skilled wordsmiths, you would have both chosen a language more personal, "fine poet" Giacinto Scelsi (Anderson, 1995, p. 25) and "richly poetic" Morton Feldman (Ross, 2009, p. 527). I'd be lucky if anybody managed to finish reading my title before giving up on the whole dissertation.

With hindsight, and with awareness of perspectives such as Bochner and Ellis (2016), I'm able to reflect on how much it would have helped to get autoethnography involved in this aspect. I know it would have encouraged me to "connect with my readers" and "talk the way most human beings talk," which feels instantly more relevant to how I approach my work. Similarly, the concept of presenting my ideas in a more creative way, closely connected to the act of music-making (Gouzouasis & Bakan, 2018; Wiley, 2019), offers an opportunity to reconcile written research with research through applied composition. If I could focus on making my writing engaging for the reader, I would also be more engaged with the process of producing it, which would likely extend to making the written component of my project less a distraction and more a reinforcement of the practical portfolio. I would have been surprised and reassured by Bochner and Ellis encouraging me to open myself up to critique, to be vulnerable, to show my face to the readers (2016, p. 81), rather than to suffer intellectual exertion by fortifying every stage of my work against criticism.

To "show my face" in my research – isn't this similar to "revealing myself in my surface," Morton Feldman? I know I can do the latter (that's the whole point of my being a

composer), but the former is hard. I don't think you were being playful when you admitted to not understanding musical time (Ilić, 2015)—am I right in seeing direct openness in this statement?

I wasn't in the right place in my life to embark on such a complex multi-dimensional project—or so I felt, but I decided to bury the fears deep under ambition and determination. Time travellers at this career stage often struggle financially, and parenting increases the pressure considerably, as theoretical research can tell me with authority (Woolston, 2019). I'd been warned on several occasions, and with the best of intentions, but I wasn't willing to accept that the window of opportunity had closed for me. To combat the anxiety, I focused on shaping the project to make it personally stimulating, hoping intellectual satisfaction would enable me to navigate the stormy waters. What types of musical structure draw me into their sound-world most forcefully and render me hopelessly lost in their frequencies for the longest stretches of auditory oblivion?

I resisted the siren-call of the fragile tremolo violin and willed my body to pull out of section EB of Intensity X. I knew how important that type of articulation was to the nature of the whole composition, so it was inevitable that I would let myself be lured back into the immersive joy of timbre, eventually.

While creating the surface of this music, I felt freer and more at ease with the process than in the case of all other elements of the project. Even though I'd never composed on such a large scale, and I'd known this was going to be the centrepiece, the work had a healthy flow to it—I wanted to revisit this feeling. I jumped in at 23 seconds, the transition from the introductory section X0 to subsection A0 (see Figure 10.1), the quiet Big Bang of this universe. Mid-range granular and pulsating electronics were building to a crescendo, just as two violins, high in their range, were allowing the shadows of their early presence to dissipate. Very long notes, softly, with a mere hint of vibrato, succumbing to the wave of the first of those glowing pad chords—this was the birth of Intensity X. Out of that wave, the electric guitar emerged, another very long and soft note, moving imperceptibly from sul tasto towards the natural position of the EBow (a compact electronic device enabling the guitar's sound to be sustained indefinitely, held by the picking hand; see Heet Sound Products, 2020). Prompted into a slow downward slide by a deep bass hit, it met one of the ghostly violins, and found reassurance in the saxophone—more confident in its melodic identity, but still gentle and sensitive to its surroundings. These instrumental phrases were breathing freely, suspended in their instants and transforming without urgency, but also closely related in their stretched melodic contours. I had given the musicians specific pitches, but the realization of rhythmic values was free within the loose guidelines of short-medium-long (see Figure 10.6), allowing the lines to interact organically outside of fixed time.

As I listened more closely, the allure of the internal life of the notes—their timbre—grew.

<insert Figure 10.1 near here>

Figure 10.1: A higher dimension view of the structure of *Intensity X*

The truth is that I'd always known I wouldn't be able to complete a project of this magnitude and complexity, unless I felt strongly connected to the subject matter on a personal level. Even as I was putting together my proposal and had to organize my thoughts with sufficient discipline to show potential for robust research, I kept promising myself that the top priority would always be producing a set of compositions I could find personally

stimulating and rewarding, as opposed to choosing a topic for its academic attractiveness (or my impression of it). The consequences were of a fundamental importance to my future career—I was going to enrol on a doctoral degree with the ratio of workload as strongly biased toward a practical portfolio as possible. While the specific requirements vary across universities (with highly varied attitudes among doctoral candidates; see Leedham and Scheuregger, 2020, pp. 66, 83) at the one institution which was ready to give me a chance, it meant opting for a DMus, rather than a PhD, due to a shorter dissertation.

György Ligeti, you once experienced a "generational crisis"—you saw academicism as a danger both external and from within. How did you apply your "self" to find your personal "compositional direction," even though you couldn't give it a name? Can I achieve this without becoming, like you, an "anti-academic"? (Ligeti quoted in Floros, 2014, p. 144).

I had no expectations that, however short, the dissertation would still prove the focal point of the crucial final stages of the degree, and that I could have avoided serious issues, had I placed my "self" in it at the outset. After all these years of travel, the higher dimension was still overwhelming and disorientating—a multitude of feelings, sounds, images shifting and transforming infinitely, where "particles pop in and out of existence" and "defy any rational attempt to understand it" (Neil deGrasse Tyson in ThinkBigger, 2017). Here, the "self" could be that one constant particle I'm familiar with from other dimensions, allowing me to keep practice and theory connected.

The music is all there. Fragile, indirect, conflicted, searching—clearly flawed, but also driven by a sense of purpose, expressive, structured. I've weaved the colors of many threads into "one surface," György Ligeti (Ligeti quoted in Ford, 2016). I've revealed myself in this surface, Morton Feldman. This music has come from a personal place, Wolfgang Rihm. But I've withheld my "self" from my writing, and I don't feel a strong enough connection between the dissertation and the portfolio. Giacinto Scelsi, my sound is a sphere, but my project still follows a line.

I knew I couldn't take for granted my satisfying relationship with the instrumental lines in Intensity X. I pulled myself out of that moment and shifted my attention to a very different place along the timeline. There were lines to be heard in the texture of Eight (Szafranski, 2017) in the string quartet—taut and uncomfortable, they were troublemakers, but they taught me an important lesson. I thought, since they were so stretched and flattened, their melodic contours wouldn't demand autonomy, but I was simply underestimating the strength of their voice and underplaying their potential for expression.

György Ligeti, Alex Ross (2009, p. 508) observed that, in the process of finding your voice, you set out to "restore spaciousness and long-breathed lines," in contrast to the musical pointillism of serialist composers. I feel a closeness to this concept and to your sound-world, but this project was supposed to be about me. I'm not reacting against any current trend in composition—the more the merrier—so the creative context is fundamentally different. Have I tried too hard to be your follower, instead of channelling my energy toward self-discovery?

I was reluctant to revisit *Eight*—it had been a difficult period—but it was a key test of my maturity as a time traveller. I glanced at myself creating a composed, live-instrumental equivalent of time-stretch editing so prominent that the listener could "enter" each consecutive sound. I was imagining placing the notes under an aural microscope, where the usually elusive minute details of articulation fill the spectrum completely. This was the right direction, but my mindset was ill-suited for the task. I had burdened it with the theory of

other composers' technique before finding out, through practice, what I needed to learn from them. Eight had grown entirely out of pre-compositional research and its form was guided by strict processes in terms of the timing of events, harmonic progression, and changes in timbre. I was very satisfied with the results of this first stage and it fit elegantly into the written component of the DMus, but the music was already struggling to breathe in the overtightened corset before a single note made its way onto a stave.

Based on analyses of Ligeti's *Lontano* (1967) and *Lux aeterna* (1966), Feldman's *Piano* and *String Quartet* (1985), and Scelsi's *Aitsi* (1975), I established that I could achieve a similar effect of slow unfolding of musical time by mapping out temporal distances between stronger musical gestures at an average of approximately eight seconds (I would then push the envelope by increasing the distances in the remaining compositions in the portfolio). The whole form is guided by this distribution of events, with timings indicated in the score, and generally by multiples of eight to form the larger building blocks (see Figure 10.2).

<insert Figure 10.2 near here>

Figure 10.2: A higher-dimension view of the structure of Eight (the units of 88 along the top are 88 seconds of duration)

You said the right approach was to "let Time be," Morton Feldman (Feldman & Friedman, 2000, p. 87), but you weren't suggesting we should stop taking it into account, were you? This statement, direct and elemental, packs a punch. You had a knack for quips, you were a tease, or "verbose, egotistical, domineering, insulting, playful, flirtatious, and richly poetic" (Ross, 2009, p. 527), and it's often difficult to read your true intentions. I'm beginning to think you suggested composers had a tendency to place the line above the circle—to prioritize "relative time" over "absolute Time," and that only one of them deserved a capital T. Your name for it was "Time Undisturbed."

For both compositions, I had two sets of chords handy, generated by means of a pitch rotation technique previously used by Oliver Knussen, with roots in Igor Stravinsky's late style (Anderson, 2002). The technique involves moving the bottom pitch to the top of the set and transposing the new set down to be based on the same pitch as the original. The same process is then applied to the new set, which continues until the original reappears. The result is a group of chords—two groups in the case of Eight (see Figure 10.3) and Intensity X (see Figure 10.4)—with the same number of units as the number of pitches within the set, consistency of pivot notes, and with a strong cyclical identity, even when they are rearranged. They are born as linear stages initiated by the first chord, logically connected, but they are not fixed in this sequence, and new colors are revealed with every fresh combination.

If only I had noticed the correspondence between this harmonic concept and the acceptance of non-linearity of practice-led research, the experience of the DMus would have been enriched. A project grows out of a single idea and, as a solitary researcher, I have no choice but to tackle one part at a time, but I should never feel bound by any fixed sequence of events.

<insert Figure 10.3 near here>

Figure 10.3: The harmonic resource of Eight

<insert Figure 10.4 near here>

Figure 10.4: The harmonic resource of Intensity X

I hear movement in this harmonic framework, but there is no specific direction. Following the full cycle as a loop is a good option, but my ear tells me that the chords, maintaining a shared internal structure, are naturally capable of connecting freely. They aren't stages in a linear progression, but they maintain a very audible coherence. Bryn Harrison, you recognized the importance of harmonic change to our perception of time—can we manipulate harmony to make a composition feel non-linear? Does this situation come close to your idea of "sound as a sphere," Giacinto Scelsi? Does it help to enter the "third sonic dimension" (Sciannameo, 2001, p. 24)?

Contradiction was all over the sound of *Eight*, though I only hear it with hindsight. The strings flow with a desire and potential for freedom, but they are forced to acknowledge the immovable pre-determined checkpoints, flows, and resistances. I followed it through to the end—the sense of reassurance resulting from this level of structural discipline was intoxicating and the composition progressed with satisfying momentum ... but the texture emerged strained and gasping for breath, the sonority predominantly stark and barren. The form of Eight was a numerical concept based on research and, as I began to weave the threads of string color into the texture, I should have reconsidered the strictness of that initial plan. I allowed for too much resistance. I should have given my mind the freedom to jump between the stages of the process, but I chose to follow a line instead—the structural design had been elegantly organized and supported by evidence, so I felt it was my duty to adhere to it, to fill the container.

Giacinto Scelsi, a cellist rehearsing your Quartet No. 2 (1961) once shouted at you: "You are crazy, and your music is the reflection of it; you want all of us to become insane!" (quoted in Sciannameo, 2001, p. 23)—an explosion of frustration and a bad choice of words. I read them as: "You have revealed yourself in the surface of your music; you want us to experience it." Another cellist, Frances-Marie Uitti, called you, with admiration, a "master improviser" (Uitti, 1995, p. 12), and I think the words of both cellists are strongly connected.

Having signed off on the theory stage of *Eight*, I found myself in a practice stage so contracted and limited that I felt like a duvet stored in a vacuum bag. The piano part was a complete realization of the system of timing strong musical gestures in agreement with the average of eight seconds—block chords standing tall, like signposts. Attempting to generate the string quartet parts in a similarly systematic way was torturous. At such a slow rate of development, the sustained lines were buzzing with internal life and they needed space to breathe. I started off by making decisions entirely based on pre-calculated timings, a chart-based system of timbre control, and harmonic tensions suggested by the piano chords. By the time I finished the composition, I was capturing my part-improvised performance by means of a MIDI keyboard controller and computer software, tweaking the details afterwards.

The decision to allow a particle of spontaneity to enter the nebula of my creative process was a breakthrough, and it forced me to revise my theoretical plan.

Before the era of software, you embraced spontaneity in a similar way, Giacinto Scelsi. Your tool was a very early electronic keyboard—the ondiola (Clavioline)—but the workflow was fundamentally the same. You would start a tape recorder and improvise a single line, then track another line, then another (Klangforum Wien, 2013); your ondiola's mechanical controllers were analogous to my MIDI software controllers. You would then work with an assistant to flesh out the details of instrumental range, technical execution, and timbre, and to clarify harmonic processes (Ross, 2009). I was on my own, but I did the same thing. Why

was I reluctant to discuss this—an aspect of "self"—in my dissertation? After your death, Giacinto Scelsi, there were those who dismissed you as a fraud; but there have been many more since who have admired your individuality (Anderson, 1995). Wouldn't it have been beneficial to all elements of the project, if I had made this openly part of my methodology?

A major element of my evolving approach from *Eight* to *Intensity X* was a system of timbre control. It was going to be a rock-solid system, relying on the undeniable authority of numbers. There was a chart I had created for *Eight*, as part of the overtightened corset, with every definable component of string articulation assigned a numerical value, and it was simply too expansive to implement as intended. Dynamic, degree of vibrato, bow placement, type of bow motion, pizzicato, mutes—I was going to map a desired sum of values for every bar, for each string player, and surgically select various combinations to hit the exact numbers. It was suffocating. In the hands of another composer, this might be a workable solution, but I don't feel my music this way. It would amount to composition without my "self."

Out of desperation, to save at least a portion of the theorized plan from being consigned to the dustbin, I chose to map increasing and decreasing timbre complexity of the ensemble, but the means to implementing this plan became richly varied. Influenced by Scelsi's practice, I was in the position to listen to a virtual representation of the lines, partly improvised and tweaked in a software environment, and to allow my personal response to articulation techniques to suggest the right solutions for this aspect. My chart of articulations remained a handy reference, and I used the number values for guidance, but I wasn't bound to an algorithm.

The timbre processes saved me from giving up on the project. The last-resort flexibility healed some of the strain and starkness I had forced myself into at the planning stage of *Eight*, and it became a core building block for *Intensity X*. They worked according to a well-formed plan, projecting a sense of structural development to balance the cyclical harmony, but there was no algorithm. I simply decided that certain techniques of articulation created simple timbre, while others—trill, tremolo, bowing over the bridge, wide vibrato, louder dynamic—introduced complexity. I then used my ears to formulate six specific degrees of complexity, but there would be no calculation of values (see Figure 10.5). It was a wide array of ingredients that could be mixed to place the required amount of emphasis on either end of the scale, or strive for balance of complexity of medium—my "self" was completely engrossed in this instrumental alchemy, because I invited it inside the lab.

<insert Figure 10.5 near here>

Figure 10.5: The implementation of timbre in Intensity X

The concept proved so effective, in fact, that it allowed me to formulate general expressive instruction for the ensemble. Each subsection of $Intensity\ X$ would be assigned an "intensity" level out of six, linking dynamic levels and articulation techniques to expressive interpretation, and making this parameter a building block in the architecture (see Figure 10.6, where every set of melodic phrases has an "intensity" level). This was the path to reconciling system with intuition, which was a realization of sufficient importance to give rise to the name of the composition ("X" referring to a variable).

While working on Intensity X, I started referring to complex timbres as "tremble" effects, as they all produced a type of oscillation. You had a similar idea, Bryn Harrison, regarding

"fluttering, ephemeral surfaces" (Harrison, 2012), though you created them by means of busy textures with polyrhythmic complexity. Giacinto Scelsi, I'm operating closer to the example of your Anahit (1965) and String Quartet No. 4 (1964), in which you saved most of your trill ingredients until the latter stages of growth towards the climax—I'm building on my understanding of your approach.

Time. *Eight* was just under 12 minutes long.

It's going to be eight units of 88 seconds, so 11 minutes and 44 seconds long. Eight, eight, eight ... this number is going to be everywhere in Eight. A growling bass drone opens the piece—its timbre transforms, though the pitch seems static. All of the sounds fade in slowly from silence. György Ligeti, you favoured this approach of "almost imperceptible" (Ford, 2016) note attack to project a sense of stasis. Is musical stasis attractive to us, because it feels like time itself has slowed down?

No one would notice the exact length, as the end of the piece fades in from, and out to, silence. Would they notice the formal logic? Subconsciously, perhaps, but the tempo is probably too slow, so this was mainly a simple ritual of self-reassurance. I spent a considerable amount of time working out the formal proportions in Eight before acquiring a clear vision for what the composition would sound like. That was a mistake. I didn't allow myself the freedom to test the effectiveness of the structural plan in practice, to experience living in this new country before loading all of my belongings onto the removal van.

"Time? What is time?" Those words were reportedly used by the "exhilarated, not at all tired" last man standing at the end of the 19-hour performance of Erik Satie's Vexations, organised by John Cage (Ross, 2009, p. 527). If we're thinking of relative time—a linear sequence—then is it of importance to this aspect of experience? If it's absolute time—a sphere—then should we, as Morton Feldman stated, let it be and accept that we don't understand it? "I am interested in how this wild beast lives in the jungle—not in the zoo," you once declared (Feldman & Friedman, 2001, p. 87). Have I been trying to force the elements of my project into cages?

Time. *Intensity X* is over an hour long. A large-scale composition was necessary to give the project sufficient weight and to supply evidence of ambition expected at this level of academic work. Was the longer duration a source of additional pressure? Perhaps, but it didn't take me longer to compose *Intensity X*, only to notate it. Now that it's all over, the project approved and signed off, I wish it had been only this one long composition. I'm genuinely satisfied with the music and how it reflects my aesthetic vision. It unfolds slowly and prioritizes texture, but it also has depth of color and melodic character, which add a satisfying balance of tension and release. The issues I'd identified having completed *Eight* hadn't been caused by duration or planning. The culprit was a self-imposed rigidness in execution of my aims. The birthplace of this culprit was my fear of having to defend the work in writing. I had worried about controlling time, while I should have been connecting it to Time.

Pierluigi Billone, your 1+1=1 (2006) is over an hour long and you've chosen to employ only two instruments (or is it one?). Your focus on the idiomatic instrumental characteristics of the bass clarinet is clear—was the duration of the piece necessary to present the impressive range of shades of color you had in mind? Or was the duration, as a predetermined container, one of the catalysts for an exploration of timbre at such impressive scale and level of detail? Your words seem to suggest the latter option (Billone, 2020) but, perhaps, I'm projecting my own experience. Your sound world also captures and reprocesses

elements of improvisation (Rutherford-Johnson, 2019), which helps the meditative texture remain fresh. 1+I=1, with its haunting ghostliness and patient commitment to surface, was an early source of inspiration for Intensity X. Why did I leave it out of my dissertation? My linear path of research had led me away from my early thoughts, which seemed underdeveloped, and I didn't have the tools yet to see how easy and beneficial it would have been to reconnect with them. I didn't know about the sphere.

Early in the project I was adamant that the key work in the portfolio should be orchestral. I put myself through an A3 page of torture trying to map my timbral and harmonic processes onto an orchestral ensemble, before realizing that it was counterproductive. Undoubtedly, being realistic about timescales was part of the decision, but this size of ensemble was simply the wrong tool to achieve my key aims: to let the listener enter the sound, and to put the aural experience under a microscope. A small ensemble would pull the listener's chair closer to the source and make the smaller details of timbre more noticeable.

Monty Adkins, you made a note of the impact of giving the listener the opportunity to focus on a single timbre when writing about Borderlands (Templeton & Adkins, 2016), which features only one cello (multitracked) and electronics over 37 minutes and 45 seconds. I can hear how focusing on a single timbre over an extended duration encourages a more attentive perception as the ear listens in to the micro-fluctuations within each note of the cello's phrases. Monty, do you think this still applies if we increase the number of timbres? How about three instruments?

The reasons for choosing soprano saxophone, electric guitar, and violin for the live ensemble were not part of a well-formed artistic vision (not that I would have admitted it during the project, or in the dissertation). The electric guitar was a strong candidate, because I play it myself, which would save resources, but—more importantly—would give me much more time to experiment with timbre that I could have hoped for rehearing with another musician. The violin was also convenient, thanks to a long-standing and successful collaborative relationship. Additionally, having had time to reflect on Eight, I had a very clear idea regarding my preferred use of the available articulations. The soprano saxophone was not so obvious. I wanted a contrasting timbre, the ability to shape sustained notes over their duration, and a rich back catalogue of articulation techniques—but I still felt it was a risky decision, due to breath limitations and the attention-grabbing timbre. Only once I'd made these choices did I return to the theory in my dissertation and note the following: the duration of notes and phrases in the saxophone is limited by human breath (discarding the option of circular breathing); violin bowing is less limited, but bow changes are still a factor in very slow music; the guitar would normally have the shortest sustain, but the EBow (Heet Sound Products, 2020) completely removes that cap, allowing a note to ring out for a very long time (until the battery runs out). Thus, they elegantly fit into a scale of sustain durations. Were I limited by linear time, I would be guilty of reverse engineering, but I've transcended that vision of reality—I'm imagining the higher dimension.

Giacinto Scelsi, why did you "deliberately falsify" the composition dates of some of your works (Freeman, 1991)? Did you feel you were escaping linearity of time?

I experience another snapshot from my visit to the higher dimension. I like this moment. The recording session with the violinist, Agata Kubiak, went very well. So well, in fact, that I'm now faced with more than double the violin material I've been planning to include in *Intensity X*. Yesterday I was asking for additional takes, just to be safe, and today I'm staring at my DAW (ProducerSphere, 2020) project window and two complete violin parts, as both

the original takes and the backup are perfectly effective. What's more, as I encouraged Agata to use her expertise and share her thoughts on details of articulation, many of the backup takes have their individual and highly valuable character. There is no satisfying way for me to choose. Because I want to hear all these violin phrases in my premiere recording, I'm going to go back and add a second violin to the required instrumentation. A little manipulation in the DAW will be enough to make the recording sound as if it featured two individual players. Revision changes the theory, but it also puts the practice in a new light.

Am I right in saying that for you, Monty Adkins, multitracking a single cello in Borderlands was a key formal and expressive decision to support the "repetitive observation of an object" (Templeton & Adkins, 2016)? For me it was a coincidence, and I was still thinking of live performance and the need for two players, but I feel it allowed me to sneak in a small portion of "attentional stability."

Thanks to *Eight*, improvising sketches of melodic lines for the live group directly into my DAW was a natural and fully anticipated part of the process. The concept wasn't free of major issues, though, and the duration of the composition did become a seemingly insurmountable obstacle for a moment. I found myself completely unable to make meaningful decisions about the placement of individual notes along the timeline of the synthesized drones. The improvisation had revealed exactly which pitches I wanted to use and how they would interact with some of the desired articulations, but making decisions regarding the exact placement of them in the notated score was proving surprisingly difficult—an issue which grew out of proportion as I began to worry about deadlines.

You chose to say very little about f* for music (2012) on your website, Jagoda Szmytka. By stating simply that the composition "makes [the] connection between free improvisation and very structured musical notation" (Szmytka, 2018), you make it easier for me see the relevance of analyzing f* for music to Intensity X. Admittedly, the element of improvisation will not be as exuberant in my case, but it is nonetheless crucial in shaping the flow of the instrumental lines. I've decided to embrace indeterminacy in my notation, but it is still a well-defined representation of my structural plan.

It was, perhaps, inevitable that my first conclusion was to suspect that I lacked the skill to complete this part of the compositional process. Even worse, as I had already laid out the full scope of this one-hour piece with electronics, my next assumption was that there was no turning back and that I was doomed, having invested so much time and effort in a composition I couldn't finish. At this point, the evidence of the melodic sketches improvised and tweaked within the DAW project proved critically important in breaking the deadlock. I listened to the playback of virtual instruments and realized that the issue was purely notational. This music, which had captured a portion of my "self" thanks to the improvised sketches, didn't want to be nailed to the timeline with the hammer of notational precision.

György Ligeti, when you saw the shortcomings of serialist music, you reacted by "at once negating and extending, that is modifying"—and you said you would have also reacted this way to your own practice (Ligeti quoted in Floros, 2014, p. 76). Am I "modifying"?

In my plan for the role of the saxophone, violins, and the electric guitar in Intensity X, I could easily identify the contours of multiple melodic phrases which recur, but also constantly transform in terms of timing and color. This duality of recurrence and change was the reason for my inability to settle on a fixed realization of the live group material and I was ready to embrace it. I was going to free the phrases—the instants—from specific temporal

positions in each subsection and encourage the musicians to visit and re-visit them in any order, or even to skip them (see Figure 10.6). The live instrumental parts became non-linear.

<insert Figure 10.6 near here>

Figure 10.6: The complete guitar part score for Intensity X

In James Saunders' *Modular Music* (2008), the following statement succinctly captures some of the benefits of using modules (instants) as part of a work's construction:

For example, reuse of modules in new contexts allows more of the material's potential to be explored through new configurations rather than limiting it with a fixed relation to other material. This is both a creatively valid position and an efficient use of composing time. (Saunders, 2008, p. 154)

These ideas are a perfect fit for my reasons for choosing to place the melodic phrases for the live instruments in boxes floating above the musical ground, but within reach of the musician, empowered to pick one from three to four per section at will. The musician is also given a high-level security clearance to shape the rhythmic values and selected aspects of articulation—both within set and clearly indicated boundaries—in order to discover varying nuances in the instants they choose to visit.

Neil deGrasse Tyson, when discussing the theoretical possibility of time travel (StarTalk, 2014), you envisaged a timeline of this fourth dimension laid out in front of you, where you could "jump in at any point" repeatedly. I've given my musicians a timeline with sets of melodic modules assigned to each section—they've been given the green light to play them in any order, to repeat, or skip them. I know this is not complete freedom, but isn't modularity a path for music to access a higher dimension?

Effectively, rather than face the uphill struggle of making these details fixed against my instincts, I chose to embrace the partly indeterminate nature of that which remained not fully determined following the semi-improvised stage of the composition. I had a very clear plan for which features of articulation would result in the right timbre complexity for each section, but I couldn't decide the exact application of all of them on a note-by-note basis—I wrote this indecision into the piece. I could feel which notes should be longer or shorter in relation to each other, but I couldn't decide exactly how long or short each of them should be—I added this indecision to the score, too. I did know exactly which pitches the notes should be associated with, so this element remained fixed.

But this isn't the whole truth, Bartosz Szafranski. You had no idea you should refer to Intensity X as modular music, even though the evidence was right in front of your eyes. You thought you were working within a textural concept akin to that of Witold Lutosławski—controlled aleatory as opposed to fully indeterminate music (Bodman Rae, 1999; Stucky, 1981). You knew your music sounded nothing like Lutosławski's, but you simply couldn't find a better point of reference. You owe this improved understanding to your doctoral viva examiners, so it was feedback received when you thought you were almost finished. Here's an important question for you: does the chronology of this process matter?

The electronics are fixed and pre-recorded. The instrumental parts are partly indeterminate, modular, and designed for live performance. Arriving at this combination of approaches reflected my process of creating the piece, including the difficulties, and helped me to fully embrace the non-linear nature of composition. Looking at the whole project, any

stage of encountering an issue and making an effort to overcome it only became a struggle, because I thought it reflected badly on the previous stage. I put a plan in place, I found that I couldn't fully implement it, at which point I had two options. First, to go back and change the plan radically to remove the "errors," hoping that this time I'd find the capacity to implement it completely. Second, to go back and modify only the individual aspects connected to issues of execution, retrospectively making these issues an expected part of the process. Their potential to become problems was entirely the question of my reaction to them.

The written component—the dissertation—remained a looming storm cloud throughout the project. Maintaining an "appropriate academic style," or my understanding of it at the time, was part of the problem. Writing the dissertation was like an unnecessary detour that transforms a short and direct journey into an exhausting endurance test. However, in consideration of the relationship between chronology and the development of my musical ideas, through the reflexive autoethnographic process of the present inquiry, I now understand that the expected structure of the dissertation is likely to have been the more cunning saboteur. It disintegrated and obscured the story I am re-writing now with an awareness of the importance of "self," leading to a much more valuable experience and to becoming reflexive. Gouzouasis (2020) identifies the value of becoming reflexive as creating "new meanings and mindful re-interpretations of [the writer's] actions and experiences" and I am inspired by how strongly this connects to the craft of composition. Research aims, repertoire review, methodology, breakdown of the compositional process, and, finally and most uncomfortably, the conclusion—these sections, chapters, and subheadings create a powerfully tempting illusion of tidiness and organization, a light in the abyss of uncertainty, like the irresistible glow of an anglerfish's bait in the pitch black of underwater depths. Early in the process, they imprinted themselves on my understanding of the "correct" approach to completing the practical portfolio, without me realizing that it was contradictory to my "self."

"Self" is the particle that transforms the line into the sphere. With "self" you are always re-writing.

Wait, which one of you said that?

I had undertaken much formal planning, but, in the latter stages of Intensity X, I was working with a newly discovered ability (or newly experienced necessity) to manipulate the surface of the shapes, lines, textures, and colors more freely, revisiting the earlier instants of the process to implement revisions to the theory, based on the knowledge of "how this wild beast lives in the jungle—not in the zoo," also known as practice. I only wish I had fully embraced it and consciously employed it in all aspects of the project, without the internal conflict and the sense of clawing my way out of a pit of failure, which was my experience then.

I'm NASA pilot Cooper in Interstellar (2014), having crossed the event horizon into the singularity of my project, surrounded by a bizarre library of the innumerable moments which constitute it. Autoethnography has drawn me here to look again, and to look closer, at my attempts to write this story—to "observe myself observing" (Ellis, 2013, p. 10). Like the disordered mound of tangled audio tapes you left behind, Giacinto Scelsi, it's overwhelming, But I'm slowly beginning to realize I can access any of the moments at will and that their order is insignificant.

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