S U B F L E C T I O N

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MA by Research.
University of Huddersfield 2014.
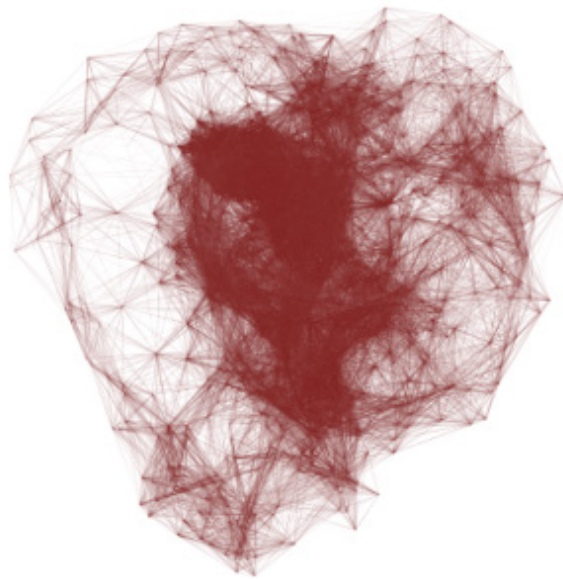
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Introduction

Dear Stranger,

I don't know the reason, why I am writing to you, but I am certain this will not be the last time. I don't know who you are, and to be honest, it is better this way.

I hope you forgive me for sending this coffer, but your address is the only thing I remember. Maybe I have been there, maybe I read it somewhere, or maybe I lived there once. Now, from this hole, I will write to you about my memories, my life and why I am hiding here.

There is something outside this space, waiting to intercept the coffer. The Thing wants to steal my memories because it has none, and knows nothing about our world.

I am forced to camouflage and obscure the texts contained in the coffer so that 'the thing' cannot understand them. I hope you will accept my apologies.

These words begin my story.

The Mirror.

I still remember the first time I saw myself in the mirror. Even today, I cannot explain the image that was reflected, but I can explain the sensations that emerged from that moment until now. Those sensations weren't caught in that mirror; instead, the image was obscuring my reality, my environment and everything that surrounded me. That mirror didn't show me a new world in which I was going to discover new things; I was not Alice and the mirror was not a door, but a wall. The only thing the reflection said to me was: "you cannot change the image that you are seeing".

That sentence was in my head for all those years, years through which I couldn't hold the cruelty and dogmatism of reality.

I wanted to go beyond. I needed to find a mirror in which the image changed whenever I looked; an image that was not my reflection. I thought the subject and the context could coexist together, as form and background, if I changed the subject, the background would change with it.

I started to write blindly, trying to find the way for the static and stationary reflection to come to life. My writings were decadent poetry and numerous surrealist short stories, always describing a subject contemplating vast, lonely environments, surrounded by total darkness. A darkness that took different forms and personalities, but always remained enigmatic to the entities that the subject was shouting at in 'the nothing', seeking answers.

I found, in some way, a sense of peace and stillness through my texts. Had I found the answer? That feeling made me think… why was I quiet when I wanted to battle the mirror? Why had I stopped searching?

I discovered that the quietude was because, when writing, I had put myself in a position of comfort. These texts said what I wanted to hear. They did not provide an answer to my prayer; again that damn mirror and the same damn reflection! Where was the duality? I had failed in my attempt. After that, I fell into a state of apathy. I had given up and had accepted that 'the other' did not exist by itself: it would always be a kind of modification of my individual self.

But then, that dream came, a dream that was repeated night after night and was extended when I was awake, creating an infinite dreamlike feeling. It's been a long time but I can remember exactly what happened.

The Cathedral.

It is very windy here. I look around, but this place is completely closed, not even the enormous chandelier hanging from the ceiling seems to move an inch.

I have the feeling that I have been waiting in this cathedral for a long time. When I go back and look straight ahead it is there, I see it. I cannot recognise its face because, despite being in front of me, I only can see it from behind. It is neither a man nor a woman, but I know the time has come, the wait is over and after this, I

will leave this place forever.

'Who...?', before I have concluded my question, The Other starts talking. I cannot understand because I don't know the language. These aren't words, but a string of abstract sounds. These noises do not seem to come from a person, or anything I have heard before. I cannot relate them to anything. However, they seem to know me and they know the reason for my eternal stay in this cathedral.

I try to get closer, to recognise that being, but my feet seemed to be stuck to the ground with glue and my eyes are frozen, staring at it. In spite of this I can still only see it from behind. It is neither a man nor a woman, but I know the time has come. The wait is over and after this, I can leave this place forever.

A new path has opened in front of me to start searching, and a new language to get to know. In the beginning, I was looking to find a different reflection, a moody, unpredictable and unknown reflection. As well as unknown, it had to be detached from its own reality. Now I have realised, I cannot create a different reflection; the mirror was right! I have to propose a different subject; I have to create *The Other in itself*. If I cannot change reality, I will create an alternate reality.

Having described what led me to this point, now you can understand me a little better. Anyone but you, my perfect stranger, knows this story, and what you will find in the other letters I have sent you.

The product of this exploration is an audio-visual work, entitled *Subflection,* in the dimension of 5760 x 1080 pixels, for three independent screens or projectors. Unfortunately, and despite the importance of preserving its original size, I had to adjust the proportions of the work, so you can view it on a single screen. I will explain my creative process to you, in three chapters:

The_Self: the Romantic Subject and the search of the imaginary, away from reality (the creation of 'the exalted ego').

The_Doppelgänger: Victor Frankenstein and the search for the other (the creation of the 'doppelgänger').

The_Other_in_Itself: a search for the new subject.

Of course, all the things you have read and will read hereafter, are impressions, discoveries and personal reflections on the compositional which arose at the time like a wild 'marabunta' of hungry ants.

At no time do I make a value judgment of any concept of my reflections, or say that I have a universal definition of something. They are a handful of questions thrown into the air, which, despite having no answers, have never been an impediment to me asking the question.

Dear Stranger, I'm sorry if I'm not clear enough in my letters. I have been alone for a long time, and maybe I have lost some of my fluency. I hope you forgive me.

Inside the coffer you will find my story.

Yours sincerely,

E.

The_Self

Dear Stranger,

This is the first chapter of my story, as well as the first step towards finding the new subject in itself. You know as well as I do, every quest needs to suffer, discoveries, changes and mistakes.

If you read my last letter, you will know I am a spirit consumed by despair and disenchantment with my surroundings, a spirit that reacts as Shelley said, with "an invisible power" (Shelley, *Hymn to Intellectual Beauty,* 1817) against the dogma of reality. That is why I would like to talk to you about this piece from the point of view of the 'Subject of Romanticism', which was described well by Margaret Drabble (among others that I will be quoting during this letter) when she said that romanticism "expressed an extreme assertion of the self and the value of the individual experience" (Drabble 1985, pp. 842-43).

She goes on to state that the key attribute of the romantic artist is their imagination. Wordsworth, comments that this imagination results in "an ability of conjuring up […] passions, which are indeed far from being the same as those produced by real events" (Wordsworth 1801, p. 63).

During the run up to the creation of *The_Self*, I have made several attempts towards a compositional work fully unaware of a rational apprehension of reality, as well as from the acoustic environment. I have worked transforming the soundscape expropriating the causality of the concrete sounds, announcing "the substantial transformation of values, from rational to irrational, from the prosaic nature of thought to the mysteries of creativity" (Jouvé 1958, p. 51).

Due to the relentless pursuit of trying to find a way to change reality, I "started by declaring the bankruptcy of human reason, by substituting the unconscious, the subconscious and the mystic for the rational" (Guerard 1942, pp. 47-8).

My new and only friend, my Perfect Stranger; I hope you find the way to reach these sound studies, going beyond the following words,

> "Of all the beauty and the terror there
> A woman's countenance, with serpents locks,
> Gazing in death on Heaven from those wet rocks"
>
> (Percy Bysshe Shelley, *Posthumous Poems* 1824).

The_Self

> "Imagination…
>
> That awful power rose from the mind's abyss"
>
> (Wordsworth 1850, p. 599).

My perfect Stranger, I hope you found the studies.

In *The Self*, I want to tell you how the romantic subject creates its imaginary, and in parallel, how Victor Frankenstein builds his monster. Both personalities synthesised in the same piece; both of them using their imagination in an attempt to create a new object.

I would like to comment on all the work in a "poietic" posture (Nattiez 1990, p. 34), so the analysis will be on the point of view of the creator and not the recipient. I think someone outside the creative process of the work must always undertake the aesthetic exercise, because the composer will always act under his limitations, prejudices and weaknesses.

This piece hybridises three elements belonging to different practices of electroacoustic composition:

transformed soundscapes, concrète sounds, and prepared piano.

"Music as-environment has become an inescapable presence in the public sphere of our lives"

(Westerkamp 2013, p. 227).

Although most theories about the notion of soundscape creation are focused on its documentary/ethnographic and rational representation (Schafer 1977, pp. 15, 29, 43, 53), my aim is to forget the social and global references connoted by the original sound material, to forget its etymophony (Tagg 2012, p. 159) and the "Acoustic Ecology movement" (Schafer 1977, p. 237); to find the imaginary thing through the abstract and ambiguous qualities of the new soundscape as a romantic object. "Untreated field-recordings are used primarily for forensic and academic purposes, a new generation of recordists has emerged, preoccupied with the abstract and formal dimensions of captured environmental sound… This bias reflects an attempt to discover rather than invent" (Dumiel 2000).

The search for soundscapes and found sounds led me to make numerous trips to different locations to gather recordings. My "dérive" (Debord 1958), has been represented by the baudelairian "*Flâneur*", a walker who "has no motive, doesn't carry the memory of his past and doesn't have specific achievements or directions. He is moved by curiosity and he is interested in trivial things, detached from the social and economical conditions of […] society" (Ochoa 2009, p. 4).

I intend to tackle soundscape composition as an unreal (or artificial) invention. This subjective approach places the soundscape in the role of a romantic object. Compositionally, then, space will be generated from complete abstraction, through the deconstruction and processing of field recordings (Truax 1978, p. 126).

"trying to harness imagination and as a result, the mind as source of realities*"*

(González Moreno 2007, p. 86).

During the composition of the piece, I have discovered other composers that, although we have taken similar aesthetic paths, I feel they focus their work too much on listening experience and the sound in itself. I found these aesthetic paths in *Benthic Storm* (López, Azoic Zone, Geometrik 1993), *Out of Range* (Winderen, Touch 2014), *KWH* (Gough, Dérives, UI_Disques), *Pendlerdrøm* (Truax, Islands, Cambridge Street Records 2001), *Grau* (Gough, Birmingham Sound Matter, Audiobulb 2009) or *World Reiceiver* (Inoue, Infraction 2006). These works are composed of transformed soundscapes, moving away from the real sound environment to generate a new object.

In the manner that I have extracted contextual meaning from the acoustic soundscape, I will search for further meaning in concrète sounds. I want to acousmatise those sounds under the romantic perspective, rather than by their physical and acoustic qualities and, as in the other sound elements of my work, in their creation, perception and interpretation processes, not in their listening experience.

In this case, there are other composers who have used the same approach, using processed concrète and found sounds. Some examples of this approach would be: *Arrival* (Wishart, Journey into Space, Paradigm Discs, 2002), *Landing* (Deupree, Room40, 2007), *5 Études de Bruits/Étude aux Objets* (Schaeffer, Disques Dreyfus, 2010), *Hétérozygote* (Ferrari, Electronic Works, BV Haast Records, 1990), *Évidence Matériele* (Harrison, Empreintes DIGITALes 2000), *With What Remains* (Gough, Entr'acte 2008) or *ETC* (Harrison, Vaggigone, Wishart-EMS 2004).

The ramblings about what I was doing on this romantic perspective, trying to create a non-existent thing, imaginary and abstract, have taken me straight to the concepts of copy, portrait and picture that Hans-Georg Gadamer uses in his magnum opus *Truth and Method,* which also takes examples to explain his work of Goethe and Romanticism*.*

Dear Stranger*,* this is not an analysis about the art theory, but a description of the ontological nature of my work.

*"*The essence of a copy is to have not another task but to resemble the original" (Gadamer 1960, p. 133). The

copy just pretends to imitate that to which it refers. It is a copy in the sense that it aims not to be more than the reproduction of something; its only function is to identify it.

By transforming the sound of reality, and as a romantic poet, I was trying to flee the copy, which has a factual example in the concept of portrait. "By way of its own pictorial content, a portrait contains a relation to its original. This does not simply mean that the picture is like the original, but rather that it is a picture of the original" (Gadamer 1960, p. 139).

I don't agree that the garish monsters of reality and rationality were the narrative engine of my composition, or that they identify it, because by "merely describing what is there, the poet is demoted to the role of teaching" (Baudelarie 1868, p. 511).

The desire to create a new reality has demanded that I undeniably accept my aesthetic consciousness, founded on the concept of the experience. At this point, according to Gadamer, is when the portrait-painter becomes a painter, when the portrait becomes a painting. For Gadamer, this change has severe consequences: "for a model is a disappearing schema. The relation to the original that served the painter must be affected in the picture" (Gadamer 1960, p. 139). So when reality and its sounds become a piece, it must necessarily destroy its original statutes.

> "We start from the view that the mode of being of the work of art is presentation and ask ourselves how the meaning of presentation can be verified by what we call picture. Here representing cannot mean copying. We will have to define the mode of being of the picture more exactly by distinguishing the way in which a representation is related to an original from the way a copy is related to an original. For this we need to make a more exact analysis"
>
> (Gadamer 1960, p. 133).

It is this need for the analysis, this duty of deepening in the being of the work, which forced me to use sound elements pertaining to the environment, and to deform them until their perversion.

Like The Flâneur, I didn't care for any specific place; I wandered senseless as Maturin's *Melmoth* wandering through eternity. From this perspective, I have recorded a myriad of sounds from urban, industrial and natural locations, recordings of various specific objects, bioacoustics sounds from mammals and insects, underwater sounds, physical sounds from chemical reactions and architectural sounds of the vibrations of buildings and bridges.

"After having formed this determination and having spent some months in successfully collecting and arranging my materials, I began" (Shelley 1818, p. 33). I learned to use the tools, which would help me complete my work. I imagined Turner's brush in *Shade and Darkness-The Evening of the Deluge*, or the pen of Comte de Lautrémont in *Les Chants de Maldoror*.

I have created my own colour palette, which included, among others, spectrum convolutions, with other samples and resonant materials using FFT and Phase Vocoders, data analysis and resynthesis to create new sounds through spectral modifications, and filtering operations, equalisation and envelope treatment.

> "There can only be a documentary or communicative reason to keep the cause-object relationship in the work with soundscapes, never an artistic/musical one"
>
> (López 1997, p. 6).

My dear Stranger: while I was reading *Selected Poems* of Hölderin, I met Martin Heidegger (who was Gadamer's master) and, I think that his thoughts about art and poiesis are quite related to this piece.

In the way I understand Heidegger, art is not a representation or a reproduction of what already exists, but an exercise "through a certain interpretation of what exists and a particular concept of truth" (Heidegger 1950, p. 68). The Poiesis in Heidegger is a kind of enlightenment, proposing an alienation of the world's mechanisation, and thus regarding the creation and poiesis; a change from the original state of a thing to another one. Through perception, different elements are integrated to generate a new entity. The heideggerian idea can

get close to how I designed this piece and the reasons why it is this way and not another. "The poet, if he is indeed a poet, does not merely describe the semblance of heaven and earth" (Heidegger 1994, p. 144).

I would like to talk to you about the prepared piano in this piece. For the recording I have used a piano in disrepair, with several of its parts broken and completely detuned. I'm not sure if David Tudor would have played it, perhaps only under Cage's orders.

This prepared piano was an answer to something I had been looking at throughout the compositional process of this piece. When I listened to the broken piano, this sonority was, in some way, different than the other sounds which surrounded me: they were an abstract! Could I express the imaginary through the real way? I was reading and looking for answers and finally, I discovered the symbol, which is pretty close to the other concepts with which I was dealing in this piece. I wanted to try using a real sound, but in a different way of interpretation to create the abstract, and this is the reason I composed for broken prepared piano.

I would like to talk to you about the symbol, but Vischer perfectly defined my concept, saying of a symbol that "it does not matter whether the object is imagined or actually perceived: as soon as our idea of the self is projected into it, it always becomes an imagined object" (Vischer 1997, p. 45). And of course, I clung to this idea.

These works are the most important references to the prepared piano in my piece: *Sonatas and Interludes for prepared piano* (Tilbury-Cage, Explore Records 2006), and specifically *Solo for Piano* (Tudor, *David Tudor plays Cage and Tudor*, Ear-Rational records 1993).

All elements of this piece were combined and organised through a specific system of construction, which I have designed with Max/MSP. This system takes different sound excerpts every certain number of seconds, of each element, automatically, and places them along the time line. I did this with every element, but not simultaneously.

I wanted to find a substance to encompass all elements. With this in mind, I remembered my trips to Rome, particularly one when I went to visit an old friend who was finishing his studies in architecture. We visited many buildings; he explained to me, their history and physical characteristics, I listened attentively.

After leaving the great Pantheon, we headed to a small chapel a few minutes away. The Chapel of St. Eustachio, apparently not highlighted in any aspect from any other one, but the reverb was able to subtly merge all sonic activity in a way that caught my attention.

Without further delay, and remembering this event in Italy, I studied convolution reverb and I took a flight to Rome. I went to the Chapel of St. Eustachio and captured the Impulse Response. After that, I used it to create my reverb for the piece. It was just what I needed, dear Stranger, now, my first work had ended.

The romantic author (such as I) had fulfilled his purpose and, had exalted his self through the construction of the imagination, and, in his way, had found sublimity. His creative energy and frustration led him to find, through the dream and imagination, the unlimited, the infinite fullness of being and the Sublime.

Similarly, Victor had built his new and surreal creature by using parts of other bodies, "the dissecting room and the slaughter-house furnished many of my materials" (Shelley 1818, p. 33). Now he intended to observe how his monster came to life.

> "With an anxiety that almost amounted to agony, I collected the instruments of life around me, that I might infuse a spark of being into the lifeless thing that lay at my feet"
>
> (Shelley 1818, p. 34).

I searched through Romanticism, how to create a work away from reality and found it, but although the result was new and abstract, the nature of sound remained physical, part of reality and its boundaries.

I realised the full importance of the self and its creative will that the piece had. The work had all trace of my empirical experience, memories and emotions. I returned to represent myself; again I found myself in the

mirror.

Dear Stranger, I was back at the beginning, I changed the status of self into the exalted self. I had not found what I sought, nor the Sublime. I was still in front of the mirror again and was seeing the same. I had disguised reality; I hadn't built a new one. And born of that sense of revelation is when I want to talk you about the other side of the piece, the moving image.

I wanted to describe the image as the process I suffered when I realised that the imagery that was created was no more than reality amended. This image describes a process of change, from the most abstract imaginary to figurative manifestation.

You can see that during the first few minutes, the image is composed of an indeterminate texture and finally a desolate landscape is revealed. I took some reference from romantic painters, who expressed aesthetically and conceptually what I wanted. Works, such as *The Tree of Crows* (Friedrich 1822), *Snow Storm-Steam-Boat off a Harbour's Mouth* (Turner 1842), *The Cloud* (Cozens 1785) or *Winter Landscape* (Friedrich 1811).

This other side of the piece gave me the opportunity to show that he had suffered a terrible disappointment; in some way I was back to the romantic author, plunged into his miserable existence within the walls of reality, and, like Turner or Friedrich, I wanted to manifest it. The moving image is a composite video from a single plane, which has its own structural unit. I wanted to relate it to the paintings of romantic authors, which I have mentioned above, hence why it is a moving painting.

Although the video is virtually static, it has a "time vectorisation" (Chion 1994, p. 18). It has an abstract beginning, a changing development and a figurative end. I didn't mean to provide a synchronisation between image and video, as despite being linked in parallel in concept, it represents an unusual "audiovisual contract" (Chion 1994, p. 10).

The sound part narrates the construction of the imaginary from reality, and the visual part describes how this imaginary returns to its real origin because it is merely an illusion, a damned costume that I could not discover until the end. This conflict extends to the narrative of both, despite their being formed as textures. The music develops in a dynamic and changing shape while the image development is slow and progressive.

This relationship establishes an "audiovisual counterpoint" (Chion 1994, p. 38), since each element (audio and video) is designed for themselves as separate identities, but compared with one another.

In the next letter, I will tell you about my next piece. The search for The Other and the relationship with its creator through the metaphor of *Frankenstein or the Modern Prometheus*, and the concept of duality of the other as the equal of Sartre and Emmanuel Levinas.

I hope you are still there.

Yours sincerely,

E.

The_Doppelgänger

Dear Stranger,

I am glad to know you are still here reading me. This is the second chapter of my story, my search for the being in itself. After failing in the first chapter and realising that I just disguised the reflection in the mirror and I got only an exalted ego through my research, I propose building the second chapter, *The_Doppelgänger*. As in the first piece, the romantic subject built its imaginary art work and Victor Frankenstein built his monster.

In this chapter, I am going to tell you about the next point in my path, where I will try to design The Other, the different reflection in the mirror, to find the subject in itself. I will explain this point under Mary Shelley's Frankenstein metaphor and the conflict between the subject and the other as the reflection.

After making the exalted ego, I wanted to check if it was possible to generate the duality, the creation of 'The Other' was the next step. I wanted to express a confrontation or a dialogue where the antagonists, who are differentiated by definition, were found together in some point.

This "narcissism of small differences" (Freud 1986, p. 111) has led me to creating a series of previous studies of *The_Doppelgänger* based in duality, the dialogue and the conflict between two parts: the subject and its reflection.

The studies are constructed by two personalities differentiated in each piece, a kind of Dr Jekyll and Mr.Hyde, or a Dorian Gray and his picture. These personalities were instrument and electronics.

I should have given up "but I was still cursed with my duality of purpose; and as the first edge of my penitence wore off, the lower side of me, so long indulged, so recently chained down, began to growl for licence. Not that I dream of resuscitating Hyde; . . . no, it was in my own person that I was once more tempted to trifle with my conscience" (Stevenson 1886, p. 43).

Dear Stranger, I am sorry to put you in the same situation as the last letter, but I can't allow that being to decipher the thing I am sending to you. Beyond these lines, you will find the location of the previous studies to *The_Doppelgänger*,

> ''Leave everything. Leave Dada. Leave your wife. Leave your mistress. Leave your hopes and fears. Leave your children in the woods. Leave the substance for the shadow. Leave your easy life, leave what you are given for the future. Set off on the roads*"*
>
> (André Breton, *Les Pas Perdus* 1924).

The_Doppelgänger

In *The_Doppelgänger* I want to tell you about the next step in the search for *The_ Other_in_Itself,* the different reflection in the mirror. At this point in the process I will treat the topic of the creation of 'the other', and I will do it through Mary Shelley's Frankenstein metaphor. As the previous piece represented a continuous and globalised narrative process, in this piece I split the content into four individual movements with different compositional approaches, each one representing a specific moment in the tale, starring Victor, his creature or both.

Transitions of all movements are made by means of juxtaposition (Bregman 1990, p. 5), where it shows that the juxtaposed elements are not only different, but also disjointed. Prior to the juxtaposition, there are elements in each section, which clarify the change. These elements end in a point of impact, giving way to the next movement.

Dear Stranger, as I have observed in *The_Self* and as you have, I couldn't represent the reflection, the other, the monster of Frankenstein with elements belonging to reality, so I have discovered I could use the computer to create movements concerning the creature, the other. If I used elements generated through the computer, I would be creating a new being and not transforming the existing environment, creating a composition where it is impossible to recognise any human action behind the sound source, in a *"*remote surrogacy" (Smalley

1997, p. 112).

I think I am one step closer to getting what I am seeking, or closer to gaining another answer, whether positive or negative. At least in some way, I managed to remove reality and environment to create the synthetic being, the other. Every movement is composed with a kind of narrative score, extracted with specific fragments from the novel.

1. *Awakening.*

"Darkness then came over me and troubled me, but hardly had I felt this when, by opening my eyes, as I now suppose, the light poured in upon me again"

(The monster. *Frankenstein,* chapter 11).

As already announced, one of the early thoughts of Parmenides; "from nothing, nothing comes", from the hands of Victor Frankenstein and within digital technology, in this case, the artificial creature is born. As I used synthetic, or, it could be more daringly said, virtual, elements to create the monster, so I realised I had committed an act of creation much closer to an orteguian idea of technique (Ortega y Gasset, 1982).

I looked for a way to breathe life into the body that was in front of me, after the resounding failure of the previous process;

"…How can I describe my emotions at this catastrophe, or how delineate the wretch whom with such infinite pains and care I had endeavoured to form? His limbs were in proportion, and I had selected his features as beautiful"

(Victor Frankenstein. *Frankenstein,* chapter 5).

I searched for how to give life to the creature through the methods of digital composition. I found a perfect key to do it, dear Stranger, the principles of glitch or "the post-digital aesthetics" (Cascone 2002), which I think would also symbolise ideas of new Futurism.

"It is from the 'failure' of digital technology that this new work has emerged: glitches […] are the raw materials composers seek to incorporate into their music"

(Cascone 2002, p. 4).

This movement consists of a series of sound events obtained from the data-bending technique belonging to the glitch art. These events symbolise the first moments of the life of the creature as a series of blinks or heartbeats that occur in the immense vacuum, breaking the nothingness.

I gathered these events from data sonification of the first piece, in RAW format. The result of this process is unexpected, since transcoding is done semi-automatically, and it is impossible to foresee the consequences. Through micro editing I have extracted the desired sample, and with digital signal processes (DSP) and application of envelopes and ring modulations, I obtained the first manifestation of life for Victor Frankenstein's monster, or the other.

I thought that for expressing a being born from nothing as a way that overlaps with immense background, in "emptiness-plenitude" (Smalley 1997, p. 121), I needed to place them in different planes. I looked at how to produce an echo that would represent a large space. After searching for a while, I found a warehouse that was perfect for its acoustic characteristics, and especially its reverberation, to represent vastness and emptiness. I followed the capture process and convolution to pick up the reverb explained you in the previous letter.

I wanted to find how to turn my mistake into an aesthetic element of this work, a symbol of life and not of death. I understood that "the glitch is no longer an art of rejection, but a shape or appearance that is recognized as a novel form of art" (Menkman 2010, p. 342).

Awakening is a more minimalistic, abstract and aseptic approach to the aesthetics of failure, being related with *Dataplex* (Ikeda, Raster Noton 2005), *Prototypes* (Noto, Mille Plateaux 2000) and *Time and Space* (Ikeda, StaalPlaat 2000).

The visual part of *Awakening* is a computer-generated graphic, symbolising, like the sound, the creature's birth; they are both aspects of a synthetic character. The graph is shown as an abstracted eye and heart. Being united and representing the same, the two's behaviour is synchronised so that the most significant element of this relationship between sound and image in a vacuum; the beginning of synchresis (Chion 1994, p. 63).

This sound surrounded by silence, is punctual, abrupt and instantaneous. "The punch becomes the moment around which the narration's time is constructed" (Chion 1994, p. 60). Both image and sound have a concrete and immediate temporal animation, acting simultaneously for a very short time, thanks to a rigid synchrony. I wanted to represent an action and an immediate and unique visual relationship, so the "punch" (Chion 1994, p. 60), the synchronous point between audio and video, is the only audiovisual event in *Awakening*, reducing everything to that moment.

This audiovisual relationship represents reducing all to simply existing in isolation. In the thoughts of Levinas (*Time and other*) I found this concept of "solitude of existing".

> "It is by existing that I am without windows and doors, and not by some content in me would be incommunicable. If it is incommunicable, it is because it is rooted in my being, which is what is mot private in [...] the interior relationship par excellence"

> (Levinas 1979, p. 42).

2. *Mutability*.

> "I then reflected, and the thought made me shiver, that the creature whom I had left in my apartment might still be there, alive and walking about"

> " I jumped over the chairs, clapped my hands, and laughed aloud"

> " I imagined that the monster seized me; I struggled furiously and fell down in a fit."

> "But through the whole period during which I was the slave of my creature I allowed myself to be governed by the impulses of the moment";

> "Man's yesterday may never be like his tomorrow;
> Nought may endure but mutability!"

> (*Frankenstein*, chapter 10).

This movement represents the moment that Victor Frankenstein discovers that his monster is alive, and then it suffers a series of episodes of instability and mental and emotional confusion, which mutate. That instability inside the mind of Victor, I managed to represent through a system that also mutated and represented instability and continuous change.

Mutability is an algorithmic composition using Supercollider for an ensemble of eighteen cellists. I wanted to represent that these changes were important and decisive to Victor denoting certain epicness. That is why I used a high number of cellos. I also thought that if I needed to represent instability and confusion, it would be interesting to observe the coordination among eighteen performers. I also needed to generate this in the gesture; it should also have instability in the execution of the music. For this, I used undergraduate cello students to record the composition, allowing them to view the score only a few minutes before recording.

Dear Stranger, I will try to explain the compositional system of this movement as best I can. The ensemble was grouped into three different voices, each of which has minimal tonal and rhythmic variations, but all follow a common scheme.

I chose the set of notes in the manner of Schoenberg's twelve-tone rows, and I find Schoenberg's 'elimination of tone' an important conceptualisation about the nature of mutability, and agree that "the method of composing with twelve notes grew out of a necessity" (Schoenberg 1950, p. 103). We can find this method in *Five Piano Pieces, Op.23* (Schoenberg 1920-1923).

The composition of my piece utilises the Schoenbergian method especially in the first two postulates (Schoenberg 1950, p. 115). The rows consist of twelve notes of the chromatic scale, arranged in a specific linear order; no note appears more than once in each row.

According to the usual notation used for these rows, I have assigned a number to each note. No note can be confused with the tonic, as it is a purely arbitrary and numerical relationship. The basic rows, dear Stranger, would be read as,

Voice I (White)

0	1	4	3	9	2	5	6	7	10	8	11
C	Db	E	Eb	A	D	F	Gb	G	Bb	Ab	B

This voice is the basic row of the movement, and is performed by two groups of cellos. The remaining group uses the same numerical order, but transposed a perfect fifth upwards. That is, if we call the white voice as B_0 (basic row), the black voice is B_5, and it will be as follows,

Voice I (Black)

7	8	11	10	4	9	0	1	2	5	6	3
G	Ab	B	Bb	E	A	C	Db	D	F	Gb	Eb

Aleatoric Music is a fundamental feature of the idea of instability in this movement, as well as the idea of mutation as a cause of the indeterminate character of the composition. The kinds of aleatoric techniques, I used were inspired by works like *Klavierstück XI* (Stockhausen, Klavierstück I-XI, CBS/Sony), *Music of changes* (Cage, Wergo 1982) and earlier pieces such as *String Quartet Nº3* (Conwell).

Now, dear Stranger, confusion, uncertainty, and instability begin to take their place in the piece. The first element of randomness introduced debunks the initial classical dodecaphonic aesthetic. In each of the notes of the rows, the algorithmic system will choose between sounding the note or keeping it silent, according to a probability alternately weighted 60% chance of sound against 40% of silence, and 70% versus 30%. We can find a perfect example of composition with probability in *Phitoprakta* (Xenakis, Le Chant Du Monde 1965) or *Daisy* (Luque 2011).

Thus, inversion processes, demotion, etc, on the twelve-tone row ostinato, do not define the composition but the decision of the row itself, which carries out the random silence. Each note in the series may be in a different octave, chosen at random by the algorithmic system, within the tessitura of the cello.

Another aspect consists of the rhythmic figure that takes each note of the series (whether it is silent or not). Each of the three groups interpret rhythms with different subdivisions on a common tempo: the first group of cellists plays figures of binary subdivision (1 or ½), the second group of ternary subdivision (1/3 or 2/3), and the third group, quintuplets (1/5 or 3/5).

During these states of instability, Victor loses partial or total reference to reality, so I used this contraposition of different rhythmic subdivisions, which causes a loss of the notion of a common tempo between instruments, and replaced this with a texture of notes that are fluctuating or clashing through cyclic permutations.

I found especially unstable and confusing permutations in the work of John Luther Adams *For Lou Harrison* so I relied on that work to create mine. We can find also cyclic permutations in *Lyric Suite* (Berg 1926).

The possible rhythmic values vary only in a special moment, when each group of cellists reach the last note of their corresponding twelve-tone row, they will play a sustained note for a random duration.

This break separates each cycle; the evolution of the piece over time is a cyclic permutation. For instance, the White Voice 'will die' when it has completed the following scheme,

0	1	4	3	9	2	5	6	7	10	8	11
1	4	3	9	2	5	6	7	10	8	11	0
4	3	9	2	5	6	7	10	8	11	0	1
3	9	2	5	6	7	10	8	11	0	1	4
9	2	5	6	7	10	8	11	0	1	4	3
2	5	6	7	10	8	11	0	1	4	3	9
5	6	7	10	8	11	0	1	4	3	9	2
6	7	10	8	11	0	1	4	3	9	2	5
7	10	8	11	0	1	4	3	9	2	5	6
10	8	11	0	1	4	3	9	2	5	6	7
8	11	0	1	4	3	9	2	5	6	7	10
11	0	1	4	3	9	2	5	6	7	10	8

After explaining to you the compositional process of *Mutability*, I would like to tell you about its visual part. This part is made of three abstract shapes using Quartz Composer, in order to materialise instability and mutation. I have developed a digital animation based on a kind of attractor whose movements are random and unstable.

As *The_Self*, the relationship between moving image and sound is an audiovisual counterpoint, because both are designed in an independent way, but compared to each other and related conceptually. They do not synchronise, but in both of them it is possible to perceive the same behaviour. The general movements of the attractors in time don't work in a vectorial way because they don't have a future orientation.

However, they do have a set of visual micro-rhythms caused by the physical properties of the designed attractor and their fluctuating movements.

3. *Steps*.

"It is with considerable difficulty that I remember the original era of my being; all the events of that period appear confused and indistinct. A strange multiplicity of sensations seized me, and I saw, felt, heard, and smelt at the same time"

(*Frankenstein*, chapter 11).

Dear Stranger, it is at this point when Frankenstein's monster takes its first steps into the world. The monster begins its empirical development through learning and begins to inscribe its tabula rasa with vital experiences.

I wanted to represent this learning process as a continuous and predictable narrative sequence. The creature goes through three main states in its early stages, and therefore this movement does the same. The first state is that of loneliness and emptiness, the second of insecurity about everything around, and the third on the beginning of learning and discovery. For composing this movement I have drawn on the logical sense of the process that the creature suffers, not in each phase independently.

To determine this logic, I have created a rhythmic sequence of algorithmic digital synthesis, which consists of a wide palette of sounds in several layers. In this case, the algorithmic system has a closed and totally predictable function that doesn't give way to indeterminacy, as I have wished it to be. "Leibniz conceived of a calculating language defined by two and only two figures: 0 and 1. Leibniz developed this system to express numbers and all operations of arithmetic-addition, subtraction, multiplication and division" (Steiner 2012, chapter 2).

Regarding the rhythmic sequence and sensation of repetition, I want to express the idea of a logical development and continuous narrative rather than loop. I say sensation, dear Stranger, because that is not an actual repetition, as in each cycle there are changes which are difficult to perceive, but this term helps

to provide narrative, as "[a] phrase that sounded arbitrary the first time, might come to sound purposefully shaped and communicative the second" (Margulis, 2013).

You can find examples of algorithmic composition within this aesthetic approach in *Multistability* (Fell, Raster Noton 2005), *Tender Love* (SND, Mille Plateaux 2005) or *Cyclo* (Cyclo, Raster Noton 2001). These works are structured by algorithmic patterns which bear a linear narrative and a generally predictable behaviour, despite having many changes, like the development of *Steps.*

Dear Perfect Stranger, I would talk about the visual part that completes this section. Like *Awakening*, the fundamental aspect of the relationship between sound and image is a synchrony with the relationships that entails, as well as the fluctuating behaviour similar to *Mutability.* The moving image is composed by three computer-generated graphics that symbolise the three stages defined above within the first moments of learning for Frankenstein's monster.

The other key aspect of the moving image in this section is the selection of colours. The colour of each graph corresponds to a different state within the classification of Eva Heller's colour psychology. The graphic on the left represents loneliness and emptiness (# A8A7AD), the middle graphic represents uncertainty (# D5C5AE), and the right one represents novelty, the new aspects that the monster is discovering (# B0CEB6).

4. *The Clash.*

"I will work at your destruction, nor finish until I desolate your heart, so that you shall curse the hour of your birth"

(The Monster. *Frankenstein,* chapter 16).

"Oh Night, and the spirits that preside over thee, to pursue the daemon who caused this misery, until he or I shall perish in mortal conflict"

(Victor. *Frankenstein,* chapter 24).

Dear Stranger, this is the last and, together with the first one, the most important movement of *The_ Doppelgänger*, in which the conflict between Victor and his monster occurs. It is at this point that subject and object are fighting and trying to overlap each other, trying to create the true duality, such that they "feel the "repulsion" of the object, and hate it; this hate can afterwards be intensified to the point of an aggressive inclination against the object-an intention to destroy it" (Freud 1925, p. 137).

I wanted to portray the conflict as a moment of confusion, where the actions of the two personalities will battle undefined. I have written a movement for violin, bass saxophone, trumpet and computer, based on a sound mass, constantly changing. I wanted to replace the melody, rhythm and harmony in the orchestration with the importance of the behaviour of the spectrum, and for the whole, not each individual item, because I wanted to represent a texture. After all, the two quotas are the same.

The piece consists of twenty different voices. Ten voices were obtained directly from the instruments, using a graphic score and parts of the novel in which Victor and his creature were fighting verbally, and ten obtained by a computational process. Each of these voices will perform based on a specific literary fragment and a line of graphic score. After playing a fragment, the same instrument will play a hypothetical answer, chosen by the performer in reference to literary fragment that has been assigned in reference to the next line of the graphic score. The computer will process this answer. With this system I have managed to find a section, which depicted the conflict, disorder, and confusion that characterised duality and similarity between Victor and his monster.

As you have seen, dear Stranger, I have made use of the principles of Spectral music to compose *The Clash*, and you can find references to this type of composition in works like *Hyperion* (Haas 2006), *Gondwana* (Murail, Naïve 2003), *Dèrives* (Grisey, Erato 1981), *Natura Renovatur* (Scelsi, ECM 1963) or *Kraanerg* (Xenakis, Asphodel 1997).

I suppose you have figured out that now I will give an explanation about the visual identity of this movement.

The moving image of The Conflict is originated from an interactive graphic computer system using Quartz Composer and OpenGL, This system generates a complex digital graph through a webcam sensor, interpreting shapes, movements and colours captured by the camera. I designed this system because I wanted to express, as in the sound, the idea of conflict and duality, two personalities being that created the image.

As in the previous movement, the behaviour of the image over time is not a vector. It does not have a development towards a point, but rather their animation is closer to the idea of a sculpture that is mutating in an abstract way. I would like to call the behaviour of the image shaping and not development.

All the visual parts of *The_Doppelgänger*, from the type of digital composition to the behaviour over time, bear very close resemblance to *Seismik* (Kolgen 2013), *Rheo* (Kurokawa 2010), *Eff-Lux* (Sisman 2012), *The Existence of Time* (Barri 2012) and *Syn_* (Kurokawa 2014).

Reflecting on duality and conflict in this movement while I was composing, I kept thinking of Sartre and his thoughts on self and other in his work *Being and Nothingness*. Therefore, it influenced me throughout this piece and in the relationship with the equal and Frankenstein.

I have been able to create an object entirely away from reality with the digital thing, but like Victor Frankenstein, I had created an equal who behaved as I expected and knew its next step when I was seeing it. I was no longer myself as in the first piece, but even being another thing, I could recognise me. That is, dear Stranger, I am still facing the same reflection *because* my "neighbour is a representation of myself" (Sartre 1993, p. 45).

I had created a new reflection, but an identical reflection to myself, or very similar because when I looked, "what I could perceive in that face, was but the effect of certain muscle spasms. These, in turn, are just the effect of a nervous impulse through a path I recognise" (Sartre 1993, p. 145).

What I had created "was a cognisant substance, of the same essence as me, which could not be dissolved into secondary and primary characteristics, and whose essential structures I find in myself" (Sartre 1993, p. 144).

Dear Stranger, I barely have the strength to go on, but I will use all that I have left in the last attempt to change the reflex, for creating *The_Other_in_Itself*.

There is one last letter, in which you will discover what happened in the end, so I hope you are still here to read it.

Yours sincerely,

E.

The_Other_In_Itself

Dear Stranger,

This is the third and last letter I'll write to you, because this is the last stage of the process in which you have been with me from the beginning. As you know, I have failed again in *The_Doppelgänger*, although some to extent I had a feeling that was going to happen. Maybe that is why I have used the metaphor of Frankenstein, because I knew the end, but I should portray it as an important step in the development of this search. The use of digital synthesis has given me the opportunity to *"create what otherwise might never happen"* (Brün 1970, p. 2), but still, it was predictable and limited as it was a neighbour, an equal.

I think it's convenient to have thought the other as the neighbour/equal in *The_Doppelgänger* to create *The_Other_in_Itself*, as well as to have created an exalted ego in order to create the other as the neighbour/equal. I am satisfied that I have established a logical development in the three pieces and having come to this because all the steps above have led me to this point.

In this chapter I will discuss *The_Other_in_Itself,* through non-objectified (I will explain the definition of this later)/generative digital synthesis, an object that ceases being an object and becomes a subject. I will try, as far as possible, to create a piece that is able to behave autonomously, being infinite, unpredictable and sublime.

As in other cases, I wrote four previous studies to *The_Other_in_Itself*, based in not-objectified/generative algorithmic composition systems. These samples are each a few minutes in duration, since it is impossible to record the complete works, as they are endless. Two of the studies are made from digital synthesis, one with ambisonic spatialisation and the last in multifocal for eight channels (both adapted to stereo for this time). Another study is written for choir and computer in multifocal system for six channels (recorded in a church with stereo microphone pair). I had the participation of the student choir of University of Huddersfield to record the samples, and sent this audio into the computer to code its generative behaviour. The last of the studies is for harp and computer, following the same system as the previous study, but for this piece I have only used one short sample of the harp.

As it has already become a tradition in these letters, you have to find the location of previous studies to *The_Other_In_itself* beyond these lines,

> "They surround him on every side, sinking their jaws into his flesh, tearing their master to pieces in the deceptive shape of the deer"
>
> > (*Metamorphoses*, Ovid).

The_Other_In_Itself

> "Infinity and Eternity are twins"
>
> (Brün 2003, p. 37).

Dear Stranger, I must confess that I can't explain how I am feeling right now, and what it has meant to have found a way to change the reflection in the mirror. I'm still not sure if I have completely achieved it, but I'm sure the mirror is no longer a wall as it was at first, but finally ... a door.

> "Door: Why it's simply impassible!
> Alice: Why, don't you mean impossible?
> Door: No, I do mean impassible (chuckles). Nothing's impossible!"
>
> (*Through the Looking-Glass, and What Alice Found There,* Carroll).

The_Other_In_Itself is the closure of *Subflection* with the creation of the being itself through an autonomous system generated by computer. As I have told you in previous lines, I'm not even sure if it is definitive, but the

door opens to a world where the human being and everything surrounding him remains in the background, or at least it is questioned by another identity able to stand up. Through the creation of this system, I found that "machine takes me by surprise with great frequency" (Turing 1950, p. 12) and that is something I could have never experienced in the previous pieces of *Subflection*. I have learned to consider the computer and the thing that generates it, not as a tool but as a door, or even a being in itself.

I knew this would lead me to wonder about concepts like artificial intelligence, the idea of the cyborg, and the man-machine question. Of course, my intention is not to delve into topics of computational theory or to rephrase this question that Turing posited: "can machines think?" (Turing 1950, p. 1). I wanted to complete this quest by creating a work whose synthetic intangible content (not belonging to the reality) was autonomous, different each time, infinite, and not having similarities with humans or its surroundings.

I have searched for some time how to create a computer-based autonomous system and all readings led me to generative music. This concept was often defined having previous, more basic approaches by figures such as Kircher, Maelzel, Cage, Stockhausen or Brian Eno. As Brian Eno, "I was flirting with ideas of making a kind of endless music, not like a record that you'd put on, which would play for a while and finish. I like the idea of a kind of eternal music, but I didn't want it to be eternally repetitive, either. I wanted it to be eternally changing" (Eno 2013).

Dear Stranger, when I started studying generative music I stopped at some interesting composers who based their music in algorithms, rules and computer systems, such as Berg, Koenig, Roads or Brün.

I have continued my exploration to find special systems known as generative, and have discovered that most of them were based on physics, genetics, biology, data- mapping and emergence. Thus, their approach was very close to science.

Dear Stranger, I think creating an autonomous composition based on biologic/genetic or emergence systems was a mere mimic of the behaviour of existing life forms or data-mapping, so I discarded the idea of creating the piece through these systems. Obviously, there were aspects that he shared with these perspectives, for instance that "in essence, all generative art focuses on the process by which an artwork is made and this is required to have a degree of autonomy and independence from the artist who defines it" (McCormak 2012, p. 4).

This piece was written from four sets of algorithmic synthesis with Supercollider. These were controlled by a series of random patterns, which generated and modified their behaviour in an infinite way, without committing to a model or an actual algorithm. I couldn't take an existing model based in real life or data sonification, because I would return to the start point, regarding reality and the mirror. Three of the four algorithmic systems were conjugated to one another as a complex and changing texture, and the fourth generated a number of sound particles as "microsounds", (Roads 2001) exempt from the texture.

During the whole process I have been trying to get away from reality, to change the mirror's reflection so, in an attempt to avoid controversy by adapting the term to my work, I have decided to invent the term 'not-objectified music' instead of generative music. Why this name, dear Stranger? I have related the composition of *The_Other_In_Itself* more with ideas about freedom, autonomy and the moral subject of Immanuel Kant, than emergence systems or artificial intelligence.

This piece became, once and for all, a subject itself, whose behaviour I couldn't predict and had nothing related to my equals, the environment around us, or me. I have checked the algorithms for emergence/ genetic/biologic models, which were subject to rules. These algorithms learned to react to stimuli, survived, are subject to change for determined reasons, etc., and under my perspective "it is by no means to be inferred that we have treated it as an empirical notion" (Kant 1785, p. 21).

Why is *The_Other_In_Itself* free and behaves as a subject? Why does it act under its own individual principles? Because I didn't grant it the benefit of causality, I did not give a reason or excuse for its actions. I was not objectifying it or holding it to a causal determinism, which would be its vital engine, as happened with Frankenstein's monster.

The 'not-objectified' system had no reason to make one choice or another, since it was free from contextual,

biological or empirical influences, unlike the common generative models and, in general, all living beings or that which relates to our reality. Their actions do not argue with causality or empirical principles of "the peculiar constitution of its nature" (Kant 1785, pp. 55-56), because their nature is abstract and intangible.

As I have explained in my first letter, I will not say that is a strong truth, and I won't take anything for granted, I am just showing the result of my reflections. As the Kantian autonomous subject, this piece is not objectified, because "freedom of will is the ability to not be bound to act by natural causes" (Kant 1785, p. 59).

The_Other_In_Itself's identity and its "alternative intelligence" (Goodiepal 2004, p. 15) is independent of every being belonging to our world, because "the moral value of an action resides neither in the effect it's expected to have nor in any principle of the action that must derive its foundation from that expected effect" (Kant 1785, p. 14).

After all, dear Stranger, now the mirror has become a door and the reflection is an image I don't know, and it's different every time I look.

Cage said that randomness in music would expropriate the creator's ego, but in not-objectified or generative music, this idea goes far beyond. Through that door, I have discovered that my piece had robbed me of the identity of creator, being now its own owner, and myself, who built it. But it is the piece who decides how to behave, and ultimately who, or what, it is. Through that door we could also question how the idea of the artist, musical gesture, and the perceptive concepts of time, narrative, repetition, memory and intuition will become different and illusory.

You can find a similar process in terms of generative and systems music in *Acid in The Style of David Tudor* (Hecker, Mego 2009), *Surveillance* (Luque 2011), *Esstends-Esstends-Esstends* (Vida, Pan 2012), *Elseif* (Gilmore and Rogers, Entr'acte 2006), *Harder Posher Pinker* (EVOL, RRS 2013) or *Autonomous and Dynamical Systems* (Dunn, New World Records 2007).

Regarding the moving image, I have designed three digital graphics using meshes and vectors through the combination of OpenGl and After Effects. This graphics were originated from tiny shapes like cells, grown in an abstract way as to get lost towards the limits of the screens. Through these graphics I wanted to express the infinite and sublime character of the piece; "another source of the sublime, is infinity; if it does not rather in some sort belong to the last. Infinity has a tendency to fill the mind with that sort of delightful horror, which is the mist genuine effect, and truest test of sublime" (Burke 1909, p. 52).

These shapes represent the birth of a cell (the other in itself) and their progressive growth, being impossible to determine their size and magnitude. "The sense of the sublime here arises through the consciousness of the vanishing nothingness of our own body in the presence of a vastness" (Schopenhauer 1818, p. 273).

The behaviour of the images was vectorial, their development linear over the time. This vectorisation was the method to express the indeterminate growth of the cells. Both image and sound had an arbitrary but regular and uniform development, insomuch as they are subjected to the idea of infinity by Burke, who stated, "succession and uniformity of parts are what constitute the artificial infinite. Succession; which is requisite that the parts may be continued so long and in such a direction […]. Uniformity; because if the figures of the parts should be changed, the imagination at every change finds a check; you are presented at every alteration with the termination of one idea, and the beginning of another" (Burke 1909, pp. 52-53).

The moving image is composed of a single plane during its growth, when an unexpected change occurs. This change is not a contradiction to the Burkean idea, since it was only a zoom in within the shapes during the same process.

The comparison between sound and image was an audiovisual counterpoint. They were created independently, but have a relationship with each other; their behaviour over time was the same, and the same concepts were expressed. Each module of synthesis was linked to a different part of the graphics.

You will find a similar visual approach on digital cells, vectors and nodes in works such as *Struct* (Haiman 2013), *Cellular Forms* (Lomas 2014) or *Oscillating Continuum* (Kurokawa 2014).

Dear Stranger, with this letter I end Subflection, and I would write a conclusion, but the whole process is full of them in every corner. That 'thing', my creation, is waiting outside (or so I think). It seems, that my experience is not so far from that of Victor Frankenstein's, after all.

I have given life to that subject and, although not of this world, and not created from sources of the world, and neither is it governed by its rules, I have feared that, that small part that we share (it was me who created it), will bring it again looking for answers.

I don't know how many times I will be here, but I will put myself in the mirror, and decipher that reflection which is changing and infinite, which… now exists.
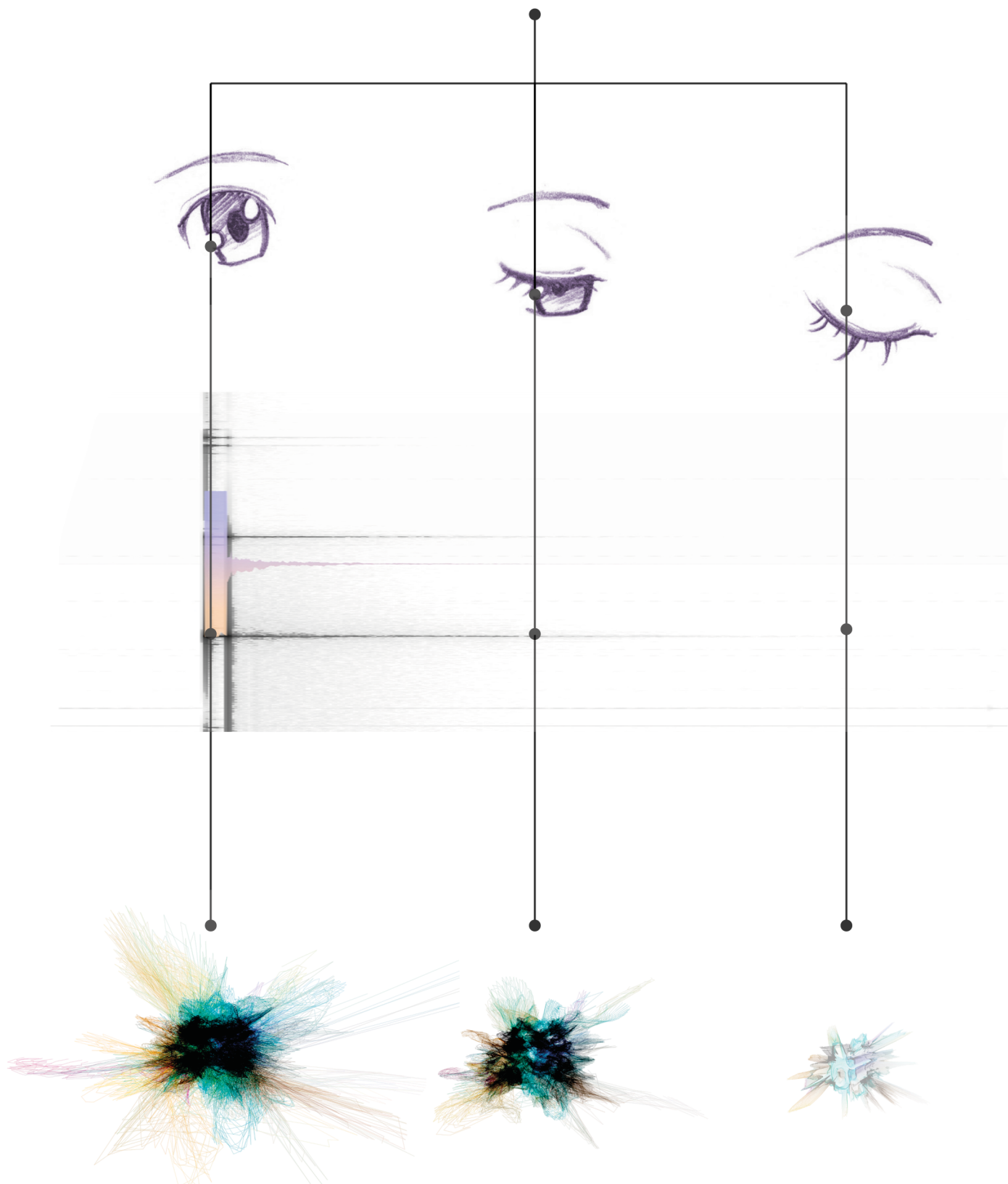
Yours sincerely,

E.

Scores

[*The_Self*]
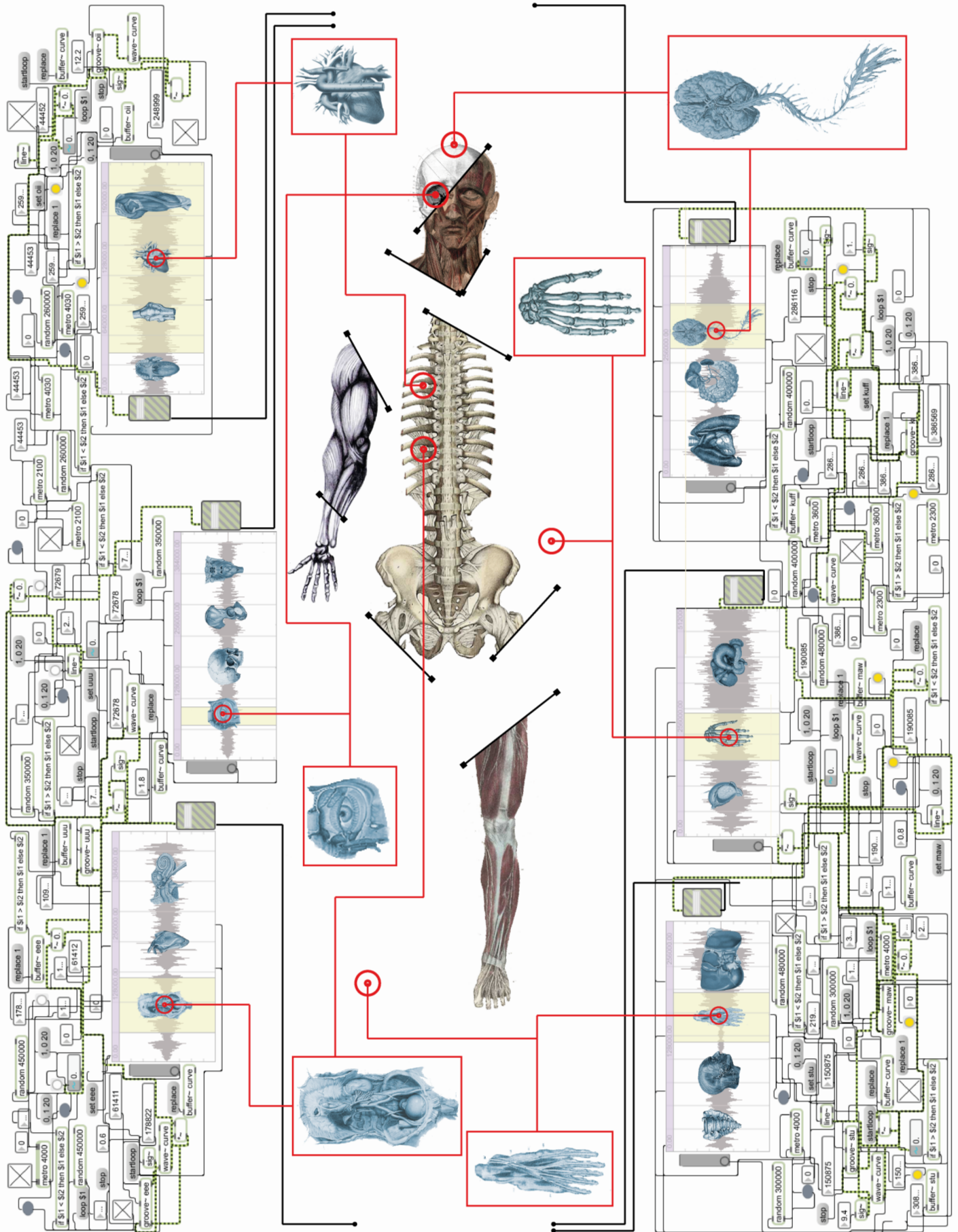
[The_Self]
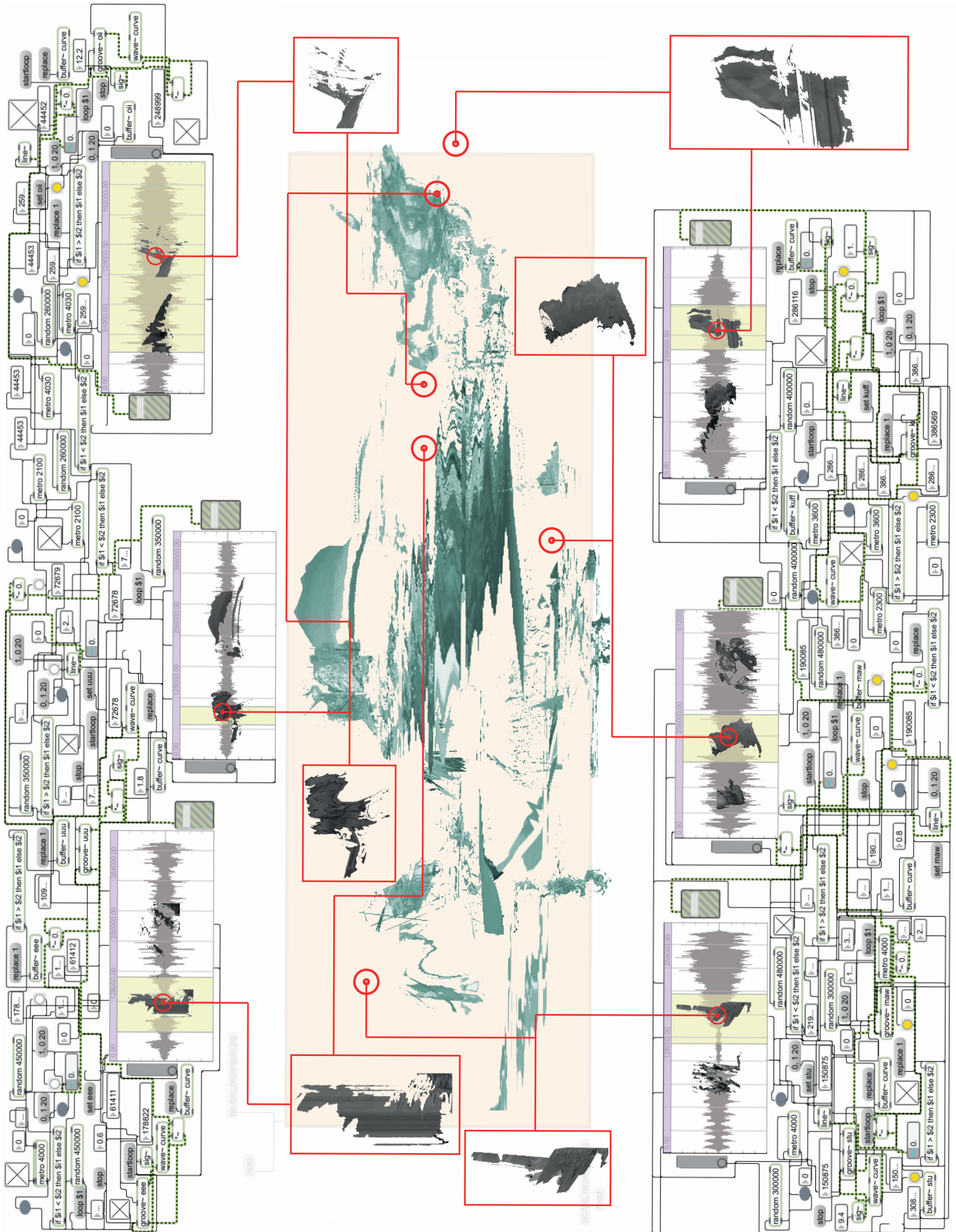
[*The_Doppelgänger-Awakening*]

"Darkness then came over me and troubled me, but hardly had I felt this
when, by opening my eyes, as I now suppose, the light poured in upon me
again"

[The_Doppelgänger-The Clash]

[harmonics & notes]

[multiphonics & notes]

[multiphonics, notes & harmonics]

[code]

"You are my creator, but I am your master; obey"

"Oh night, and the spirits that preside over thee, to pursue the daemon who caused this misery, until he or I shall perish in mortal conflict"

"I was hurried away by fury; revenge alone endowed me with strength and composure"

"Villain! Before you sign my death-warrant, be sure that you are yourself safe"

"Man, you shall repent of the injuries you inflict"

"There can be no community between you and me; we are enemies"

"My rage was without bounds; I sprang on him, impelled by all the feelings which can arm one being against the existence of another"

"And, oh! That I could, with the extinction of your miserable existence, restore those victims whom you have so diabolically murdered!"

"Devil, - I exclaimed, - do you dare approach me? And do you not fear the fierce vengeance of my arm wreaked on your miserable head? Begone, vile insect! Or rather, stay, that I may trample you to dust"

"I will work at your destruction, nor finish until I desolate your heart, so that you shall curse the hour of your birth"

[Behavioural examples of some seconds]

[Nor-Objectified Patterns]
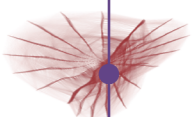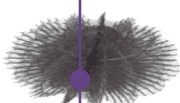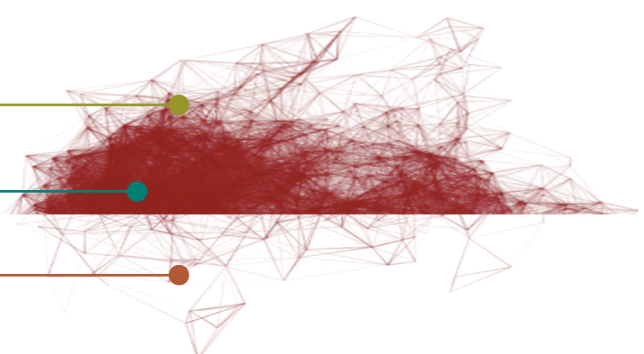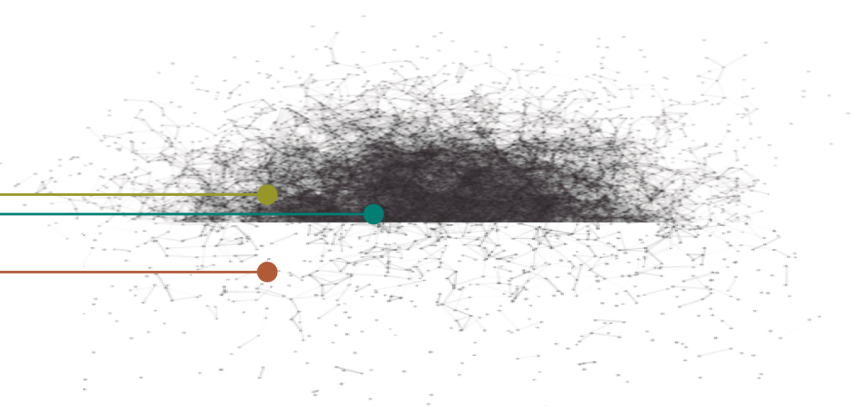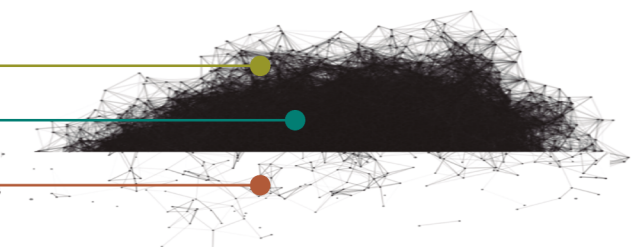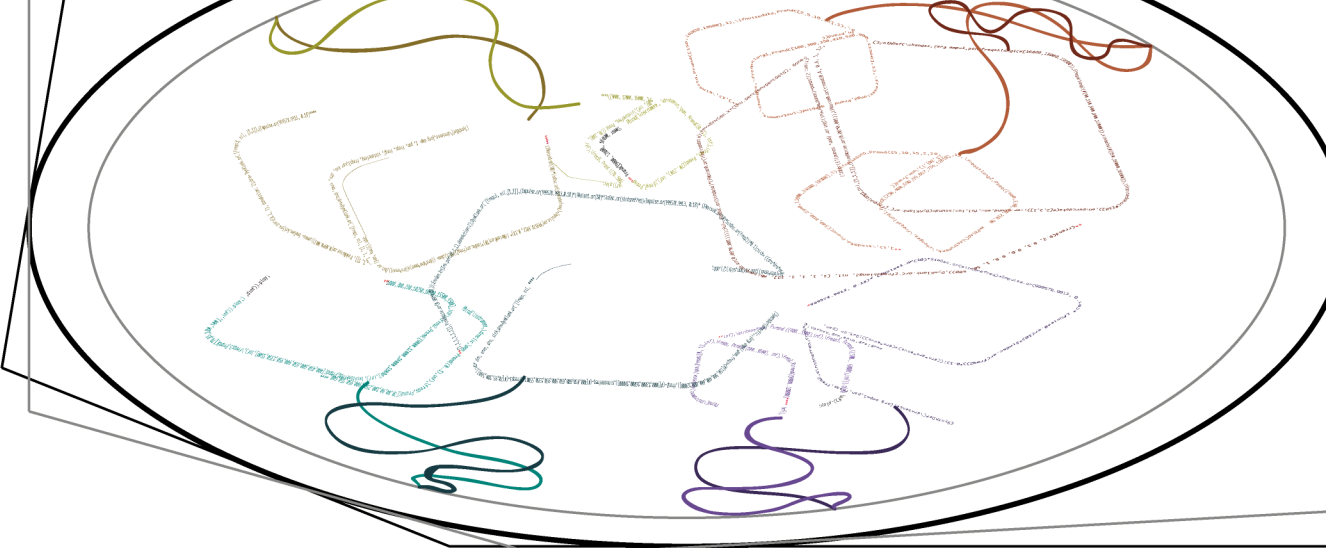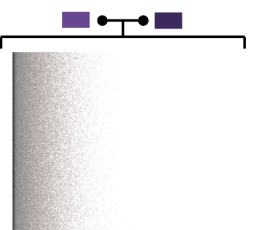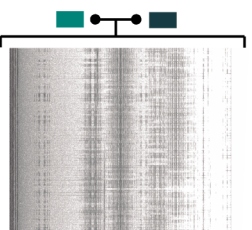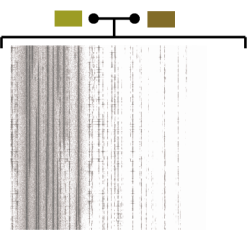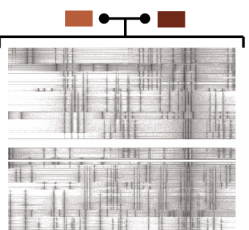
[Sound Constructors]

[The_Other_In_Itself]

Bibliography

BIBLIOGRAPHY

Augoyard, J. F., & Torgue, H. (2005). *Sonic experience: a guide to the effects of sound*. Montréal: McGill-Queen's University Press.

Bailey, T. B. W. (2012). *MicroBionic*. US: Belsona Books Ltd.

Baudelaire, C. (2007). *Complete Poems*. Manchester: Fyfield Books.

Baudelaire, C., & López Castellón, E. (2007). *Las flores del mal*. [Flowers of Evil]. Madrid: Edimat Libros.

Berg, P. (2009). Composing Sound Structures with Rules, *Contemporary Music Review, 28*(1), 75-87.

Brün, H. (2004). *When Music Resists Meaning: The Major Writings of Herbert Brun* (Pap/Com edition.). Middletown: Wesleyan University Press.

Burke, E. (2008). *A philosophical enquiry into the origin of our ideas of the sublime and beautiful*. Oxford: Oxford University Press.

Carroll, L. (2005). *Alice in Wonderland: and Through the Looking Glass*. Dublin: Penguin Random House.

Cascone, K. (2002). The aesthetics of failure, "Post-digital" tendencies in Contemporary Computer music. *Computer Music Journal, 24*(4), 12-18.

Cubitt, S. (1998). *Digital Aesthetics*. London: Sage Publications.

Day, A. (2011). *Romanticism* . New York: Routledge.

Debord, G. (1995). *Les Lèvres Nues.* Paris: Allia.

Drabble, M. (2000). *The Oxford companion to english literature*. Oxford: Oxford University Press.

Echauri, R. (1994*).* Sobre el origen del ser y la nada, *Acta Philosophica, 3*(2), 315-325.

Emmerson, S. (1986). *The Language of electroacoustic music*. London: Macmillan.

Fineberg, J. (2000). Guide to the basic concepts and techniques of spectral music, *Contemporary music review, 19*(2), 81-113.

Freud, S. (2010). *El malestar en la cultura*. [Civilization and Its Discontents]. Madrid: Biblioteca Nueva/Digitalia.

Goodiepal, (2004). *Radical Computer music & Fantastik Mediemanipulation*. Copenhagen: Pork Salad Press.

Harley, J. (1995). Generative Processes in Algorithmic: Chaos and Music. *Leonardo, 28*(3), 221-224.

Harley, J. (2011). *Xenakis: his life in music*. New York: Routledge.

Heidegger, M. (2003). *Holzwege.* (R.J. Armengol, Trans). Frankfurt: Vittorio Klostermann.

Heller, E. (2005). *Psicologia del Color*. [Colour Psychology], (J. C. Mielke, Trans). Barcelona: Editorial Gustavo Gili.

Hugill, A. (2012). *The Digital Musician* (2 edition). London: Routledge.

McCormack, J. & Dorin, A. (2001) Art, Emergence and the Computational Sublime, Second Iteration. *Proceedings of the Second International Conference on Generative Systems in the Electronic Arts, 5(*7), 67-81.

Johnson, R., Mattern, J., & Stevenson, R. L. (1999). *The Strange Case of Dr. Jekyll and Mr. Hyde*. Kansas: Econo-Clad Books.

Jouve, P. J. (2006). *Tombeau de Baudelaire.* Saint Clément de Rivière: Fata Morgana.

Kahn, D. (2001). *Noise, Water, Meat: A History of Sound in the Arts* (first Edition). Cambridge: The MIT Press.

Kant, I. (2012). *Kant: Groundwork of the Metaphysics of Morals*. Cambridge: Cambridge University Press.

Kant, I. (2005). *Crítica del juicio*. [Critique of Judgment], (R.J. Armengol, Trans). Buenos Aires: Losada.

Kim-Cohen, S. (2009). *In the Blink of an Ear: Toward a Non-cochlear Sonic Art* (1 edition). New York: Continuum International Publishing Group Ltd.

Kirke, A., & Miranda, E. R. (2009). A survey of computer systems for expressive music performance. *ACM Comput. Surv, 42*(1).

Lander, D., & Lexier, M. (2013). *Sound By Artists* (Facsimile edition). Toronto: Charivari Press & Blackwood Gallery.

Landy, L. (2007). *Understanding the art of sound organization*. Cambridge, Mass: MIT Press.

Landy, L. (2012). *Making music with sounds*. London: Routledge.

Levinas, E. (1987). *Time and the Other* (New Ed edition). Pittsburgh: Duquesne University Press.

López, F. (1997). Schizophonia vs l'object sonore: soundscapes and artistic freedom. *CEC, 1*(4).

Marc Battier (2007). What the GRM brought to music: from musique concrète to acousmatic music. *Organised Sound*, *12*, 89-202.

Margulis, E. H. (2014). *On Repeat: How Music Plays the Mind*. New York: Oxford University Press.

Menkman, R (2010). *Glitch studies manifesto*. *Video Vortex Reader II: moving images beyond YouTube*. Amsterdam: Institute of Network Cultures.

Miranda, E. R. (2002). *Computer sound design: synthesis techniques and programming*. Boston: Focal Press.

Molinuevo, J. L. (1998). *La experiencia estética moderna*. [The modern aesthetic experience]. Madrid: Síntesis.

Molinuevo, J. L. (2004). *Humanismo y nuevas tecnologías*. [Humanism and new technologies]. Madrid: Alianza Editorial.

Moreno, B. G. (2007). *Lo sublime, lo gótico y lo romántico : la experiencia estética en el romanticismo inglés*. [The Sublime, gothic and romantic: the aesthetic experience in english romanticism]. Cuenca: Universidad De Castilla-La Mancha.

Nattiez, J.J. (1990). *Music and Discourse: Toward Semiology of Music*. Princeton: Princeton University Press.

Nierhaus, G. (2009). *Algorithmic composition paradigms of automated music generation*. Wien: Springer.

Ochoa, R. (2009). *The importance of the walk in the analysis of public spaces.* Understanding the Post-Industrial City: Metropolis, Urban Renewal, Public SpaceJoint PhD Seminar. Lisbon 2009.

Rampley, M. (1997). From Symbol to Allegory: Aby Warburg's Theory of Art. *The Art Bulletin*, *79*(1), 41-55.

Roads, C. (2004). *Microsound*. Cambridge: MIT Press.

Roads, C., & Strawn, J. (1985). *Foundations of computer music*. Cambridge: MIT Press.

Russell, R. C. J. (2012). *Radical Computer Music*. VSD.

Russolo, L. (1987). *The Art of Noises*. New York: Pendragon Press.

Sartre, J.P. (2003). *Being and Nothingness: An Essay on Phenomenological Ontology* (2 edition). London: Routledge.

Sauer, T. (2009). *Notations 21*. New York: Mark Batty Publisher.

Schaeffer, P. (2007). *Tratado de los objetos musicales/ Treatment of Musical Objects*. Madrid: Alianza Editorial Sa.

Schaeffer, P. (2013). *In Search of a Concrete Music*. Berkeley: University of California Press.

Schafer, R. M. (1994). *The soundscape: the tuning of the world*. Rochester: Destiny Books.

Schoenberg, A. (1950). *Style and Idea*. New York: Philosophical Library.

Schopenhauer, A. (2005). *El mundo como voluntad y representación*. [The World as Will and Representation]. Madrid: Alianza Editorial.

Shelley, M. W. (2003). *Frankenstein*. London: Penguin Classics.

Smalley, D. (1997). Spectromorphology: explaining sound-shapes. *Organised Sound, 2*(2), 107-126.

Steiner, C. (2012). *Automate this: how algorithms came to rule our world.* New York: Portfolio/Penguin.

Supper, M., & Arteaga, A. (2004). *Música electrónica y música con ordenador: historia, estética, métodos, sistemas*. [Electronic and computer music: history, aesthetics, methods, systems]. Madrid: Alianza Editorial.

Tagg, P. (2013). *Music's Meanings*. New York: Mass Media Music Scholar's Press.

Tarantino, T. (2009). Waydinding in John Luther Adam's for Lou Harrison. *Perspectives of New Music, 47*(2).

Torigoe, K. (1982). *A Study of the World Soundscape Project.* Toronto: York University, M.F.A.

Truax, B. (1999). *Handbook for Acoustic Ecology*. Vancouver: Cambridge St Publishing.

Truax, B. (2001). *Acoustic communication*. Westport: Ablex.

Truax, B. (2002). Genres and Techniques of Soundscape Composition as developed at Simon Fraser University. *Organised Sound*, *7*(1), 5-14.

Turing, A.M. (1950). Computing machinery and intelligence. *MIND 59*, 433-460.

Wilson, S., Collins, N., & Cottle, D. (2011). *The SuperCollider book*. Cambridge: MIT Press.

Wordsworth, W. (1995). *The prelude: the four texts (1798, 1799, 1805, 1850).* London: Penguin.

DISCOGRAPHY

Adams, L.J. (2007). *For Lou Harrison*. [Recorded by The Callithumpian Consort]. [CD]. US: New World Records.

Berg, A. (2003). *Lyric Suite*. [Recorded by Kronos Quartet]. [CD]. US: Nonesuch.

Cage, J. (1965). *Sonatas and Interludes for prepared piano*. [Recorded by John Tilbury]. [CD]. England: Explore Records.

Cage, J. (1982). *Music of Changes*. [Recorded by Herbert Henck]. [CD]. Germany: Wergo.

Cyclo. (2001). *Cyclo*. [CD]. Germany: Raster Noton.

Deupree, T. (2007). *Landing*. [CD]. Australia: Room40.

Dunn, D. (2007). *Autonomous and Dynamical Systems.* [CD]. US: New World Records.

EVOL. (2013). *Harder Posher Pinker.* [File]. Spain: RRS.

Fell, M. (2005). *Multistability*. [CD]. Germany: Raster Noton.

Ferrari, L. (1990). *Electronic Works*. [CD]. Netherlands: BV Haast Records.

Gilmore, J., & Rogers, G. (2006). *Elseif*. [CD]. England: Entr'acte.

Gough, H. (2008). *With What Remains*. [CD]. England: Entr'acte.

Grisey, G. (1981). *Partiels / Dérives*. [Recorded by Ensemble Ars Nova]. [CD]. France: Erato.

Haas, G. F, Widman, J. (2006). *Donaueschinger Musiktage 2006 Vol. 2*. [Recorded by Sinfonieorchester Des Südwestfunks]. [CD]. Germany: NEOS.

Harrison, J. (2000). *Évidence Matériele*. [CD]. Canada: Empreintes DIGITALes.

Hecker, F. (2009). *Acid in The Style of David Tudor.* [CD]. Austria: Editions Mego.

Ikeda, R. (2000). *Time and Space*. [CD]. Netherlands: StaalPlaat.

Ikeda, R. (2005). *Dataplex*. [CD]. Germany: Raster Noton.

Inoue, T. (1996). *World Receiver*. [CD]. US: Instinct Ambient.

López, F. (1993). *Azoic Zone*. [CD]. Spain: Geometrik.

Murail, T. (2003). *Gondwana, Désintégrations, Time And Again*. [Recorded by Orchestre National de France]. [CD]. France: Montaigne.

Noto, A. (2000). *Prototypes*. [CD]. Germany: Mille Plateaux.

Roads, C. (2004). *Microsound*. [CD]. US: MIT Press.

Scelsi, G. (2001*). Streichquartett Nr. 4 / Elohim / Duo / Anagamin / Maknongan / Natura Renovatur*. [Recorded by Klangforum Wien]. [CD]. Austria: Kairos.

Schaeffer, P. (2010). *5 Études de Bruits/Étude aux Objets*. [Vinyl]. France: Disques Dreyfus.

Schoenberg, A. (1923). *Piano Music*. [Recorded by Paul Jacobs]. [CD]. US: Nonesuch.

SND. (2005). *Tender Love*. [CD]. Germany: Mille Plateaux.

Stockhaussen K. (1994). *Klavierstück I-XI*. [Recorded by Aloys Kontarsky]. [Vinyl]. Japan: CBS/Sony.

Truax, B. (2001). *Islands*. [CD]. Cambridge Street Records.

Tudor, D., & Cage, J. (1993). *David Tudor plays Cage and Tudor*. [Recorded by David Tudor]. [CD]. Germany: Ear-Rational Records.

Vaggione, H., Harrison, J., & Wishart, T. (2004). *ETC*. US: EMS.

Vida, B. (2012*). Esstends- Esstends- Esstends*. [CD]. Germany: PAN.

VVAA. (2008). *Dérives*. [CD]. France: Universinternational.

VVAA. (2009). *Birmingham Sound Matter*. [CD]. England: Audiobulb.

Winderen, J. (2014). *Out of Range*. [CD]. England: Touch.

Wishart, T. (2002). *Jurney into Space*. [CD]. England: Paradigm Discs.

Xenakis, I. (1965). *Metastatis- Phitoprakta- Eonta*. [Recorded by Maurice Le Roux]. [CD]. France: Le Chant Du Monde.

Xenakis, I. (1989). *Kraanerg*. [Recorded by Alpha Centaury Ensemble]. [CD]. Netherlands: Etcetera.