

The Ontology of Generative Music Listening

Michelle O'Rourke

Doctor of Philosophy

School of Arts and Cultures

November 2014

Abstract

Generative music, manifesting a perpetually new music which transcends the temporal limitations of both live and recorded music, presents us with continuously new possibilities and perspectives which in turn enable new modes of being. As specific compositional choices are automated, the sonic possibility space thus becomes the operative creative field. The new concern with structural possibilities as they come to presence yields a new listening ontology.

Brian Eno's specific manifestation of generative music has evolved along a distinctly technological trajectory of creativity. Through his own liminal position between popular and avant garde musical cultures, his ambient aesthetic has found a new mode of expression and materialization. The music is environmentally utilized as an absent presence rather than as an object of focus, and this position is preserved and mirrored textually in this inquiry; the music is not directly treated as an object of scrutiny but rather informs the text as a background, ambient presence.

The experience of listening to generative music carries with it the possibility of transcending the duality of the subject-object relationship and its impedance of the transformative power of the aesthetic experience in its traditional aesthetic conception. Generative music thus inherently evades both traditional methods of analysis and traditional modes of aesthetic commentary. As the music foregrounds the moment in which reception occurs, while simultaneously existing as a background presence, it elicits a transformation in the way in which we perceive and conceptually order the sound, the environment, and our subsequent relation between the two. Generative music itself becomes a structure through which one can engage with a new way of being through listening, one in which we apprehend our creative capacity through being receptive to alterity.

In this way, listening itself has an ontology, one which can only be revealed through new forms of textual engagement. Ontologically, Heidegger provides the language to explore a music that reorients us at the level of being. Phenomenologically, he examines and reveals the structures of being which manifest our earth and world, our very possibilities of and for being, and these structures are precisely those which are

technologically represented in generative music. Aesthetically, Heidegger views the artwork as almost a generative system in itself—one which sets truth to work as it manifests a dynamic between revealing and concealing. Art and technology, and thus *poiesis* and *techne* respectively, are examined as orientations of being which have an ideal configuration for Heidegger that manifests at the level of thought. Thus, Heidegger's specific philosophic configuration which is pre-eminently concerned with ontological structures and coming to presence provides a structure through which generative music can emerge and find resonance.

Heidegger's philosophy evolves and unfolds in new generative iterations through his student Hans Georg Gadamer, who extends the hermeneutic nature of being to include the process of mediation. This enables an exploration of the temporality of the moment of the aesthetic encounter—a point of convergence at which the perceiver or listener undergoes self-transcendence through entering the unifying and structuring force of play. Play manifests sonically in generative music, during which the pre-existing temporal and subjective structures are reconfigured and transformed through technological mediation.

Similarly, Emmanuel Levinas reveals new variations on Heidegger's ontology as he explores notions of alterity and the ways in which these are formative of our subjectivity. As he delineates the moment of encounter with the Other, we recognize its constitutive elements as they play out technologically within the generative music listening encounter. As the notion of infinity is played out sonically through each passing generative iteration, it manifests a constant overflowing of itself in both thought and presence. This process arises through a dynamic movement between interiority and exteriority, in which an internal desire for the Other is ignited and perpetuated by the external, radical Other. This simultaneously internal and external encounter with alterity situates a fundamentally radical passivity, one which reflects our ontological situation which comes to be mirrored in the technological, generative manifestation of the same structural relations.

The philosophical approach of the present inquiry is not a commentary on generative music; it is a demonstration of its genesis—embodying the generative motion between being and becoming which comprises generative music, rather than engaging with

traditional textual commentary about music. Between the textual presence and musical absence, a space arises in which music can emerge not as an object but as a way of being into which we enter. In this way, the subject–object structure of traditional aesthetics is transcended in a move toward a new aesthetic which encompasses the larger truth at issue—that the process of configuration, combination, juxtaposition and subsequent emergence is the very point of the genesis of meaning, or the origin of truth. Thus, generative music embodies not only a technological but also a textual path to this moment in which we engage with the origins of our own ontological possibilities.

Dedication

To Dr. Jan Stefanov for his continued support and in loving memory of my mother,
Catherine R. Zolnowski.

Contents

Title Page	i
Abstract	ii
Dedication	v
Table of Contents	vi
Preface	ix
INTRODUCTION: Generative Music and its Philosophical Resonance	1
The Invitation	
The Iterations	
The Components	
Combined Parameters	
The Generative Being of Music	
Unity	
The Map	
CHAPTER ONE: Heidegger and Eno: The Aesthetic Encounter	17
Heidegger	
<i>Aesthetics</i>	
<i>Truth</i>	
<i>World</i>	
<i>Earth</i>	
<i>Strife</i>	
<i>Open</i>	
<i>Technology</i>	
The Shift	
Brian Eno	
<i>Aesthetics</i>	
<i>Truth</i>	
<i>World and Earth</i>	
<i>Strife</i>	
<i>Open</i>	
<i>Technology</i>	
The Second Shift	
<i>Gelassenheit</i> and Surrender	
<i>Questioning</i>	
<i>Eno's Questioning: Process and Function</i>	

	<i>Heidegger's Questioning Gelassenheit</i>	
	The Final Shift	
CHAPTER TWO	Gadamer: The Mediating Moment	81
	Time	
	The Festival	
	Play	
	The Game	
	Transformation into Structure	
	Representation	
	Double Mimesis	
	Contemporaneity	
	Return of the Festival	
	The Moment	
	Conclusion	
CHAPTER THREE	Levinas: Face to Interface	109
	Phenomenology Foundations: The Problem of the Ego	
	From Ontology to Alterity	
	The Originary Encounter with Alterity: Face to Face	
	Infinity and Totality	
	Truth	
	The Truth of Technology	
	Desire and the Technological Other	
	Truth and the Technological (quasi-) Other	
CONCLUSION	Being Generative, Becoming Music	133
	A New Beginning	
	<i>To Undergo an Experience</i>	
	<i>Music</i>	
	<i>Generative Art</i>	
	<i>Algorithm</i>	
	<i>In the Text and Texture</i>	
	<i>Movement</i>	
	<i>Genesis</i>	
	<i>Physis</i>	
	<i>From Genesis to Generative</i>	
	<i>A Listening Nexus</i>	
	<i>Passivity and Action</i>	
	<i>Freedom and Determination</i>	
	<i>Algorithmic Essence</i>	
	<i>Parataxis</i>	

Aesthetic Reversal: Reversing Aesthetics

An Ambient Origin

The Aesthetic Event

Shift

The Ambient Moment

The Transformative Moment

The Open Installation

The Step Back

Alterity and Freedom

Moment of Truth

The Beginning of the End

Bibliography

185

Preface

Perhaps a few prefatory remarks are required in order to explain what likely appears at first glance to be a strange conglomeration of characters in this thesis—Brian Eno and Martin Heidegger, Hans Georg Gadamer and Emmanuel Levinas. What impulse and questions have motivated such an unexpected array of characters? What could they possibly have to say to one another on a topic which none hold in common? If our most elemental experiences with philosophy and art have yielded any consistent truth, it is that immediate correspondences are often only the most superficial of correlations and often mask an entire world which lies just below the surface. In other words, first glances aren't always reliable; words and experiences sometimes fail to match up and thus a new language must be born, often arriving from a seemingly unrelated or surprising source. It is the unlikely combinations which point us toward thinking in new ways.

My first glance at computer generated music proved to be one such instance of corresponding dismissal. It appeared somehow cold and inorganic with an automation which seemed tedious. At least that was my abstracted notion of it until Brian Eno led me into it, or into his version of it. At the time I began contemplating a subject for the present study, Brian Eno's latest work was *77 Million Paintings*, a generative based audio visual installation presented both in the gallery setting and on your home computer by way of a software DVD.¹

It consisted of endless shapes, colours and sounds patterning themselves and converging at variably slow rates seemingly infinitely. My interest in Eno's music and aesthetic philosophy meant that I would pursue some avenue of his work, and the trajectory of his work seemed to culminate at this generative music juncture. It seemed I had arrived at an object for my study.

¹ <http://www.enoshop.co.uk/product/77-million-paintings-second-edition.html> (15 September 2014).

The trouble was that I simply didn't use music that way—looking at a computer screen, hearing infinite variations on the same thing. In fact, it was Brian Eno himself who had accustomed me to using music ambiently, almost as an extension to film music whereby I read my environment differently through an added piece of aural scenery. Through his ambient music which could sustain attention but did not require it, I had begun to use music as a lens or tool rather than an object of focus. Its presence in the background somehow altered the foreground. I had ceased listening *to* music and was instead listening *through* it. Now here he was asking me to seemingly do just the opposite. I was now to sit down face to face with the work and give it my full attention. Somehow I had to mentally transport the gallery mindset into the space surrounding my laptop computer, and these worlds seemed to be separated by a great divide.

To make matters more challenging, the aesthetic object of focus in this instance was not an object as such at all. Lacking any set beginning, ending or repetition throughout its never ending stream of notes sounding in succession, Eno's generative music evaded focus in the traditional sense as it presented no determinate body to analyse or dissect. Consequently, I found myself increasingly focusing on this divide between the gallery experience and the home experience, and this somehow mirrored the experiential discrepancy between composed and indeterminate music: a space is left open somewhere as some structural feature of the work is designated to the listener rather than the composer and this somehow this gives us new cognitive and perceptual cues to think differently about not only the piece but how it fits into our world. The open space in the piece somehow adheres itself to the greater open of the world and draws attention to it.

Once again, my prior thoughts about the experience and the actual experience itself proved to be two entirely different things. The focus required for appreciating *77 Million Paintings* was not the hard edged attention one usually brings to a typical film experience where the environment is blocked out and the conceptual world is reduced to the action on the screen. Instead, this was a softer, gentler focus during which the escape into my imagination did not involve going somewhere else or pretending that the images on the screen were anything other than what they were

in any given moment. I was somehow in the here and now and in an imaginative space at the same time. What struck me was that Eno had somehow achieved a reversal of the regular order of experience in a viewing and listening situation; the images, while engrossing, seemed to point to the music as the focal point rather than the other way around. Additionally, they seemed to visually map out or tell the story of what my mind was already doing as a result of the generative listening experience. The shapes and contours were on a path of exploration into possible ways of being, with each altered manifestation in turn transforming the overall world of the screen.

The transformations of pitch, timbre and duration coupled with slowly evolving imagery were very subtle but their results were striking. Just as one could look away from the screen for moments and return to find that several almost imperceptible mutations had completely altered the visual disposition of the screen, so too could one hear the simultaneous and paradoxical familiarity and newness of the accompanying music. In fact, the music as a focal point could carry this transformation on its own, with the visual display merely acting as an illustrative aid. This became clear when I realised that I could somehow perform this shift in perception without sitting at the computer watching evolving shapes and colours. I could achieve it anywhere when I became both open and focused, or simultaneously aware and detached subjectively. The colours and shapes on the screen could easily blend into the varying shades and contours of rooms and views which accompanied my everyday vision. The shift whereby something which appears closed and fixed suddenly becomes one instance of an infinite realm of possibilities is an internal one; as the music blended into my thoughts, I stopped directing them and instead listened in to them. I received them as if from outside myself somewhere. As a result, I saw the world in a new way and I had new choices. I experienced myself not as an agent acting alone and moving in a world of objects but as an integral part of this world, a manifestation and co-creator of the moving force of existence. I somehow stood outside of myself and blended in simultaneously in a new way. Ultimately, I had been taught a new way to think. But I had to be led into it and through it the first time, and each repeated generative encounter seemed to be practice at this new way of listening and seeing.

Surely this was an aesthetic encounter which exemplified the curiosity and vitality of aesthetic theory at its best. But this somehow surpassed pure aesthetics, as this particular work of art and music had somehow managed to operate at a level of existence—that peculiar place in which imagination and materiality exert a reciprocal influence on one another, where possibilities and actualisation are one and the same. This particular aesthetic encounter, which in itself is likely only one permutation of other similar experiences made accessible through music and art, had somehow dislodged my notion of subjectivity as the starting point for the truth of perception. The correlations which I made at any given point were highly contingent upon a more fundamental level of truth which enabled these varying connections to be thought at all. These two levels of truth and the ensuing shift between them thus required that I look beyond aesthetics to ontology in the exploration of this encounter in order to subvert my own cognitive categories and bypass the accompanying preconceptions which would further entangle me in subjectivity rather than offer a vantage point on it.

While an ontological approach to generativity made sense, several challenges still presented themselves from a research perspective. How does one analyse or examine a music which doesn't have a pre-existence? It not only inherently lacks a discrete beginning or end but also never repeats itself in quite the same way. This lack of musical object led me to question the degree to which I am reading music into these sounds. Do they sound like music because of how I organise them in the moment of reception and how I anticipate what comes next? This seemed to suggest that the music was as much in me as it was in the computer. It was somewhere in between, in the juxtaposition or intersection between the machine performing as such and me in a certain receptively curious orientation towards it. But the experience clearly didn't end there; it bled out of the artistic bounds into the mundane moments of everyday life. Not only did I lack a discrete object to dissect, but I also seemingly lacked any conceptual boundaries of the experience as well. Each layer readily bled into the next in an unending deferral of meaning. Oddly, somehow the music sounded like that. Its properties reflected this ongoing process

of ghostly traces where the significance of this experience resides. So the research somehow needed to address this reflective quality which never quite caught up with itself. It suggested a resonance with a core at the very centre of being or at the most basic, primal experience of life and the world. I was implicated in the music somehow from the beginning despite the music not having a pre-existence.

In trying to tie these questions together into some functional structure of inquiry, it became clear that I needed a language which could encompass art in both universal and specific terms, technology, and the experiencing self. At this point, two well-known essays of Heidegger, who was already implicated in my ontological pursuit, sprang to mind: 'The Origin of the Work of Art' and 'The Question Concerning Technology'. Heidegger's unique way into things via linguistic explorations seemed not unlike Brian Eno's generative music. It started in one place and took you through several permutations, never finishing as such and in leaving things thus open pointing the reader back to the process as the very point of significance. Could one combine the two essays somehow or read the spaces in between to conduct a study on technological art and its relation to being? This seemed to be the most promising approach.

Heidegger, however, is not without his problems. One academic criticism which bears itself out in this enquiry is that while his ontology accounts for the structures or fictions which make up our being, it doesn't seem to account for how we account for other beings as beings. They seem reduced to the status other things in-the-world hold. This problem of alterity plays out similarly with regard to technology and subjectivity: by what mechanism can we take in something new and not reduce it to the same? How can I hear a new music that I haven't already altered or subsumed its uniqueness in the very act of hearing? Or, in Heidegger's language, can my thoughts escape their destined path of enframing [*Gestell*] which technology supposedly reifies? Ultimately, how can thought transcend its own limitations?

At this point, it became necessary to extend Heidegger's philosophy beyond himself. Taking his critique of Western metaphysics to heart, however, meant that I needed to remain firmly within his ontological-phenomenological lineage; I must find other

thinkers on his path which focus on transcending subjectivity. For this, I argue, is the core of Eno's aesthetic philosophy as it is played out in generative music and is subsequently the binding force between the seemingly odd coupling with Heidegger. Exploring Heidegger's thought further through the lens of other philosophers even seemed methodologically correlative with generativity itself, almost as if his thought was resounding in new ways with each iteration. These iterations ended up playing out through two of his students, Hans George Gadamer and Emmanuel Levinas. As they both built upon Heidegger's ontological foundation and expanded it in ways which would prove useful, a path began to emerge which was not hierarchical in nature, but rather seemed to be a natural unfolding. Thus, it seemed appropriate to give them each their own separate spaces in which to resound rather than risk subsuming them under Heidegger's voice at every conceptual turn. Besides, generative music doesn't repeat intervallic relationships in close proximity; if this study is to somehow compositionally reflect generative principles, the respective voices shouldn't feature too close together either. The dynamics of a more closely placed dialogue weren't consistent with the generative music ambience.

While Gadamer and Levinas shared the experience of being Heidegger's students, although not concurrently, they also both challenged the centrality of subjectivity in ways which shed light on the generative music listening experience I sought to explore. Gadamer sought to reveal how art as an experience changes the one who experiences it through a hermeneutics which built upon Heidegger's notion of temporality as well as his aesthetics. As one defining aspect of generative music is its ability to transcend our own temporality, Gadamer offered a method and a vocabulary through which to explore the ways in which a transformative aesthetic experience can have temporal continuity in the moment of encounter. Levinas addressed the issues of alterity which were problematic in Heidegger's thought, and his account of the formative event of subjectivity would help to situate the ways in which technology, as a quasi-other, could elicit an experience in which we become open to the unknown and are able to leave it as such.

The study which followed from these three thinkers was very much about thought itself as the site of receptivity or interaction with music. As Brian Eno had twice

succeeded in changing the way I listened to music, and this in turn altered both the way I thought about music and the way I thought in general, I wanted to investigate how this happened, using the elements of the *77 Million Paintings* listening experience as the foundational catalyst. In this sense, however, Eno himself began to fade into the background, as the phenomenological basis for the study was the *experience* of the music and not some arbitrary endpoint outside of ourselves, whether that be a musical object or a composer. As such, I attempted to delineate, or in phenomenological terms 'bracket out', the constituent ingredients of the experience, and these seemed to be curiously tied to Eno's ambient and process-led aesthetics but also somewhat indeterminate in their relationship with him. So just as Eno had not composed but enabled the music in question, similarly did he enable and anchor this inquiry; his generative music was a catalyst, an attractor which pulled the disparate parts of the study into a whole, a structuring model which opened a gateway and then reappeared as an exit. In this way, this inquiry has wider reaching implications with other music and art forms which share similar characteristics but it also doesn't attempt to paint all of Eno's work with a single aesthetic brush. The key component is the listener's subjective orientation, which is made manifest in the presence of certain elements. These elements are found specifically in Eno's generative music but possibly elsewhere as well. As such, this study is not about Brian Eno or even his music as a specific object of focus, although these are important ingredients; rather, it is about an aesthetic intersection in our thoughts which flourishes under the conditions which Eno initiates.

These conditions are not particular to Eno, although I can think of no one who achieves them more readily. The elements of *77 Million Paintings* which I have identified have natural correlates with other music, and in this way, I feel I can discuss generative music as a whole; however, certain qualities must be exhibited in order to elicit the experience in question, and as such, not all generative music fits the mould. The music must first be an extension of ambient music, not requiring one's full attention but also not unable to sustain it either. In other words, the interplay between the background and foreground is enabled by this indispensable quality, and for this reason, some of Eno's ambient pieces might elicit elements of the shift

in question. However, recorded ambient pieces have a beginning and end and the potential for familiarisation, and thus lack the temporal transcendence and the perpetual novelty which the computer affords generative music. Something occurs in this intersection of indeterminacy and rote process which, coupled with a slow speed and lots of spaces for reverberation, makes the generative listening experience a unique one amongst other music. While Enō's articulation of his aesthetics lend a great deal to the present study, I do not pretend to limit this experience solely to his music. However, as this inquiry grew directly from Enō's work, it is inherently bound to it and can serve to reciprocally explain some aspects of the ambient listening experience. In other words, not all ambient music is generative, and not all generative music is ambient. This study refers to ambient generative music, with generative, in the sense I am using it here, meaning simply the unending soundings which arise from specified structural limitations.

The final structure of the thesis, which is based around terminology, was deliberately designed for two reasons. Firstly, I wanted to somehow mirror the generative music listening experience with a textual experience in order to stay phenomenologically grounded in and around the self and receptivity. Secondly, I wanted to foreground language as both a medium for this experience and as a direct correlate with listening. While Heidegger seldom dealt with music, listening as it relates to poetry was of the utmost importance as a prompting trail back to the remembering of being and its perpetual becoming. This twofold listening sat on either side of the shift which I sought to explain and explore. The significance of poetry lay in its ability to invoke a way of reception which bypasses our understanding and the preconceptions carried with it. The unusual, paratactic arrangements of poetry resonate their truths in the same way generative music operates; side by side or face to face, the unending stream of notes in sounding in succession elicit a digital contemplation which is similarly freeing for the listener and not technologically constraining, thus challenging the notion that technology and its accompanying arts are somehow self-limiting and overly regulated, as I myself once suspected.

The danger with poetry and a self-reflexive focus on language is its tendency to stray from its author; the sense of agency is sometimes lost and the words subsequently

seem suspended, indefinitely resonating without a destination. This has been a particular criticism of Heidegger, who has been blamed, particularly by Adorno, for creating 'jargon' which 'causes all its words to say more than each single one'² through the over-determination of concepts. Unfortunately, Adorno's criticism that jargon predisposes people toward submission to authority, or specifically to authoritarianism, seems to miss the point. The space left open from the exited agency of the author operates as an invitation to the reader or listener; the resonant openings in Heidegger's terminology only appear hollow when the reader has not performed his or her side of the exchange. The differing paradigms of interpretation between poetic ontological or existential terminology and the more anthro-political vocabulary of Adorno do not invalidate the former as a discursive approach. So just as Heidegger's use of language was both deliberate and ultimately unavoidable as he operated at the boundaries of language itself, so too is the linguistic strategy of this study. While its attempts may not always reach their desired outcome, to use language in a way which is inconsistent with the way it actually operates would be a detriment to the subject matter at hand. Similarly, as the voices of Eno and Heidegger collide stylistically, the ensuing tension is utilised as a moment which elicits further action and involvement from the reader rather than artificially glazed over in what would be an act of over-determination.

Perhaps the most detrimental practice with language occurs when words become reified into common usage to such a degree that they no longer require thought. By letting language resound as in poetry, or Heidegger's works, or even Eno's music, a larger spectrum of connotations and possibilities arises and informs our thoughts. In order for these resonances to not be merely echoes of our preconceptions, we must become open to something outside of ourselves. If we can approach 'music' and 'philosophy' in this way, not as occupants of distinct stations and trajectories, but rather as similarly unfolding experiential paths, then an opportunity akin to the generative listening shift is regenerated. If, as in ambient generative music listening, we view our world through them rather than treat them as external and abstracted

² Theodor W. Adorno, *The Jargon of Authenticity*, Knut Tarnowski and Frederic Will (trans.), (Evanston: Northwestern University Press, 1973), 11.

organising principles, we can enter into them and allow ourselves to be overtaken, glimpsing a new level on which to experience truth. While this is certainly not a new or innovative practice, the opportunity to learn or rehearse it in another way and uncover what this means to us as beings is a unique invitation which will carry infinite resonances in our everyday lives.

But before we officially drift into this more poetic register, it might be useful to reiterate the structure and function of this thesis. I aim to explore the ontology of the generative music listening experience, how the subject undergoes this experience, and the pertinence of Continental philosophy in this pursuit. The focal point of this juncture is a subjective shift which specifically manifests between two levels of truth, as a momentarily transcendent temporality, and as an occurrence which opens us to an otherness which is otherwise blocked by our preconceived subjective notions. These elements are all mirrored to one degree or another in either Eno's aesthetic and compositional approach or, more broadly, in the mechanism of operation of generative music itself, the algorithm. As such, each of these elements are dealt with by specific philosophers who have each been given their own separate sections, although some natural continuity and overlap is expected as they all emerge from the same philosophical trajectory. Finally, in the conclusion we will start anew, bringing in the algorithm as a sort of technological voice which joins Heidegger, Gadamer, Levinas and Eno in a collective exploration and summations of the preceding ideas and how they pertain to our daily life and world view at the level of being. Rather than expecting a linear progression of ideas, anticipate instead a dispersal of terms and gloss on ideas which will eventually settle into their respective homes in the conclusion. However, as with generative music, the process is one of a gradual arrival, and expectations only seem to hinder the journey.

Introduction

The Invitation

Each one of us arrives at a discussion about ‘music’ with an unspoken, underlying experience which unites us as listeners and which enables the very term ‘music’ and the ensuing conversation to have any meaning. It is a moment of connection, of the interweaving of internal and external harmony, in which music has shifted and aligned our experience of the world and of ourselves into one of continuity and significance. This experience is so difficult to articulate because of the level on which it occurs—a level within us upon which all others are founded—a level which constitutes us as a living being. This level naturally evades discussion because it is already inherently involved in every discussion. It is nearly impossible to disentangle it from other layers of experience and meaning because this level has created the space in which all else can arise for us. And while it may be difficult to explain, it is not as challenging to recall. Thus, ‘music’ becomes shorthand for our recollection of this experience, which has left its mark on us and changed us as listeners.

We are thus left with ‘music’, a discursive placeholder which is at once always too vague to do justice to our specific moment of encounter, and also too narrow, as one person’s transformative musical encounter is never directly translatable into that of another. Textually, the sound either evades the page completely or runs off the end of it. Thus, no amount of defining or delineating will bring ‘music’ to presence here; however, we can approach this dilemma from a different direction—the direction of our music experience. We can attempt a textual invitation which sets our thinking in motion rather than lingering over static concepts. The text can set the parameters within which the mutualities of our experiences fall, and from which they may again arise of their own accord if nurtured in their respective emergences. We cannot present the music; we can and will, however, provide some juxtapositions and let them resound to us and within us, and this practice holds the potential to connect with the unspoken experience which binds us together in the unity of a silence, a silence which now occurs in the open.

This is an open invitation. The listener is invited to undergo a textual event which is generated from the seeds of an inarticulable experience which itself has manifested and

flourished in countless and inimitable ways. This will thus elicit a new iteration of an ever-changing continuousness, which lies just below the discursive surface and raises itself into appearance during certain juxtapositions and convergences in which bonds forge naturally between concepts, language, experience, and perception. This will be the space of possibilities in which music can arise—not in the text, but rather within the reader. The music will surface and resound and fall away within us, as the text shapes and contours its reliefs and curves.

This textual process accomplishes more than mere conceptual generation; it both reflects and sets in motion the process of genesis by which music, and one exemplary form of music—generative music—arises. In doing so, it presents an opportunity to receive music in a new way, with an awareness of the process whereby it comes into being and the ways in which meaning arises for us. It provides an opportunity to engage with the structures which enable meaning to arise, rather than getting lost in the specific manifestations resulting from them. As we approach music not as an object of study, but rather as a way of being, we aim to discover through a textual analogue of the generative process an authentic way of engaging with generative music which both preserves its continuity and explores its perpetual originality.

The Iterations

Generative music itself is a specific iteration of ‘music’ as a whole, and as such, an exploration of this specific listening practice can inform the broader field of ‘music’. As generative music appears only under certain enabling conditions and as the result of specified processes, it becomes necessary to define both the specific iteration under consideration as well as the structural parameters from which it arises. Generative music can be broadly defined as a compositional practice which sets a system into motion with some degree of autonomy which in turn results in a complex musical generation. There are varying degrees of technological involvement, ranging from the randomized jingling of a wind chime set in motion to a fully computerized process via algorithmic composition. My definition of generative music for the present study, regardless of the degree of technology used in its implementation, is simply the un-ending soundings of possibilities which arise from specified structural limitations. These soundings capture the essence of a freedom, of a transitory expansion and expression, of transcending time

while carrying with it a thread of continuity. There is a certain confidence in their refusal to appear in exactly the same way twice, and to only manifest initially in real time, without hesitation or forewarning. The soundings exude a fundamental, driving sense of curiosity and wonder, always morphing into new shapes in order to explore the ways in which things could be in an infinite striving toward new possibilities.

The specific generative music iteration at which we arrive is manifested by way of Brian Eno. For Eno is the cultural conduit of generative music, popularizing a hitherto rare subset of specialist music with his audio visual generative software *77 Million Paintings* as well as his generative applications for iPhone, including *Scape*, *Bloom*, *Trope*, and *Air*. While these invite varying degrees of interaction, from merely choosing the speed of visual mutations in *77 Million Paintings*, to actually becoming co-creator in the generative output by way of touchscreen interfacing within the iPhone applications, perhaps the interaction overshadows a more significant element. More important than the interactive elements, which are present in some but not all of his generative works, is his presentation and framing of the generative practice. Eno has presented numerous invitations to partake in generative music creation and has embedded them within our daily lives and activities; they now lay dormant in our computers, which await being transformed into a generative music installation via *77 Million Paintings*, and proliferate on our mobile phones as downloadable applications effectively transform the mobile phone into an interactive music-generating device. This is a continuation of the ambient music aesthetic, whose identifying dictum states that it must be ‘as ignorable as it is interesting’¹, hovering in that peculiar borderline between attention and awareness, presence and absence. The generated music thus comes to embody the ambient quality through anticipation of its environmental attenuation. Even the interactive aspects, where present, exist as a function aiming toward automation. As such, Eno’s generative music exists by design as an absent presence, constructed to exist alongside its environment rather than compete with it. It is a music upon which not to focus; thus, I contend that it naturally points away from itself and toward the listener. It emerges from

¹ Brian Eno, ‘Ambient Music’, in Christoph Cox and Daniel Warner, eds., *Audio Culture: Readings in Modern Music* (New York, Continuum, 2004), 97.

its relegated background stance in short bursts of awareness and attention and then recedes in prominence back to into the atmosphere which it has constituted.

Eno's specific brand, or iteration, of generative music is not merely representative of his current compositional practice. Instead, it reflects a natural culmination of his creative approaches and retains a sense of artistic continuity within the overarching sonic themes and characteristics of his historical output. One could say that the trajectory of his musical approach has itself evolved generatively. His generative practice has grown naturally out of his ambient tradition, which has in turn been informed by his production work which utilized the recording studio as a virtual instrument, a practice which itself is informed by his prior experimentation with synthesizers and reel to reel tape. The guiding thread in a vast and varied career has been the technological extension or embodiment of his musical thought processes. He has continually sought ways to engineer himself into the process not as a composer personality or popular identity, but rather as a perpetual first listener. His continual focus on the design and implementation of systems which in turn create a music new even to him reflects his broader interest in music's function and how it connects to larger systems of art and culture.² As he navigates the dichotomous realms of the tangible sounds and the virtual spaces they seem to create, which elicit notions of interiority and exteriority, the theme of connectivity becomes readily apparent. The music whose presence he has enabled is a unifying element which conceptually explores and challenges these boundaries.

As such, Eno's creative path reflects that of generative music's ontology. It radiates in concentric circles outward from music's internal organizational principles toward music's exterior or outer edge. He first removed any traces of a subjective identity by omitting vocals, as in his ambient works, or using them in ways which are 'emotionally ambiguous'³ and hence neutralized, as on his album *Drums Between the Bells*. A further step finds the dissolution of melody and rhythm, leaving notes to sound and resound as if suspended in the atmosphere; the resulting sense of staticity which is evident in works such as *Neroli* or *Thursday Afternoon* is achieved at least partially through the

² For a good introduction to Eno's views on art's cultural implications, see Brian Eno, 'A Talk Delivered in San Francisco, June 8, 1996', *In Motion Magazine*, (1996), <http://www.inmotionmagazine.com/eno1.html> (21 August, 2013).

³ Ben Sisario, 'Pushing Back the Limits of Speech and Music', *The New York Times*, (2011), <http://www.nytimes.com/2011/07/05/arts/music/brian-eno-and-rick-holland-release-drum-between-the-bells.html> (21 August, 2013).

implementation of these methods as well as simply leaving enough space between sounds to allow the listener to enter. The listener is invited in, as it were, just as Eno seems to be exiting the music himself, leaving only traces of his presence in the duration, timbre and resonance of the lingering notes.

It is precisely this point of passing between the listener and the composer which can be accessed at the level of production, and Eno's production style reflects an organic quality as he attempts to humanize or de-stabilize the predictability of technology. This is an intervention at the level between the actual note or pitch and the listener, and in both ambient and generative music replaces melody and rhythm as a focal point. This is a technologically enabled step away from the 'object' of music toward its outer ethos, its point of connection with the listener. Generative music occupies the furthest point of emanation from the centre as it lives not only within this space of music's own sonic atmosphere, but also one step further in this space's wider envelope of possibilities. Thus, as technology enables a certain level of disengagement on the composer's end, it elicits a reciprocal level of re-engagement on that of the listener. As the sound explores its own space of possibilities, the music comes full circle.

As such, this inquiry will explore my argument that generative music is the culmination of a process of externalization and reflection which has the ability to elicit a unique listening response which can transcend subjective limitations, opening the listening subject to a listening process which occurs on an ontological level, a level in which it comes into being. As the music comes into presence in real time, it is not being composed, but rather is set free as it explores, through each successive iteration, the possibilities enabled by the variable constraints of the parameters. Brian Eno facilitates our entry into this generative space by arranging the sonic parameters of our moment of encounter and embedding it in our world for subsequent discovery. He has even provided the label for this experience, championing the 'generative' descriptor over other possible terms such as 'algorithmic composition', 'stochastic', 'probabilistic', or even 'indeterminate' or 'random'. In so doing, he has retained the notion of genesis, or point of origination, which naturally implicates an ontological level of inquiry and engagement.

The Components

Just as generative music requires both a system and an application, or in computer terminology an algorithm and a data set to which it is applied, so too does its inquiry. Brian Eno's generative practice provides the sonic structural system which enables a particular experience to arise, and this experience in turn requires a larger application or point of connection to enable the creation of a space in which meaning can arise and traverse. In the language of cybernetics, which is the science of systems, and in which Eno has a keen interest, a 'meta-system' is required in order to contextualize and understand the operation of an individual system. Thus, it becomes the relation between the two systems and not the subsuming of one into another that enables a new level of understanding to arise. As generative music inherently incorporates aesthetics, technology and ontology within its very being, it requires a system which is inclusive of all three components. Such a system is implicit in the philosophy of Martin Heidegger.

Heidegger's philosophy not only deals with aesthetic concerns and with technology, but also contains a nexus of interaction between the two. I contend that his conceptions regarding the respective essences of art and technology as they relate to Being suggest a possible framework through which to view a technological art form such as generative music. Not only—as it turns out—does he provide a philosophical language within which to situate generative music and its listening ontology, but this language is embedded in a wider framework of ontology and phenomenology. These philosophical spheres combined provide the fundamental, ontological ground necessary to uncover the conditions or structures which enable and inform existence as well as the method of inquiry which enables the discernment of these ontological structures. Both ontology and phenomenology are necessary parts of the process as we, the inquirers, comprise part of the very question. Thus, we need a way to disclose the truth about our own existential structures and how these allow meaning to arise within and through the world. Put in the language of generative music, we live in and through a set of parameters which determine our surrounding possibility space; to question these parameters is to question both ourselves as individual iterations and our world which we help comprise. Similarly, as generative music explores its own parameters to their fullest extent, I suggest that it becomes a natural ontological reflection of our own existential situation. Thus, seeking to employ the generative listening experience as a

specific way of formulating our inquiry is also necessarily a way in which we may articulate our very being. In doing so, we question the very structures from which we emerge, and this inherently ontological process is both mirrored and demonstrated in our generative listening practices.

These listening practices reveal a connection between music and philosophy which is far more intimate and primary than it might initially appear. As music manifests itself as a specific configuration of sound, philosophy manifests itself as a specific configuration of perspectives and abstracted conceptions. The essential bond exists in the configuration as each structure provides boundaries in which thought can move and develop, allowing meanings to arise in the subsequent spaces created. Thus, as philosophy and music both strive to overreach themselves and transcend these boundaries, they alter their own parameters in the process. As one level of thought is clarified and elucidated, or as one chord sounds, another level is thrown into question, and modulations approach the thought horizon. If music is one configuration of experience which connects with and shapes our subsequent thoughts, then philosophy is the receiving structure into which music permeates and pushes toward expansion. Together, they have the potential to unlock one another—with music allowing philosophy to resound and resonate while philosophy is simultaneously enabling music to move into and within a more concrete, linguistic realm. The reciprocal interaction of the two thus charts its own course and has the potential to carry us further than either individual navigational system would allow. Music lives and moves through and within philosophy of its own accord. We thus need only reveal the configurational clusters at which the bonds have occurred and let the possibilities play themselves out. This process occurs at the level of being.

Just as a harmony becomes richer as more notes are added to the chord, so too does the philosophical-musical resonance as more voices are added to the score. Thus, Heidegger's philosophy evolves and unfolds in new generative iterations through his student Hans Georg Gadamer, who extends the hermeneutic nature of being to include the process of mediation. As the present text linguistically mediates the generative music experience, the process of mediation becomes one not only relevant to technologically dependent forms of music generation such as generative music, but also its entire ensuing discussion. Similarly, Emmanuel Levinas, another student of Heidegger's, reveals new variations on Heidegger's ontology as he explores notions of

alterity and the ways in which these are formative of our subjectivity. Heidegger's thought thus reverberates through these additional voices as they perform as parameters within which new configurations and soundings can arise in other minds. As Gadamer and Levinas engage with Heidegger's fundamental ontology and further develop or critique it accordingly, Eno acquires additional space in and through which his music can resonate; this resonance occurs at the level of being.

Combined Parameters

Music is a way of being. We experience the world and ourselves differently when we are attuned to its presence. It is a unique configuration of a moment in time which we receive sonically and structure perceptually; we are both receivers and creators in this moment. To enter into this way of being is to surrender to a sonic flow which transforms the way we exist in that moment and thereafter—our being. Thus, music arrives toward us as a fragmented, folded sonic entity which unfolds both externally and internally, creating a potential space for unity between our surrounding environment and our interior world. It is within this space that music acts as a way, or path, which unfolds itself toward us, inviting us to approach its fundamental unity which both precipitates and enables its essential unfolding. In so doing, our way of being becomes that of music. This is the engaged listening encounter with music in which we are opened to new ways of experiencing ourselves and our world—our being.

Music is a way of becoming. It leads us toward a potentially transformative encounter with our way of being. It presents a space in which possibilities arise and converge and build upon one another, taking on a life of their own. We hear not only sounds, but also that which sounds; we hear sounding itself as it comes into being. This is the intersection at which we can participate in the creation of our own experience as and within being. This is a space in which meaning can arise—a meaning which is contingent upon our experience and upon our ability to be receptive to the environment in an authentic, engaged way. In this way, music is part of a larger experience which we seek to enter, a state of possibilities which we seek to become.

Thus, music comes into being. It becomes. As it does, it manifests both the fundamental continuity and the difference or tension between being and becoming—

between presence and its coming to presence. As we hear sounds immediately present which anticipate those which follow, the sounds find their ultimate unity and subsequent organization within us. We become the site of the encounter with the being of music. This process mirrors our own ontological situation, our truth, as we are both being and becoming; we are both at once, often without conscious awareness of this duality. Music exists in between—as a mediating work of truth. It is in this liminal position that it can act as a work of truth by setting truth to work within us. Music, I argue, manifests the possibility of unifying this ontological tension and of experiencing its unity within the moment. Therein lies the transformative power of music. This power, however, is only accessible as such through experiencing and receiving a unity or essential connectedness on the ontological level, or the level of being. Thus, we need a way to engage with the moment of music's unfolding; we need a new way of listening, or a listening transformation.

As music stretches itself out between our present and future being and between our interiority and exteriority, its position suggests two possibilities of re-entry into this transformative, unifying moment. As we embody the site of both reception and transformation, we can either adjust our reception practice, our aesthetic orientation, or we can alter that which we receive—the music itself. The history of music, and subsequently its aesthetics, can thus be seen as a subtle interaction and process of adjustment between experiencing, engineering, and explaining the momentary power which we hear as music. In our struggle to recreate this experience, our musical practices evolve which in turn evoke new listening sensibilities in an ongoing, iterative process. Our listening, as well as the aesthetics of listening, is thus both inherently temporal and hermeneutic; that which we hear is always both perpetually new in the moment and also serves as an aesthetic trail back through our personal listening history which we bring to the moment. This is the process of temporalizing which we perform as an inherent part of our being, and I suggest that music has the power to reorient our awareness of and participation in this process. In this way, altering either the way in which we receive or altering that which we receive must necessarily involve this engagement with the unifying practice of temporalization. This unity occurs within the moment, and thus implicates the moment as an aesthetic focal point in which these forces converge and from which the transformative power emerges.

Within this focal point is a synthesis, a synchronicity of being and coming to be in the moment, and it is at this point between temporalizing as being and being temporalized by music that I believe our own creative agency can be thus awakened. This point exists at the border between sound and music, between sensations and perception, and between meaning and truth. With our arrival into this space comes the realization that we as listeners are not peripheral to this process; rather, we embody it. As such, we do not merely create and use music; music uses and creates us. This is a fundamentally creative reciprocity. Thus, an alteration to either side of this mutuality necessarily enacts a transformation of the entire nexus. Consequently, a new music and a new aesthetics must arise concomitantly.

The difficulty which arises in both the creation and reception of a new music and a new aesthetics is that of subjectivity. The experience of unity, otherwise known as 'truth' in aesthetic discourse, is necessarily challenged and dispersed as it encounters the inherently fragmenting structure of subjectivity. While the subjectivization process enables creativity, and is thus integral to bringing music into being, it also colours receptivity; the hermeneutic nature of our specific subjective experiences preconfigure the ways in which we are able to open ourselves to the sound approaching us in the moment. The nature of understanding, for which listening is a vehicle, is such that becoming open to the origin of a new experience inherently involves an unlearning, or an unhearing, of that which we bring to the process. We read ourselves and our preconceptions and presuppositions into any encounter to such a degree that we are subsequently unable to move ourselves out of the way to receive something from outside of ourselves—something which we have not yet already come to know or predefine. We can be blocked by our own subjectivity. We thus need a way to hear our way back into the whole of music.

The Generative Being of Music

Fortunately, we have been presented with an infinitely possible music—a music which both manifests and holds open articulations of the way things are and also the way things could be. These possibilities necessarily arise from a given structure which shapes and forms the sonic boundaries which they ultimately transcend during their unfolding. This is a sensitive music, a multi-centered music which never arises or

unfolds in exactly the same way twice. It allows us only a glimpse of its entirety in its unending soundings. It presents us with the idea that music has an independent existence in and of itself, of which we hear only pieces and fragments in different, diffused moments. As each sound iteration arises from the same initial parameters and yet reveals itself in a unique formation, we are presented with a unity larger than we can hope to experience. Subsequently, we are led by this music to the idea that something larger than ourselves exists while being presented with an opening into which we might gain entry into it. The infinite state of music's being comes to us as the experience of the possibility space of infinity. And by definition, there are innumerable entrances into this space, if we know where to look, or to listen. As we encounter this space, we are encountering the Being of music. This is generative music.

Generative music is not the only source of these entry points into music's larger unity. However, implicit in its coming to presence are characteristics which I contend are specifically conducive to evading the traps which subjectivity can set for the listener. As we receive its originating presence in real time, our tendency to approach the sound as a predefined, preconceived object is naturally dissipated. We are momentarily forced out of the mode of being which is dominated by abstracted ideas and are returned to the experiential, sensorial moment; this is the point at which both music and the conceptions which inform our future experiences are born. As such, my primary argument is that generative music thus provides a way to recognize these subjective barriers and subsequently opens up the possibility of a perceptual shift in which the barriers once again become points of entry. We can be transported from a silent, conceptual realm into a musical, experiential realm. While both states are essential components of musical creation and reception, the former must be grounded in the latter. Our conceptions must be abstracted from our experiences in order for an authentic relationship to arise between our being and environment, between our sensibilities and our understanding as such.

In thus seeking to meet generative music as it presents itself to us rather than merely being presented with our own aesthetic assumptions, we approach generative music not as an object of study, but rather as a way of being which we encounter and come to embody within a concrete, experiential moment. In this way, we move toward a new aesthetic which both arises from and enables the reception of a new musical

experience; the aesthetic first arises through engaged practice, and is thus subsequently able to mediate our experiences and conceptions accordingly. The moment, as a distinct intersection of being and time, thus serves as our entry point into generative music, into music itself, and thus into our experience of being. In order to textually examine these entry points, we must begin with the experience of one. So we turn to those experiences during which we engage with this music, when it not only informs our daily existence but also emerges from within it. For if music reaches us on the level of being and thus becomes part of us, then we must carry with us seeds of the origin of this experience. These seeds are embedded in our everyday encounter with music, in our use of it. As such, the moment serves not only as a temporal unit in which to anchor experience, but also as a structure through which we encounter our own being as it is engaged, or as it is becoming. This is the moment of our unspoken, underlying experience which unifies us as listeners and which I aim to articulate through a linguistic-based methodology which structurally combines the discourses of music and philosophy.

When our being is thus engaged in such an encounter, we become part of a larger experience. To become part of a larger experience is also to become part of a larger conversation. We thus locate music within a more expansive moment, the moment of the work of art. Historically, aesthetics has sought to gather together these disparate moments under various guises and into varying organisational configurations; this has inevitably brought about divisions which, although informative in varying degrees in their own right, ultimately serve to undermine the fundamental unity of the work which is performed by and through art as a whole. 'Art', in the holistic sense and within the Western post-Enlightenment tradition, names a specific kind of experiential encounter, which manifests itself in numerous ways through varying mediums, yet retains a fundamental consistency of action due to its performative function. The 'work' of art, as such, thus serves as an opening through which various points of interaction become possible, and while the experiences through various mediums remain unique, the ontological level at which they occur enables linguistic commonalities to arise. This is the unifying action of aesthetics; a linguistic and conceptual framework arises which enables analogies and differences across experiences to resonate and inform one another. However, aesthetics lies in perpetual

danger of both overgeneralization, or blurring distinctive properties within each unique manifestation, and also overspecification, or the denial of a common ontological ground from which varying but similar experiences originate.

Thus, in order for aesthetics to achieve this delicate balance, it necessarily has attempted to provide an all-encompassing narrative for the meaning and function of art while simultaneously attempting to transcend itself in order to ground these very claims. It has done this in various ways, including the separation of art from everyday life and engaged use via Kant's pervading notion of disinterestedness. Similarly, the intellect and the emotions, conceptions and perceptions have been sharply demarcated under the guise of understanding beauty. But I believe the biggest point of separation exists in the misapprehended notion of directionality of influence of art; traditionally influence has moved laterally between creator and perceiver rather than in concentric circles which radiate out from the work of art back toward the world it is simultaneously entering and helping to recreate. This fundamentally overlooks a rich network of mutual influences and nodes of meaning creation. Both individually and collectively, these points of artificial separation have enabled a false sense of meta-level analysis for aesthetics. The higher vista from which it demarcated realms of experience predicated on the subject-object relationship ultimately severed its connection with the aesthetic experience itself, thus rendering it discursively disconnected from that which it purported to explain.

Thus, the larger experience which we enter is articulable by way of aesthetics, but ultimately points toward its fundamental, ontological ground. As we move back and forth between this ontological ground and the aesthetic layer which is built upon it, the movement manifests a phenomenon which Heidegger expresses in his aesthetic philosophy as that of strife. And paradoxically, it is only through strife that we can experience the unity which we seek.

Unity

The term 'unity' has accumulated much theoretical baggage from its originary inception in Greek philosophy, particularly as it served as a guiding thread in Greek aesthetics. However, as ontological considerations regarding the question of being have been subsequently covered over and forgotten through the progression of

metaphysics, unity has taken on meanings which are not intended in this text. This is particularly true within the realm of musicology and music analysis, such as in the theories of Schenker, who presumes a fundamental organicism which underpins his musical analysis. While this could be considered a concentric radiation from the originary, ontological sense of 'unity' intended here, unity's connotation transcends such a specified application. For unity in the Greek, and thus Heideggerian sense, denotes an essential connectedness on the ontological level. This connectedness, however, is not a state, but rather a dynamic which preserves and reflects the fundamental strife which exists between being and becoming, and thus between materiality and abstraction. This unified tension exerts a mutual reciprocity which is inherently unifying while simultaneously preserving differences. This would be, at best, conceptual utopianism were it not for the fact that unity is not a state, but rather a relational dynamic whose very non-static nature provides the force which gathers together. Unity, therefore, is the very movement with which we seek to engage. It is a specific, gathering movement which moves us along a path. This path is that of truth, for which music can provide a map within the moment of engagement.

Perhaps a concrete instance of unity in this originary sense occurs within Eno's aesthetic practice. As his aesthetic philosophy finds a concrete, sonorous expression, I suggest that his music becomes his philosophy embodied. The existing tension between his philosophical articulations and the musical work itself demonstrates the reciprocity of articulations which both arise and inform the very work in which they appear and which they have made manifest. In this sense, I contend that Eno's ability to articulate aesthetic conceptions which are inherently grounded in his musical practice provide an opening or point of intersection for Heidegger's aesthetic ontology to be engaged and explored in a concrete, experiential manner. This practical engagement and philosophical intersection occurs with the added benefit of Heidegger's relative avoidance of musical commentary, and this is mirrored in Eno's status as a self-professed 'non-musician'⁴; a space exists on either side for a mutual interaction to occur which is thus free of preconceptions which would need to be identified and dispelled. I therefore argue that Eno embodies a point of entry into

⁴ Lester Bangs, 'Lester Bangs Interviews Eno', *Hyperreal*, (1979), http://music.hyperreal.org/artists/brian_eno/interviews/musn79.html (21 August, 2013).

Heideggerian aesthetics just as Heidegger provides a language in which to articulate Eno's aesthetic practice. This reciprocity continues to develop and widen to include Heidegger's thought as it subsequently unfolds through Gadamer and Levinas. As each philosopher arises from the same Heideggerian ground, they necessarily harmonize with the key of the initial dialogue while offering differing sonic tints or tinges which reflect the gloss of the evolving work in subtly varying ways. They add a layer of ambience, of richness and depth which reflect, through their natural progression from and beyond Heidegger's thought, an inherently organic quality which reflects a production value reminiscent of that of Eno.

The Map

A structure has thus been presented as components are fed into and interact with combined parameters thus generating multiple iterations. While the structure determines the possible lay of the land, it does not determine the path through it as such. Thus, I offer a few guiding remarks which do not intend to determine a path in themselves but rather equip the reader with a set of descriptions which enumerate the parameters from which he or she has been written into the text already. Just as every text presumes a reader, so too does every reader presume a text prior to arrival. It is precisely that which one brings to the present work which we seek to reveal and thus locate similarly within the listening process.

The present inquiry contains some conspicuous absences; 'music' would potentially occupy one such space. Eno released an album in 1997 entitled *The Drop* which contained pieces at least partially created by generative music software. The title doubled as the name of both the album and a new type of music contained within it, a music which he described like this: 'It's as if you had explained jazz to someone from a distant planet without ever playing them any examples of it and they tried to do some on the basis of your rather scant explanation'.⁵ This is an apt description of our present experience; in this instance, however, our music never arrives. The permanently pending appearance of Eno's generative music highlights the preconceptions and subjective barriers which potentially impede a more unified listening experience. Thus,

⁵ Brian Eno, 'Transcript of Brian Eno's BBC World Service Interview', *Hyperreal*, (1997), http://music.hyperreal.org/artists/brian_eno/thedrop.html (21 August, 2013).

instead of referring to the music in an objectified sense, although some specific examples will be cited along the way by means of illustration, I will alternatively indicate specific elements of the moment within the listening experience. Similarly, in keeping with Eno's own role as a producer who by definition does not feature in the foreground of the work, Eno will shape and mould the inquiry through his ambient presence in the background. As with his generative music, he sets the process in motion by enabling the encounter and allowing it to play out autonomously.

In a similar way, Heidegger appears initially and then steps back to allow Gadamer and Levinas to generate their own iterative interpretations. Thus, Heidegger's thought is able to transcend its own boundaries and limitations as it is subsequently viewed and processed through the lenses of other minds. Therefore, both Gadamer and Levinas exist as discrete, stand-alone encounters but which comprise part of the larger whole or unity of the text; conclusions offered within their respective sections suggest and shape a possibility space in which the larger whole can be philosophically situated. Finally, the conclusion represents a new beginning or origin in which a new generation of circular movement arises from the previous three iterations. Generative music thus not only has a technological origin but also a textual origin, one in which we experience its ontological essence.

Heidegger and Eno: The Aesthetic Encounter

The principal aim of this chapter is to lay the groundwork for the basic philosophic framework of the thesis, and this particular foundation finds its footing from a rich network of terminology taken from two of Heidegger's essays, 'The Origin of the Work of Art' and 'The Question Concerning Technology'. This is the first section of the chapter, organised around particular vocabulary which will feature throughout the entire inquiry. In the second section, Heidegger's organising words will be restated, but this time as adumbrations of small biographical portions from Eno's life and philosophy with which they particularly resonate. This associative correlation, despite the seemingly odd pairing and cultural and linguistic particularities, will help to situate the aesthetic evolution of generative music within Eno's musical practice and philosophy and draw it nearer to Heidegger's aesthetics by way of their commonalities. It will also highlight their shared focus on art, technology and their broader functions as well as their shared approach to both language and music as possibility spaces in an effort to disrupt the typical subject-object dynamic of aesthetics. The third section moves on from the work of art and its mechanisms of action to the perceiver as the point of focus. The processes of questioning and surrender, which characterise both Heidegger and Eno's approach to their respective work, are examined as approaches which are mirrored and adopted by the perceiver during the particular generative music encounter which we are exploring. Between the three sections are two 'shift' sections which draw attention to the variations in style and content between Heidegger and Eno. These differences and the arising tensions can be read as built in instructive moments during which the reader must actually perform a shift as he or she moves from one style and voice to another. These shifts highlight the process of linguistic mediation and demonstrate through actual engagement with the shift experience what is at stake in the aesthetic encounter through the experience of strife.

It is often during the most improbable juxtapositions that the most fruitful developments arise, combine, and issue forth, ones which elicit reconsideration not only of the conceptions involved but also of the very nature of the encounter itself. And so it is with our present inquiry and the aesthetic encounter between Eno and Heidegger. The invitation which has been issued is not to textually witness a forced meeting in which one side is categorically subsumed under the other, thus covering over differences and variations for the sake of an imposed uniformity. For by the very nature of the encounter, the dimensions exceed that of two; the encounter itself is encountered, bringing the experiences and sensibilities of the one who encounters—the reader—into the fold. The acknowledgement of this often overlooked third

dimension creates a textual space in which the reader's own listening experiences, inarticulate and private though they are, can meet and find resonance with and between two other merging worlds. The reader forms part of the horizon, and this mirrors the formative truth of the aesthetic encounter itself.

The encounter thus enables the arrival at a new beginning; an origin. The point of entry enabled by this particular meeting between Heidegger and Eno is not as obscure as one might imagine; they approach the same territory from opposite, yet complementary directions. In fact, their respective approaches mirror one another as they approach the space in which art and technology intermingle in their essences. Heidegger endeavours to reach the ontological level of Being through language; by tracing paths of thought back through to linguistic origins, he seeks to generate an experience of Being rather than define it. By letting the language resound and reverberate, bringing its embedded history of usage into contact with our present day resonances, he aims to reorient our thought process toward a space in which an encounter with the Being of being can occur. He seeks to enable the encounter through creating the space and marking the path which we can then follow toward our own experience rather than merely reading about his. In doing so, Heidegger allows language to work on and within the reader, and this process inherently encompasses the experiences which are brought to the text by the reader.

Eno arrives at this same moment, this intersection, from the opposite—yet mirrored—direction. While Heidegger creates linguistic possibility spaces in which our thinking and our experiences can resonate authentically, I suggest that Eno creates equivalent spaces sonically—and these sonic spaces or worlds are informed by and grow out of his aesthetic philosophy. This is often achieved through omission, during which the very elements which are intentionally left out—vocal personalities, overt melodies, repetitive rhythms—issue forth an invitation for the listener to enter into the space enabled by their absence. The space between notes sounding independently of a melodic phrase leaves endless possibilities of subsequent aural connections by the listener, and this calls into play the previous listening experiences and history of the listener. Eno provides sonic structures into which we, as listeners, become part of the possibility space; we are sonic extensions of a world into which we are more fully invited.

Heidegger and Eno are thus both concerned with art and technology, and in this sense they occupy shared territory prior to the present encounter. While the philosophical fields of inquiry are broad within these topics, both adopt a specific approach in which these terms indicate not objects of study but rather ways of thinking and being. Eno's primary question regarding the function of art is echoed in Heidegger's question regarding its origin; the work of art is an origin itself as its function is to set truth to work. Similarly, Heidegger's exploration of technology's essence, which is not itself technological but rather a way of revealing, is sonically played out as Eno utilizes technology to 'grow' data rather than to order information. This common emphasis on function denotes a shared propensity to examine these elements at the practical, everyday level of engagement rather than from a detached, 'objective' perspective. Just as Eno composes music to be 'used' rather than 'observed', so too does Heidegger engage and redirect our thought processes rather than merely listing his conclusions. In this way, the crucial emphasis on process over product is mutually demonstrated while retaining the uniqueness of their respective approaches.

Thus, in order to preserve the place of importance which is mutually afforded to process, we seek an encounter which demonstrates rather than represents. Just as Eno engages with systems-based art and Heidegger critiques metaphysics as a system, this encounter similarly aims to establish a linguistic system and set it into motion. In such a system, key terms from Heidegger's aesthetic theory as delineated in two mutually informative essays, 'The Origin of the Work of Art' and 'The Question Concerning Technology', are explored both within Heidegger's thought and Eno's practice. In this way, I suggest that Heidegger's terminology can be viewed as linguistic ontological parameters into which Eno's practice can settle and emerge, revealing new points of resonance in the process. Through this generative approach in which the structural parameters yield novel configurations, the possibility is afforded of transcending the traditionally employed aesthetic relation of subject-object, leaving the musical object absent as such and instead revealing the structures which enable its coming into being. This reflects what I argue is the decisive moment of the work of art for both Heidegger and Eno, one in which we see the constructed nature of our experiences, our identity and our knowledge echoed in the reflection of someone else's construction of the same things: world, earth, strife.

Heidegger

Aesthetics

Heidegger succeeds in both reviving and challenging aesthetics while situating it ontologically. The aesthetic tradition which Heidegger inherited contained what he considered to be a similar flaw to metaphysics in general in that it misrepresented Being from the outset. Aesthetics arose from the dichotomous view of Being as a subject and the world as cognitively represented objects. On this view, rationality and sensuality combine to form a specific doctrine of the way meaning can be formulated within art from the aesthetic tradition through mechanisms such as symbolism and other concepts of representation:

It is the imagination as a productive faculty of the representing subject that posits the work as symbol, informs its matter...The work of art is thus the expression of the artistic will of the representing subject. Since the Being of beings resides in their representation, the work of art, by expressing the subject, also represents this being. Aesthetics thus conceives the work of art as proceeding from the artistic subject's autonomous creative activity.¹

In this way, the work of art becomes the object both of the creator and the subject who receives it. Heidegger finds this view problematic in both aesthetics and metaphysics in general as it presupposes a static, non-historical Being and speaks not from the perspective of Being but rather from a contrived point outside of it. This externalizes meaning, or truth, as an appearance or property of Being rather than as a process which occurs between being and the world in which it is embedded and helps comprise. Accordingly, Heidegger terms Being as *Dasein*, which means 'being-in-the-world'² or being 'there',³ with 'there' indicating the world in a specific time and place. This suggests that for Heidegger, we are first and foremost engaged with our surroundings, and thus it is inconsistent with *Dasein*'s natural state to divide the whole into dichotomies as such or look for truth in a state of disconnectedness from our world. Thus, Heidegger's reformulation of aesthetic ideas involves the same pursuit of

¹ Jean-Marie Schaeffer, *Art of the Modern Age* (Princeton: Princeton University Press, 2000), 242.

² Martin Heidegger, *Being and Time*, John Macquarrie and Edward Robinson (trans.), (Oxford: Blackwell, 2001), 133.

³ *Ibid.*, 133.

knowledge regarding Being and the work of art as that of aesthetic tradition, but begins from a different formulation of the relationship between Being and the world.

Truth

For Heidegger, 'Being' denotes an action or process rather than a state or condition; so too does truth. Thus, as processes, truth and Being both exist as inherently historical. The unifying principle for both essays, and indeed for art and technology, becomes that of the history of Being as it relates to truth. Just as Being is not static, neither are art and technology merely forms or objects such as paintings or machines, but rather are distinct modes of *revealing* with specific characteristics which relate ways of being and truth. Truth, therefore, can exist in relation to beings in different ways.

In both 'The Origin of the Work of Art' and 'The Question Concerning Technology', Heidegger begins by linking the idea of truth with that of essences. He introduces the idea of the work of art's origin by stating that '[w]hat something is, as it is, we call its essence or nature'.⁴ Similarly, finding the essence [*Wesen*] of technology is the primary goal of the latter essay. As Heidegger explains, 'We shall be questioning concerning *technology*, and in so doing we should like to prepare a free relationship to it. The relationship will be free if it opens our human existence to the essence of technology'.⁵ Therefore, it is existence that he places in relation to the essence, indicating that this is the proper relationship in which truth is revealed.

The discussion of essence within 'The Question Concerning Technology' demonstrates that the relationship between language and technology reveals things about the nature of truth. Heidegger states that 'it is technology itself that makes the demand on us to think in another way what is usually understood by "essence"'.⁶ Technology, therefore, is characterized as a force which has influenced language and the reality represented therein. This point is crucial to understanding Heidegger's style of argumentation and thought processes, as etymologies and translations, particularly of verbs, abound throughout his works. This highlights the changing nature of Being

⁴ Martin Heidegger, *Poetry, Language, Thought*, A. Hofstadter, (trans.), (New York: Harper Perennial, 2001), 17.

⁵ Martin Heidegger, *The Question Concerning Technology*, William Lovitt, (trans.), (New York: Harper and Row, 1977), 3.

⁶ *Ibid.*, 30.

throughout history as expressed through language as well as the notion that languages of antiquity express concepts closer to essences as they have undergone less technological influence.

For example, as Heidegger makes linguistic explorations of 'essence', he notes that the noun *Wesen* is derived from the verb form *wesen*. This form is understood similarly in meaning and pronunciation to *währen*, which means 'to last or endure'.⁷ This connotation is markedly closer to the concept of essence as Socrates and Plato used the term, denoting 'what essences, what comes to presence, in the sense of what endures'.⁸ This has served both to set the idea of the essence into motion and also to exemplify the alterations in language over time. Thus, the tracing of essence-ing or enduring demonstrates the process during which a subtle shift has taken place not only in language, but also in the experience of being of which language speaks.

Although 'The Origin of the Work of Art' was written nearly twenty years before the publication of 'The Question Concerning Technology' in 1954, it reflects very consistent, albeit less developed, notions of essences and truth. In both essays, Heidegger describes the modern conception of truth as that which corresponds with the Roman word *veritas*, meaning the correctness of a judgment or idea,⁹ or the 'conformity of knowledge with fact'.¹⁰ This has been historically carried forward in the notion of propositional truth which denotes a correspondence or agreement, and thus continues as the notion of truth in Western metaphysics. This conception of truth denotes a relational mastery over the correlating ideas and thus reflects the culture from which *veritas* emerged.

This idea of mastery, as issuing from the subject-object split, is explained as Heidegger differentiates between a work of art and a thing. He compares the Greek word *hypokeimenon* with the Roman-Latin correlate *subiectum*. While the Greek denotes an underlying core of being to which properties attach themselves with the separate term *symbebekota* for the properties, the Latin already predicates only the properties as presence. The difference between the two demonstrates that '[s]omething that lies

⁷ Heidegger, *Question*, 30.

⁸ *Ibid.*, 30.

⁹ *Ibid.*, 12.

¹⁰ Heidegger, *Poetry*, 50.

beyond the purview of this essay speaks in them, the basic Greek experience of the Being of beings in the sense of presence'.¹¹ This experience illustrates a 'translation of Greek experience into a different way of thinking. *Roman thought takes over the Greek words without a corresponding, equally authentic experience of what they say, without the Greek word*'.¹² While this experience is untranslatable as such, Heidegger elucidates the concept behind this by expanding it from syntax to sentence structure. The structure of the propositional statement puts into question whether the subject-object division reflects the true nature of the thingly object or whether we transpose this structure from speech onto the object. While neither is true for Heidegger, this question demonstrates that the essence of the thing is not present in this type of articulation when compared with the Greek, and as such, Heidegger looked to language to elicit a shift from one way of thinking to another.

The conceptual nature of speech, however, lends itself naturally to the propositional conception of truth as it represents things which can be experientially verified as correct. While this is accurately defined as truth on one level, it presupposes a deeper, more fundamental truth. The pre-existence of this level is necessary as Heidegger states:

With all our correct representations we would get nowhere, we could not even presuppose that there already is manifest something to which we can conform ourselves, unless the unconcealedness of beings had already exposed us to, placed us in that lighted realm in which every being stands for us and from which it withdraws.¹³

Thus, this deeper level of truth reflects entities as uncovered or unconcealed rather than as corresponding.¹⁴ Therefore, truth in the sense of *veritas* fails to reveal or unconceal anything, as the entire process already necessarily occurs in the open of unconcealedness.

The notion of truth as unconcealment is not only arrived at theoretically but also linguistically. The Greek word *aletheia* is translated as unconcealment

¹¹ Heidegger, *Poetry*, 22-23.

¹² *Ibid.*, 23. (italics in original)

¹³ *Ibid.*, 51.

¹⁴ Uncoveredness and unconcealment are further divided into separate levels. For an explanation of further divisions, see Mark A. Wrathall, 'Unconcealment', in Hubert L. Dreyfus and Mark A. Wrathall (eds.), *A Companion to Heidegger* (Oxford: Blackwell, 2005), 337-357.

[*Unverborgenheit*] and is discussed in both essays. Similarly, 'truth' is also articulated through the use of the related *Wahr-heit*, which indicates close relation with the verb meaning 'to preserve' [*bewahren*] and also 'to watch over and keep safe' [*wahren*].¹⁵ This is immediately reminiscent of the way in which essence is described as the process of lasting and enduring, as something which is kept safe or preserved is something which endures. Significantly, *wahren* is closely related to *wesen*, the verb form from which essence is derived. Thus, the translations of these verbs have revealed something significant regarding the relationship between essence and truth, with essence describing a particular way of being of consistency toward a state of unconcealedness.

As essence is a way of being-toward, or comportment, which remains consistent between objects of similarity,¹⁶ it indicates the possibility of being experienced differently while maintaining continuity. Thus, essence as it relates to truth is particularly significant with regard to aesthetic considerations as it can reveal the ways in which truth can be experienced through different modes of comportment. The essence also demonstrates the ways in which Being's relationship to truth changes but truth remains infinite. This is due to the fact that when we cognitively categorize particular objects, we are responding to particular characteristics or properties which seem most salient to us. These properties, however, only represent a small number of an indefinite amount of those which could potentially be responded to.¹⁷ Thus, truth is a relation in which things are unconcealed while others remain necessarily concealed.

That which remains concealed, however, remains important as it creates a balance between that which can be thought, articulated and analyzed within a culture and that which is unintelligible as such but not insignificant. As the prominent Heideggerian scholar Hubert Dreyfus articulates, 'What is most important and meaningful in our lives is not and should not be accessible to critical reflection'.¹⁸ As mystery exerts its force on decisions and practices, it also helps to determine our modes of comportment

¹⁵ Heidegger, *Question*, 12.

¹⁶ Wrathall, 'Unconcealment', 353.

¹⁷ *Ibid.*, 354.

¹⁸ Hubert L. Dreyfus, 'Heidegger on the Connection Between Nihilism, Art, Technology, and Politics', in Charles B. Guignon (ed.), *The Cambridge Companion to Heidegger* (Cambridge: Cambridge University Press, 1993), 289-316 (294).

toward truth. Therefore, art and technology, as two modes of revealing toward truth, contain unintelligible aspects which must remain as such in the relation of truth.

World

The relationship between that which is revealed and that which remains concealed is expressed by Heidegger through the terms *world* and *earth* respectively. In 'The Origin of the Work of Art', Heidegger states that '[t]he setting up of a world and the setting forth of earth are two essential features in the work-being of the work'.¹⁹ These two aspects of intelligibility give the work its unity while simultaneously setting it in motion through their opposition. The relation of world and earth are illustrated through the exploration of three specific art works. The first is the painting entitled *A Pair of Shoes*²⁰ by Vincent Van Gogh which Heidegger describes in a very poetic, descriptive tone which differs considerably from the tone of the surrounding text. The effect conjured by the text introduces the notions of the 'world' and the 'earth' which are fundamental to understanding the work-being of art. When describing the pair of peasant shoes depicted in the first example, Heidegger gleans much information from the painting:

From the dark opening of the worn insides of the shoes the toilsome tread of the worker stares forth. In the stiffly rugged heaviness of the shoes there is the accumulated tenacity of her slow trudge through the far-spreading and ever-uniform furrows of the field swept by a raw wind. On the leather lie the dampness and richness of the soil. Under the soles slides the loneliness of the field-path as evening falls. In the shoes vibrates the silent call of the earth, its quiet gift of the ripening grain and its unexplained self-refusal in the fallow desolation of the wintry field. This equipment is pervaded by uncomplaining anxiety as to the certainty of bread, the wordless joy of having once more withstood want, and trembling before impending childbed and shivering at the surrounding menace of death. This equipment belongs to the *earth*, and it is protected in the *world* of the peasant woman.²¹

¹⁹ Heidegger, *Poetry*, 46.

²⁰ Some controversy exists regarding which Van Gogh painting Heidegger viewed by this title and also who owned the shoes depicted. However, his efforts to phenomenologically engage with the painting are of the most importance to this text. For further discussion regarding the controversy, see Iain D. Thomson, *Heidegger, Art, and Postmodernity* (New York: Cambridge University Press, 2011), 106-120.

²¹ Heidegger, *Poetry*, 33.

While the picture ostensibly depicts nothing but a single pair of shoes, Heidegger has linguistically expanded the image into a sort of narrative, as '[t]he artwork lets us know what shoes are in truth'.²² While the description is by no means exhaustive, and indeed Heidegger laments that it likely produced too little of the experience of the work, the reader is introduced to the world of the work; this concept is articulated separately and therefore differentiated from that of earth.

Heidegger's engagement with the painting demonstrates a phenomenological exercise during which he seeks to linguistically convey the world of the shoes. This expresses an interaction with the image of the shoes on an engaged level rather than a constructed, objective one as he does not describe how the shoes are painted, but rather the experience held by the peasant woman while wearing them. This approach reflects Heidegger's view that aesthetics is fundamentally flawed as an approach; we are not primarily disengaged observers of our surroundings. Rather, we approach a work of art which is always already embedded within the surroundings with which we engage. Therefore, our experience of the world of the image is informed by our experience of our world from the perspective of an embodied and engaged being rather than as a subject perceiving an object.

The process of engagement is not limited to the experience of the artwork, however. The world of the shoes is only revealed upon the consideration of the shoes in their utilization. The thoughts and experiences of the peasant woman during this engaged use reveal feelings of hunger, responsibility, and environmental sensitivity which all serve both to inform and comprise her world. Thus, to see what the shoes are 'in truth' is to interact with the world of the artwork at the level on which truth is revealed. In doing so, the painting speaks, and Heidegger states, 'In the vicinity of the work we were suddenly somewhere else than we usually tend to be'.²³

In this sense, the world exhibited by the painting is not merely the imaginary place experienced by the peasant woman or even a representative framework of that which is around her. Rather, as an artwork, the painting 'sets up a world'. The world is described as 'the ever-nonobjective to which we are subject as long as the paths of

²² Heidegger, *Poetry*, 35.

²³ *Ibid.*, 35.

birth and death, blessing and curse keep us transported into Being'.²⁴ World, therefore, can be conceived of as a way in which Being happens. In other words, it is both the conditions in which we find ourselves as beings and also the way we cognitively reflect, organize and ultimately co-create those conditions. As this process occurs within the bounds of temporality, the world is necessarily historical in nature. In fact, Heidegger states that '[w]herever those decisions of our history that relate to our very being are made, are taken up and abandoned by us, go unrecognized and are rediscovered by new inquiry, there the world worlds'.²⁵

It is thus by way of the work that world is 'set up'. In this way, the work is a making or presencing²⁶ rather than the mere expression of form and matter as described by traditional aesthetics. In his description of Van Gogh's painting, Heidegger demonstrated how his engagement with the world of the work was a way in which his world met and converged with the world of the painting. This process results in a presence which involves 'the horizon of all our horizons, the horizon within which all perspectives available to us are contained'. As this horizon extends and recedes, the conception of that which is intelligible meets the unintelligible.

Earth

In order to conceive of the horizon, that which lies beyond it must be conceptually represented. This would correspond to a sort of nothingness or incomprehensibility which exists at the very limits of intelligibility. Significantly, prior to Heidegger's interaction with the painting above, he stated that '[t]here is nothing surrounding this pair of peasant shoes in or to which they might belong—only an undefined space'.²⁷ Thus, it is from out of the 'nothing' of the background of the painting that the shoes appear. This is not only compositionally significant in the visual sense, but also important in its conceptual correspondence, as the art work characteristically engages in the 'setting forth of the earth'.²⁸

²⁴ Heidegger, *Poetry*, 43.

²⁵ *Ibid.*, 43.

²⁶ *Ibid.*, 44.

²⁷ *Ibid.*, 33.

²⁸ *Ibid.*, 46.

Thus, the 'nothing' surrounding the shoes corresponds to a sort of 'noth-ing', which Heideggerian scholar Iain Thomson describes as 'the phenomenological manifestation of that which both elicits and eludes complete conceptualization, an initially inchoate phenomenon we encounter when we go beyond our guiding conception of what-is'.²⁹ Earth is completely untiring, effortless and inexhaustible and is just intelligible enough for us to recognize that it is impenetrable by nature. This inexplicability, however, is significant in that it informs and influences our conceptions by providing contour or shape. Heidegger offers an example of this process with regard to the heaviness of stone. He points out that we are unable to access the manifestation of the weight of a heavy stone, as breaking it up into segments would be to experience the dispersal of its weight and not the weight as manifested in its totality. Similarly, placing a stone on a scale would produce a numerical value, but this would remain a number and not actual knowledge of the weight's burden.³⁰

These attempts to penetrate earth are inherently doomed to destruction by earth itself. As Heidegger states, 'This destruction may herald itself under the appearance of mastery and of progress in the form of the technical-scientific objectification of nature, but this mastery nevertheless remains an impotence of will'.³¹ In other words, earth represents the very limits of our subjectivity. The endeavour to conceptualize earth by means of technology and science is a crucial theme for Heidegger, and will be explored in depth later. The exertion of human will upon the unknowable is not only ineffective but also detrimental in Heidegger's view, as the techno-scientific representation of the supposed 'truth' of earth causes the authentic interactions with earth and its unknowable truths to either diminish or cease altogether. Thus, that which appears as progress or mastery is in actuality a further obfuscation of truth, and this obfuscation itself is missed when the will, and thus subjectivity, dictates the entirety of the encounter.

While technological and scientific endeavours conceal the truth of earth through mastery, the art work is a 'happening of truth'³² in which earth remains earth. It is

²⁹ Iain Thomson, 'Heidegger's Aesthetics', *The Stanford Encyclopedia of Philosophy (Summer 2011 Edition)*, Edward N. Zalta (ed.), <http://plato.stanford.edu/archives/sum2011/entries/heidegger-aesthetics> (5 September, 2011).

³⁰ Heidegger, *Poetry*, 45.

³¹ *Ibid.*, 46.

³² *Ibid.*, 69.

revealed as 'the spontaneous forthcoming of that which is continually self-secluding and to that extent sheltering and concealing'.³³ Heidegger illustrates this through the example of a sculpture in which stone is utilized but not used up; it retains a unique character and dramatic presence in a significantly different way than that of a tool made from stone. Despite making a feature of the stone, the sculpture remains unable to reveal any ontological truth about the stone. In this way, earth can only appear as itself when it is preserved as that which is undisclosable.

Despite the inability of earth to be knowable, it nonetheless performs a vital role in conjunction with both world and Being. This can be seen in the example of the Greek temple in 'The Origin of the Work of Art'; as Heidegger states:

A building, a Greek temple, portrays nothing. It simply stands there in the middle of the rock-cleft valley. The building encloses the figure of the god, and in this concealment lets it stand out into the holy precinct through the open portico. By means of the temple, the god is present in the temple. This presence of the god is in itself the extension and delimitation of the precinct as a holy precinct. The temple and its precinct, however, do not fade away into the indefinite. It is the temple-work that first fits together and at the same time gathers around itself the unity of those paths and relations in which birth and death, disaster and blessing, victory and disgrace, endurance and decline acquire the shape of destiny for the human being. The all-governing expanse of this open relational context is the world of this historical people. Only from and in this expanse does the nation first return to itself for the fulfilment of its vocation.³⁴

Thus, although the temple is non-representational in its physical appearance, it nonetheless influences the world of the Greeks through giving shape and form to that which is unknowable. It is by means of the temple, therefore, that the Greek world is both established and reflected. However, this world would lack context without the emergence of the earth. Being would be completely immersed in the world of immediate surroundings in the absence of a reminder of the infinite and unknowable. There would exist a 'forgetfulness that our realm of being is just one disclosure of reality that contains within itself the possibility of infinitely many alternative beings', and this is precisely the danger which technology reifies for Heidegger.³⁵

³³ Heidegger, *Poetry*, 47.

³⁴ *Ibid.*, 40-41.

³⁵ Julian Young, *Heidegger's Philosophy of Art* (Cambridge: Cambridge University Press, 2001), 41.

Heidegger's choice of the Greek temple coupled with his linguistic references to Greek terminology can be misread as mere nostalgia. However, while Heidegger does describe Being as historical and therefore changing over time, he is not privileging Greek culture in this sense, as it has been supposed by some. Instead, the Greek temple is used to demonstrate a point in time during which art performed a different role. As Thomson explains, '[t]he Greek temple shows that art was once encountered in a way other than as a subject's intense aesthetic experience of an object, and thus suggests that, while those ancient and medieval worlds have been lost irretrievably, other works of art might yet be encountered non-aesthetically in our late-modern world'.³⁶ The most significant aspects of Greek life, the 'death, disaster and blessing, victory and disgrace, endurance and decline', were shaped and united through the understanding provided by way of the temple. For this reason, art occupies a privileged place for Heidegger as it can offer an alternative to objectifying technological forces and aid in our comprehension of being.³⁷

Strife

While world and earth are dependent upon each other for their respective identities, this dichotomy is not sufficient in itself to reveal truth. Heidegger describes the relationship between earth and world as a strife which is instigated by and within the art work. This striving is not a destructive process, but rather brings out the best and most authentic natures in each opponent through the forcing of self-assertion. This striving creates a paradox, as 'the more the struggle overdoes itself on its own part, the more inflexibly do the opponents let themselves go into the intimacy of simple belonging to one another'.³⁸ Thus, the work gains its unity through the intimacy achieved through battle.

The intimacy is achieved not through the resolution of the battle between earth and world, but rather through its very lack of resolution. The process of striving never ceases; earth tries to draw the world into itself and conceal it while world strives to

³⁶ Iain Thomson, 'Heidegger's Aesthetics', *The Stanford Encyclopedia of Philosophy (Summer 2011 Edition)*, Edward N. Zalta (ed.), <http://plato.stanford.edu/archives/sum2011/entries/heidegger-aesthetics> (21 August, 2011).

³⁷ Ibid.

³⁸ Heidegger, *Poetry*, 48.

surmount earth. The world 'grounds itself on earth' while the earth 'juts through world'.³⁹ The result is a rift (*Riss*), which binds earth and world together in their shared oppositional border. The rift is described as 'a basic design, an outline sketch, that draws the basic features of the rise of the lighting of beings'.⁴⁰ This process of the bringing forth of being is the happening of truth, whereby the being is brought forth into the Open and then set back into the self-secluding earth.

Open

Thus, Being is established in the Open or clearing [*Lichtung*], or the 'lighting-clearing of the There',⁴¹ through the conflict between revealing and concealing. This primal conflict between earth and world is a way in which truth happens; truth is not a pre-existing, external imposition onto Being, but rather is a way in which these conflicting traits already within Being are brought into the Open of intelligibility. It is essential to understand how Heidegger conceives of truth happening, as this shapes both his phenomenological processes and also the perceived threats to authentic modes of revealing. Accordingly, Heidegger spends much time elucidating these conceptions in 'The Origin of the Work of Art', in which he states a conceptual starting point for the process: 'Beings refuse themselves to us down to that one and seemingly last feature which we touch upon most readily when we can say no more of beings than that they are'.⁴²

This point of initial knowledge of presence necessitates the Open as the way in which human beings are granted a passage to both those beings we are not and also to our own being.⁴³ The Open, therefore, happens both in the midst of beings and to beings, as 'the lighting center itself encircles all that is'.⁴⁴ While the Open requires the presence of beings in order to exist and encircles this existence, it does not guarantee intelligibility; not all aspects of Being are able to be mastered, and according to Heidegger, most things remain unknown. This is his conception of destiny, as

³⁹ Heidegger, *Poetry*, 47.

⁴⁰ *Ibid.*, 61.

⁴¹ *Ibid.*, 59.

⁴² *Ibid.*, 52.

⁴³ *Ibid.*, 51.

⁴⁴ *Ibid.*, 51.

something veiled which passes through Being.⁴⁵ Decisions are made, and also made possible, based on that which appears in the lighting of the Open and that which remains concealed.

Unconcealedness, then, is that which is won in the fighting of the battle between earth and world. This happening of truth within the art work occurs to us as the shining of the illumination of the self-concealed being. This appears to us as beauty. The work is beautiful, therefore, due to the happening of truth within it and through it. In this way, beauty is something which is experienced on an engaged level of experience rather than from the privileged, detached perspective of traditional aesthetics. Truth, therefore, comes to operate in the art work not as correctness or representational acuity, but rather as a process revealed and held by the work.

The work of art is one of many ways in which truth establishes itself. Heidegger discusses other manifestations of truth, including the founding of political states and essential sacrifices. He continues:

Still another way in which truth becomes is the thinker's questioning, which, as thinking of Being, names Being in its question-worthiness. By contrast, science is not an original happening of truth, but always the cultivation of a domain of truth already opened...When and insofar as a science passes beyond correctness and goes on to a truth, which means that it arrives at the essential disclosure of what is as such, it is philosophy.⁴⁶

The art work, therefore, operates on a different level of truth than that of science, whose level of *veritas* allows for correct corresponding of facts and judgments based on observations which exist in the realm of the already revealed.

Technology

In order to begin to answer the question posed by the combination of art and technology, we must have an accurate understanding not only of art, but also of technology. Technology, in Heidegger's view, is widely misunderstood; we tend to view technology both as a means to an end and also as a human activity which utilizes a contrivance to achieve this posited end. As these views are correct but not true on a

⁴⁵ Heidegger, *Poetry*, 51.

⁴⁶ *Ibid.*, 60.

more fundamental, essential level, they characterize the danger contained within technology as it relates to Beings. If we do not recognise the influence latent within technology, we are apt to be mastered by it. Thus, in order to reveal the truth of technology, we must discover its essence. Using the method of questioning in the 'The Question Concerning Technology', Heidegger 'builds a way'.⁴⁷ This process, through which Heidegger comes into a free relationship with technology, is significant and will be explored in depth in a later chapter.

The way of questioning used by Heidegger involves a linguistic tracing of technology to its essence. He begins by examining the supposition that technology is a means to an end, which can be seen in the human activity which creates instruments in order to achieve ends. These, taken together, comprise the instrumental and anthropological definition of technology, which, while correct on the level of *veritas*, does not reveal the essence of technology and thus enable a free relationship with it.⁴⁸ This conception of technology is particularly problematic for Heidegger because it 'conditions every attempt to bring man into the right relation to technology'.⁴⁹ We come to view technology as an instrument to manipulate or master; this 'will to mastery' becomes urgent as we continue to attempt mastery over the very tools which helped initiate mastery. Significantly, Heidegger offers only the Latin *instrumentum* here to begin the way of questioning, which echoes the dilemma discussed earlier of Greek experience being lost in the Roman translation whereby mastery was culturally characteristic.

The notion of instrumentality leads to the examination of causality, for 'wherever instrumentality reigns, there reigns causality'.⁵⁰ Returning to Greek thought once again, Heidegger examines Aristotle's fourfold doctrine of causality which includes the *causa materialis*, the *causa formalis*, the *causa finalis*, and the *causa efficiens*.⁵¹ However, Heidegger lists the causal types in Latin, again highlighting the deviation in meaning as it travels from language to language. Thus, although all four causes were conceptually present in Greek thought and language, causality in modern thought is reduced to and dominated by one cause, that of *causa efficiens*, in which something is

⁴⁷ Heidegger, *Question*, 3.

⁴⁸ *Ibid.*, 3.

⁴⁹ *Ibid.*, 5.

⁵⁰ *Ibid.*, 6.

⁵¹ *Ibid.*, 6.

brought about as a result. Significantly, the Roman *causa* corresponds to the Greek *aition*, which means ‘that to which something else is indebted’.⁵² This is completely unrelated to the modern conception of causality, and instead signifies a sort of conglomeration of all four causes denoting a way in which something is responsible for something else.⁵³ This responsibility does not involve willing something into existence, as in modern thought, but rather a type of indebtedness of that which has come into existence. The Greek experience of *aition* would be an ‘occasioning’ in which something which is not present is brought forward into presence.⁵⁴

The occasioning or presencing [*Anwesen*] is a way of ‘bringing-forth’ [*Her-vor-bringen*] in the sense of the Greek *poiesis*. Within *poiesis*, two types of bringing-forth occur; one is *physis*, in which something arises from out of itself, such as a blossom which blooms, and the other involves something which is brought forth by way of another, such as by the artist. It is on both levels of *poiesis* that something comes into unconcealment from a state of concealment, thus making *poiesis* a mode of revealing, or *aletheia*. Just as *aletheia* is mentioned in both essays, so too is *techne*, which derives from Greek *Technikon*. *Techne* describes both the work of the artist and the craftsman, and is linked with *epistēme*, or knowledge. Thus, both *techne* and *epistēme* are ways of knowing. However, the opening up provided by this knowing differs for each term, for with *techne*, that which is brought forth into presence was shaped by the conception of the completed thing; the potential for other manifestations were present prior to its presencing. It is thus that Heidegger states that ‘what is decisive in *techne* does not at all lie in the making and manipulating, nor in the using of means, but rather in the revealing mentioned before. It is as revealing, and not as manufacturing, that *techne* is a bringing-forth’.⁵⁵

The bringing-forth of technology in the modern era begins to differ from that of *poiesis*; modern technology is a challenging [*Herausfordern*]. This challenging forth properly belongs to exact science as everything is calculated as potential energy and resource to humans. As Heidegger states, ‘The field that the peasant formerly cultivated and set in order [*bestellte*] appears differently than it did when to set in

⁵² Heidegger, *Question*, 7.

⁵³ *Ibid.*, 7.

⁵⁴ *Ibid.*, 221.

⁵⁵ *Ibid.*, 13.

order still meant to take care of and to maintain'.⁵⁶ Farming is now a process of the agricultural industry. The unknown is quantified and stockpiled as 'standing-reserve' [*Bestand*]. Significantly, Heidegger makes the point that 'whatever stands by in the sense of standing-reserve no longer stands over against us as object'.⁵⁷ In this way, we appear to have mastered everything, but have failed to recognize that within this process we have ourselves become standing-reserve as well.

While the dependence of modern technology upon the exact science of modern physics would appear to be the cause of this shift in revealing, in fact the reverse is true; modern physics is dependent upon technological apparatus for its progress and development and as such the two are mutually dependent upon each other.⁵⁸ This dependency indicates that the challenging claim issued both within and toward modern technology is a symptom of the way in which man's will relates to unconcealment.

Man is always already in the presence of unconcealment; he lacks any control over that which withdraws or reveals itself.⁵⁹ Heidegger notes that this has always been the case, as Plato did not bring about Ideas, but rather 'only responded to what addressed him'.⁶⁰ In a similar way, man is 'called forth into the modes of revealing allotted to him'.⁶¹ In this way, modern technology, as a way of revealing, is a response to a claim made upon man. Heidegger explains:

When man, in his way, from within unconcealment reveals that which presences, he merely responds to the call of unconcealment, even when he contradicts it. Thus when man, investigating, observing, pursues nature as an area of his own conceiving, he has already been claimed by a way of revealing that challenges him to approach nature as an object of research, until even the object disappears into the objectlessness of standing-reserve.⁶²

This challenging claim is enframing [*Ge-Stell*], which denotes a kind of frame or skeleton. Enframing 'gathers man with a view to ordering the self-revealing as

⁵⁶ Heidegger, *Question*, 14-15.

⁵⁷ *Ibid.*, 17.

⁵⁸ *Ibid.*, 14.

⁵⁹ *Ibid.*, 18.

⁶⁰ *Ibid.*, 18.

⁶¹ *Ibid.*, 19.

⁶² *Ibid.*, 19.

standing-reserve'.⁶³ In this sense, it is an opening up or way of revealing which determines on the ontological level the very possibility of truth revealing itself to man. As such, it is thus not at all technological in itself, but comprises the essence of technology.

To question enframing always occurs too late, as Heidegger notes, because we are already within its realm. Nevertheless, it is not only necessary but essential to do so, as enframing represents the danger which lies within technology. This danger lies in the nature of enframing, as it is a destining [*Geschick*] which starts man upon a way of revealing. This particular way of revealing blocks *poiesis*, during which further revealing would be revealed. This blocking makes man's revealing as standing-reserve appear final; man is therefore in danger not only of being forced to take himself as standing reserve but also falling for the illusion that everything exists as his own construct. Put another way, we see only our own limited perspective as the ultimate and final truth and thus close off other ways of being and knowing.

Despite the fact that we already operate within the realm of enframing, there still exists a hope. Heidegger quotes Hölderlin, stating:

But where danger is, grows

The saving power also.⁶⁴

Thus, that which threatens us also contains its antidote, or saving power. As this saving power is dependent upon discovering technology's essence, the process of discovering its essence within Heidegger's essay reveals how the shift can occur. As he leads us through a path of linguistic transformations which ultimately elicit a shift in the reader akin to that of the saving power of which he speaks, I contend that this shift is technologically paralleled in generative music listening. It is thus that the saving power arrives through the use of art, and eventually, as I argue, technological art.

⁶³ Heidegger, *Question*, 19.

⁶⁴ *Ibid.*, 34.

The Shift

The questions which Heidegger raises in both 'The Origin of the Work of Art' and 'The Question Concerning Technology' are significant; however, just as significant is the fact that he leaves them largely unanswered as such. The first essay moves circularly, leaving the question regarding the origin of the work of art to a self-reflexive definition of the work of art as an origin. Similarly, the saving power which potentially coexists within the danger of technology is left completely unnamed and unexplained. I maintain that the key to unlocking Heidegger's writing lies in the textual hints along the way. This is evidenced in Hölderlin's poetic assertion that the saving power 'grows', which, coupled with the structure of the poem's stanza, mimics the structure of Heidegger's essay. Thus, the saving power has grown along with the reader as he or she moves through the essay, tracing technology to its essence as a way of revealing. This way of revealing lies within our thoughts, and it is our thoughts which have been reoriented toward *poiesis* as the essay progresses. In this way, Heidegger incorporates the product into the process in which the reader, like Eno's listener, is co-creator.

This interplay of form and function between the parts and the whole within Heidegger's works points toward a fundamental tension which exists both textually and within the work of art; we strive to reach a meta-level from which to view things as a whole while simultaneously attempting to remain fully engaged in the physical, embodied experience of the present moment. This tension is manifested and reiterated in the subject-object relationship in which our abstracted thoughts and our engaged sensations both cooperate and compete as primary modes of accessing truth about the environment. The tension is demonstrated in Heidegger's essay on technology, as viewing it from a meta-level reveals the saving power which must by its very nature remain obscured at a lower level of explicit reference. Thus, these differing levels of engagement with the text, our environment, the work of art, and with thinking itself highlight the role of mediation; just as language for Heidegger is the 'house of being' which both structures and enables being's presence, so too does technology enable and shape Eno's music. As both engage with meta-level creations, or the creation of systems which yield creations of their own, the attempt to occupy and embody two levels at once is made manifest.

We endeavour to engage in a similar process in the present aesthetic encounter between Heidegger and Eno. We seek a perspective which both arises from Heidegger and Eno and also rises above them; we want to attain a view which is simultaneously engaged and abstracted, interior and exterior to the dialogue. As we move along a path of commonly resonating linguistic cues, a disjointed pattern of mutual connections, variances and dissimilarities arises. However, this pattern emerges not only from points of connection which occur at the level of content, but also from the coexistence of the two differing stylistic registers of Heidegger and Eno. As Heidegger's dense philosophical constructions encounter Eno's more conversational explanations, the juxtaposition of the two textual worlds create a Heideggerian strife: one climate attempts to pervade the entire text and yet is pushed back by the other, sometimes gently and at other times forcefully. Thus, the reader must make a shift from one way of reading to another, and this shift must be performed repeatedly. As such, the shift becomes a feature of the text itself on a meta-level and thus issues a repeated challenge to the reader.

The shift is not only a challenge; it is a necessity to the topic. It demonstrates, through tangible experience to the reader, what actually occurs during a perceptual shift, and this is precisely what is at stake in the aesthetic encounter with the work of art, and more specifically within generative music. Therefore, the unlikely meeting between Heidegger and Eno is additionally advantageous as these two styles can instigate and thereby demonstrate the very phenomenon which it attempts to describe: strife between two orientations or ways of thinking. As such, the path along which we move is both enabled and shaped by these shifts which manifest a pattern of movement within the reader. As this pattern takes shape between Heidegger and Eno, a common ontological earth opens up with grounds their respective worlds. This earth lies just below the shared language which ultimately eludes them both and yet connects them through the reader in the moments of the shift. Thus, together Heidegger and Eno issue an invitation to read differently—to think differently. However, the invitation, like the saving power, lies in the process and the movement rather than in a declaration.

Brian Eno

Aesthetics

The link between a biographical history and the development of a philosophical outlook is not insignificant; we are embodied in a specific time and place and these enable further parameters to arise within which we move and think philosophically. However, this encounter does not seek to recount a biography of Brian Eno as such;⁶⁵ it endeavours on a larger scale to reveal the ontology of generative music listening. Thus, Brian Eno must be properly situated within that formulation: he enables the specific type of generative music which invites the listening experience under consideration. In this sense, Eno's role could be conceived as that of a parameter itself, one through which generative music arises and takes on a specific shape with characteristic contours. In this way, not all of his biographical details directly affect his aesthetics, but his aesthetics do directly influence his generative output. Thus, the present encounter attempts to reveal some relevant experiential points from which his unique generative music has been cultivated, the details of which paint a rough picture of the aesthetics of the experience as much as they do of its progenitor.

If Heidegger's aesthetics begin from a reconfigured starting point at which Being and the world are engaged rather than disconnected, Eno's aesthetics starts from a rearrangement of the perceiver, the artist and the aesthetic process. Steward Brand describes Eno's approach:

Like all significant artists, Brian works from a deep and complex and evolving frame of reference. Unlike most artists, and like most scientists, he talks about that frame of reference. He's not worried that your experience of his art might be sullied by your understanding something about what he's up to — rather the opposite: he would like to include you in the process. This is risky, but valuable. It's risky because once viewers or listeners know what the artist is attempting, they have criteria for judging when he has failed. Brian's approach is valuable

⁶⁵ Two have already been written. See Eric Tamm, *Brian Eno: His Music and the Vertical Colour of Sound* (New York: Da Capo Press, 1995) and also David Sheppard, *On Some Faraway Beach: The Life and Times of Brian Eno* (London: Orion, 2008).

because it is so inviting. The informed viewer or listener is invited to think like an artist and therefore in a sense to become an artist.⁶⁶

Eno thus approaches the work of art with the perceiver conceived as part of the system; his or her knowledge of the system and engagement with it becomes factored into the system itself. For instance, in *Discreet Music*, he provides a diagram of the system which generates the music, including the inputs, outputs and manipulations in between. The system thus informs not only the process of generating and shaping sound, but also the listening process; it provides cognitive frames of reference which in turn shape the listening experience. Similarly, the demarcation between artist and viewer or listener becomes blurred, particularly in the interactive iPhone applications of *Scape*, *Bloom*, *Trope*, and *Air* in which Eno provides the sound possibilities and the user determines the configuration. Thus, Eno's artistic philosophy involves inclusion of the perceiver into the system of the work, whether it be through knowledge of the system which is reflected back during listening, or as part of the creation process itself through interactive choices.

Just as the perceiver is part of the aesthetic process, which unfolds with the same degree of surprise for both Eno and the listener, the aesthetic process itself is inherently part of a larger system. Eno's guiding question involves the function of art, and this requires a broad frame of reference which is able to transcend aesthetics in order to situate it within the larger framework of relationships. As he states, 'there should be one language that fits these things together'.⁶⁷ However, he finds traditional aesthetic discourse to be too vague, and finds other writing in and around the arts 'appallingly bad'.⁶⁸ Therefore, Eno often looks to science, and specifically to Darwinism, to provide an overarching mechanism through which to examine art in the wider context of culture and human behaviour.

Eno appreciates not only the unifying language provided by Darwinism, but also the effects which it has had on science in its practice; it embodied a shift from detached observation and data collecting to making active correlations between non-static entities, a process in which the scientist's very identity was ultimately implicated as

⁶⁶ John Brockman, 'A Big Theory Of Culture: A Talk With Brian Eno', *Edge*, (1997), <http://www.edge.org/conversation/a-big-theory-of-culture> (21 August, 2013).

⁶⁷ Brockman, 'Big Theory'.

⁶⁸ *Ibid.*

part of the inquiry. As Eno explains, 'In a way he brought to an end the sort of gathering stage of natural history, the stage where the job of a natural historian was just to go out and make observations, and he brought into being the next phase, which was the task of somehow relating things together and making extrapolations and predictions, and saying if this happens, we might expect that this would happen'.⁶⁹ Significantly, these outcomes are mirrored by Heidegger's ontological contribution to metaphysics; Being itself is a historically and temporally embedded process rather than a detached, timeless consciousness, and this situation inherently includes Dasein not as an observer but rather a manifestation of Being. The importance of process and self-reflexivity thus remains constant between Eno, Darwin, and Heidegger.

As a unifying structure and language, Darwinism is particularly relevant for generative music as it often involves algorithms which have been modelled on natural selection. Its emphasis on process and interrelations likewise provide a natural resonance with Eno's aesthetic practice. However, Darwinism remains tied to the larger field of science which necessarily employs an approach to the world which reflects specific methods and aims, some of which fall specifically under Heidegger's critique. It consequently lacks the self-reflexivity to examine itself at a more fundamental level, the level which enables science to come into being at all. Thus, within the present encounter, Eno's Darwinian structure can remain viable while benefiting from being situated within an ontological framework of reference. This enables both the unifying language which Eno desires as well as a method by which to engage with Darwinian concepts and structures without automatically adopting the problematic methodology which accompanies its science.

Eno's aesthetics are not theoretical abstractions created separately from the work; they are an integral part of how the work comes into being. They arise from the work both as a result of experiencing the work and also from creating it. As one of its guiding principles is the question regarding the function of art, the artwork itself becomes a way of playing out this question and others in an ongoing, iterative process. This process can be likened to a description in a recent comment by Eno as he stated that 'instead of shooting arrows at somebody else's target, which I've never been very good

⁶⁹ Brockman, 'Big Theory'.

at, I make my own target around wherever my arrow happens to have landed. It's like you shoot an arrow and then paint the bullseye around it'.⁷⁰ This metaphoric description of his work reflects the reversal of the traditional artistic approach; his work embodies the exploration process which then serves as an anchoring point for further inquiry. As such, his aesthetic philosophy exists more as a brush stroke around the edges of some selected, relevant bullseyes than as a pre-patterned object of focus.

The very act of shooting an arrow and accepting the ground on which it lands as one's own, as Eno describes, has the propensity to bring about creative dilemmas which otherwise would not occur if one were aiming for a predetermined target. As such, it can bring about more questions than it originally set out to answer. As early as 1975, with the help of a painter and friend Peter Schmidt, Eno developed a set of cards named 'Oblique Strategies' which aimed specifically to foster new perspectives and ideas during times of creative difficulties. These cards are referred to as 'over one hundred worthwhile dilemmas', and are explained on an introductory card:

These cards evolved from separate observations of the principles underlying what we were doing. Sometimes they were recognized in retrospect (intellect catching up with intuition), sometimes they were identified as they were happening, sometimes they were formulated. They can be used as a pack (a set of possibilities being continuously reviewed in the mind) or by drawing a single card from the shuffled pack when a dilemma occurs in a working situation. In this case the card is trusted even if its appropriateness is quite unclear. They are not final, as new ideas will present themselves, and others will become self-evident.⁷¹

Some of these cards are action-oriented, such as 'Ask people to work against their better judgement'. Others are formulated as questions, such as 'Is it finished?' or 'Who should be doing this job? How would they do it?' Still others state just one word such as 'Water' or 'Accretion'. The variety of the linguistic constructions reflects both the diversity of situations under which these cards were formulated and also the propensity for stimulating multiple manners of responses. The cards function as a systematic and non-determinant approach to creative situations and perfectly illustrate and encapsulate what I suggest are Eno's underlying aesthetic sensibilities;

⁷⁰ *Brian Eno—Another Green World*, dir. Nicola Roberts, 2010, 60 min. (BBC).

⁷¹ David Ray, 'Oblique Strategies', *Hyperreal*, http://music.hyperreal.org/artists/brian_eno/oblique/oblique.html (21 August, 2013).

specific connections occupy a place of less importance than the actual process of connection itself, and this process exists in continual motion between the music, Eno, the perceiver and the space of uncertainty and surprise which unites them.

Truth

When discussing his role in the aesthetic experience, Eno states that '[a]n artist is a trigger, making something happen between you and the work. Art is not a property of things, it is the site of a relationship with things'.⁷² Thus, the point of significance is the process occurring both through and around the work. Put another way, Eno sets a process in motion which invites the listener to share that approach or way of being. The 'something' which happens is the process of unconcealment, or the happening of truth.

While Eno's philosophical inclinations have been articulated in slightly different ways over his long career, there exists a definite cohesion in his overarching view of art as a system itself. Early in his career, he explained, 'You see, the prime interest in being an artist for me is that it's a system of knowledge, it's a way of investigating the world. It's different from rational investigation of the world because it proceeds simply from excitement. And what I think is most interesting is that when you work, you deliberately find yourself moving towards an area of uncertainty'.⁷³ This area of uncertainty is one in which Eno is both creatively stimulated and comfortable, as his interest is directed primarily at seemingly organic structures which themselves can be viewed as systems of growth and change, thus requiring a degree of acceptance in uncharted territory. Acceptance for Eno is not a passive state, but rather actively enables a new level of complexity, as he explains:

Acceptance involves incredibly complex refigurations [sic] of your own perception. To be able to see what's going on - and that phrase has many different levels of meaning, but I'm using it on one of its lighter levels at the moment - to see what's going on requires real examination, first of all your own perceptual mechanisms which are related to your own survival needs and your own environmental context and so on... so

⁷² Charlotte Higgins, 'Eno Helps Solve the Purpose of Art', *Guardian*, (2010), <http://www.guardian.co.uk/culture/2010/jan/26/london-centre-arts-cultural-exchange> (19 August, 2013).

⁷³ Caroline Coon, 'Brian Eno', *Hyperreal*, (1977), http://music.hyperreal.org/artists/brian_eno/interviews/ritz77.html (23 August, 2013).

it involves a Critical Examination of all those things. Which is immeasurably difficult to do as it's always under review.⁷⁴

Thus, the uncertainty embraced in his work, particularly in that of generative music, necessitates a degree of acceptance as complete control is surrendered over the output. This in turn reveals a point at which one can see more clearly that which we bring to the process of perception. As art is a way of investigating the world, it explores the way things could possibly be, as elicited in the work of art. In this exploration, one comes to know the truth of how things presently are more profoundly, including the ways through which we see them as such. This process demonstrates itself endlessly in Eno's generative music such as that of *77 Million Paintings*, which shows a seemingly infinite number of possible visual and aural combinations. As the listener experiences them with the knowledge that their configurations were not planned as such but instead were generated, any patterns which are heard or seen as such can be identified as imposed by the listener. In this sense, Eno's concept of truth could be conceived as the site of a relationship in which possibilities and actualities converge to inform our present configuration of reality.

World and Earth

If art is described as 'the site of a relationship with things',⁷⁵ then the relationship exists not only between the perceiver of the work and the work, but also between the work and the larger environment in which it exists and to which it contributes. 'Things' in the statement thus encompasses a point of convergence between the world of the work and the world around the work as perceived by the listener or viewer. As such, 'things' is appropriately ambiguous, as Eno conceives of art as part of a process through which we deal with uncertainty. The work manifests a concrete instance of an abstract notion while the abstraction is preserved to some degree. As Eno explains, 'Evolving metaphors, in my opinion, is what artists do'.⁷⁶ He continues:

Humans actually codify most of their knowledge not in terms of mathematical tables, sets of statistics and scientific laws, but in terms of metaphors. Most of the things we normally have to deal with understanding are complex, fuzzy, messy, changing, and in fact poorly

⁷⁴ Coon, 'Brian Eno'.

⁷⁵ Higgins, 'Eno Helps Solve'.

⁷⁶ Brockman, 'Big Theory'.

delineated. We don't actually know where the boundaries of them are, let alone being able to make clear questions about them. We spend a lot of our time as ordinary humans navigating through complicated situations with one another, that require constant negotiation, and constant new attempts to understand.⁷⁷

In this statement, the fluidity of intelligibility is acknowledged; there is a constantly changing clearing in which the known and unknown, the world and earth on which it is grounded, configure to form different aspects of our intelligence from situation to situation. The different rift designs potentially produce different configurations of earth and world, thereby eliciting varying metaphors. Thus, Eno's conception of metaphor, and of art as such, is a way of expressing a structural correlation which is able to recognize and encompass the unknown as mysterious while still retaining a cognizable mimetic structure.

This metaphor-making process occurs as artists 'invent metaphors, break up metaphors, challenge them, pull them apart, put them together in new order and so on', they 'remind you constantly of this process that you're most of the time engaged in, the process of metaphor-making'.⁷⁸ While Eno is speaking on the universal level about artists, his artistic practice is such that many decisions are surrendered to a process or system. As such, the artist in this instance and work become interchangeable functionally, and the work in fact performs these actions. As the metaphor-making process is brought to the forefront of thought, the viewer or listener is compelled to adopt a comportment consistent with *poiesis*; the exacting nature of enframing is deterred as the possibility for more revealing becomes apparent. This, I maintain, is precisely the saving power of which Heidegger spoke.

Eno contends that science provides an extreme example of this process by providing the structure upon which to build metaphors by isolating pieces of our environment or experience and making predictions or theories around those parts.⁷⁹ This is the point of connection between science and art, as Eno states that 'each is a highly organized form of pretending; of saying "let's see what would happen if the world was like this"'.⁸⁰ This perspective of science demonstrates Heidegger's notion that the saving

⁷⁷ Brockman, 'Big Theory'.

⁷⁸ Ibid.

⁷⁹ Ibid.

⁸⁰ Ibid.

power of technology can be seen in its danger; the pretending involved in science opens up possibilities for further truths, while the quantification and labelling process issues forth standing reserve. Thus, the imagination that is required to ascertain correlations in science can be lost when everything is perceived as being under our control.

Much like Heidegger, Eno laments that it is control which has become celebrated in our culture today.⁸¹ This is evident in the proliferation of technological advances which enable us to connect, quantify and organize things. While one might expect Eno as a studio producer to champion this mindset, in fact the opposite is true. He views the possibility of perfectibility and certainty as 'a sense that has become a real albatross to us' as it limits the part of us that is 'a bit messy and barbarian'.⁸² Thus, it is this unknown, or Heideggerian earth, which Eno desires to both recognize and celebrate as unknowable in his music and art.

Eno's description of art as a system of knowledge, or a way of knowing, is related to his view of culture, which he describes as 'everything you don't have to do';⁸³ variations can exist in modes of knowing as a result of the freedom which accompanies nonessential decisions. Eno's summary is perhaps a simple way of conveying the ontological situation of culture; it emerges as an interrelatedness of the possible ways in which Dasein can be, given its set parameters for existence. Or, as Eno again summarises, '[I]ts necessity stems precisely from its contingency'.⁸⁴ The system of culture becomes necessary in order to make sense of and navigate a set of possibilities which are not otherwise determined by necessity in the sense of survival. Culture is thus contingent, but not optional. It comprises an interactive structure through which various ways of being become contextualized, and this occurs necessarily as earth grounds and unites them. Culture thus becomes its own system within which other systems exist.

⁸¹ Stuart Jeffries, 'Surrender. It's Brian Eno', *Guardian*, (2010), <http://www.guardian.co.uk/music/2010/apr/28/brian-eno-brighton-festival>, (22 August, 2013).

⁸² Kevin Kelly, 'Gossip is Philosophy', *Wired*, (1995), <http://www.wired.com/wired/archive/3.05/eno.html>(23 August, 2013).

⁸³ Mark Sinker, 'Taking Modern Culture By Strategy', *Hyperreal*, (1992), http://music.hyperreal.org/artists/brian_eno/interviews/wire92.html (23August, 2013).

⁸⁴ Ibid.

Consequently, if art exists as a system of knowledge within the cultural system which is interactive, there is an inherent organic component to the subtext of the system from the outset. Possibilities emerge and grow from different combinations of earth and world configurations. As such, systems-based creative practices introduce a framework which sets in motion a process of decision-making on a meta-level; the creator can interact with the system both to introduce and remove boundaries from which the output of the system arises. The system thus introduces not only structural limitations, but also a freedom which ensues from both the surrender of decision-making on the micro level and also acceptance of the output as it arises from the predetermined systemic structures. Thus, in systems-based creative practices, an element of earth always remains preserved within the system itself as it generates new worlds.

The creation of new worlds was something which always interested Eno, even as a young child. His early love of drawing and the subject matter represented pointed the way toward the creative connection between imaginary worlds and systems. He loved to draw houses which incorporated labyrinths, waterfalls, bridges, and all sorts of futuristic imaginings.⁸⁵ He explains, 'The feeling I like is the feeling of making a world of some kind, and that's what I still like; the feeling of being inside this world, and wondering if everything was like that. And that was the first time I had that feeling. Creativity is always a very strong desire to make a world of your own'.⁸⁶ Thus, for Eno, creativity inherently involves Heidegger's worlding of the world. This creativity evolved from drawing to his present day music and installations; these present the listener and viewer with alternate worlds which are safe to explore. One musical example of this often cited by Eno is that of his album *On Land*, which aims to create a sense of place and time for the listener.⁸⁷

The desire to create new worlds soon found an outlet for expression on the systems level as Eno enjoyed listening to the hymn 'Jerusalem' as played by his grandfather's player piano. This activity soon captured his interest in the player piano as a way to make new sounds. He describes all of the rolls that his grandfather had collected which contained the instructions via holes in the paper for the player piano. Eno would make

⁸⁵ Michael Bracewell, *Re-Make/Re-Model: Becoming Roxy Music* (Cambridge: Da Capo Press, 2007), 192.

⁸⁶ Bracewell, *Re-Make*, 192.

⁸⁷ Steven Grant, 'Brian Eno Against Interpretation', *Hyperreal*, (1982), http://music.hyperreal.org/artists/brian_eno/interviews/troup82a.html (22 August, 2013).

new holes in the rolls or cover pre-existing holes with pieces of tape. He states that ‘I liked the *system* that the player-piano represented—and I like performing some extra surgery on the rolls that nobody liked!’⁸⁸ Thus, this was an early generative music forerunner which combined the sensibilities of systems-based creation with the creation of new sonic possibilities and their ensuing worlds.

Eno’s process-led creativity was encouraged and nurtured when he attended art school in 1964 at Ipswich Civic College. This ended up corresponding with Roy Ascott’s arrival to Ipswich to head the art school. Ascott came from Ealing School of Art after founding the controversial ‘Groundcourse’, which was an extremely unique approach to teaching art which involved a blending of science and art as well as an approach that challenged the students’ identity and work processes.⁸⁹ Ascott was specifically interested in applying cybernetics and behaviourism to art and art education. His unique practices extended to that of his hiring of faculty members for his department, such as a cybernetician and mathematician, which were both highly unusual in an art department both then and now. Ascott describes the first year of the course as being about ‘changing preconceptions...by dismantling the idea that you are either a good or bad artist and whatever you are is fixed—who you are, and so forth’.⁹⁰ The second year focused on the notion of self-recreation and designing models of human beings, then moving between these models via exercises, role-playing, diagrams and mind-maps. Many students found this process very challenging both emotionally and cognitively and subsequently left the course.

Eno, however, thrived in the systems-based environment. It also forced him to get ‘used to the idea that *you were expected to be articulate*, and people would call you on it...You had to try, at least, to think out what you were doing. Ipswich made me become fascinated in the connection between intellect and intuition’.⁹¹ These came to be viewed by Eno as part of a continuum rather than as a binary opposition as a result.⁹² It was also at Ipswich that he was introduced to the painter Tom Phillips, who introduced Eno to the musical avant-garde scene in both England and America,

⁸⁸ Bracewell, *Re-Make*, 193.

⁸⁹ *Ibid.*, 202.

⁹⁰ *Ibid.*, 200.

⁹¹ *Ibid.*, 207. (*italics in original*)

⁹² *Ibid.*, 207.

exposing him to composers such as John Cage, and introducing him to Cornelius Cardew and Morton Feldman among others. Thus, both the processes and the very conceptual framework which enabled these processes had their 'ground' in the Groundcourse which had a lasting impact on Eno and his work. The conventional boundaries between science and art were temporarily suspended in their mutual contributions to creative processes and the articulations of their larger context in the world.

Strife

The process through which generative music comes into being technologically is one in which strife continually manifests itself. As each iteration articulates one sonic configuration among many possibilities, the generative process itself continually references or points toward the level of earth, or the ground from which all the possibilities gain their viability as such. Similarly, strife arises in the listener between ways of listening; expectations of certain compositional practices or musical structures such as melody and harmony compete cognitively with an open comportment in which preconceptions are surrendered. This process of surrender is thus both a response to the strife present in the work and also initially manifests as a striving in the listener.

The concept of surrender, I would argue, is the most championed principle in Eno's work, as he strives to create situations which invite that response, or which say to the listener, 'This is where you can surrender!'⁹³ While the idea can be traced back as far as the development of ambient music, which resulted in part from surrendering to the experience of a malfunctioning stereo system, it has reached its apex in generative music. The idea is inherent in the structure of the generative system, as Eno explains, 'Generative forms in general are multi-centred. There's not a single chain of command which runs from the top of the pyramid to the rank and file below'.⁹⁴ It is thus that the very creation of generative music becomes a structural analogue for the process of surrender as it is elicited through strife.

⁹³ 'Brian Eno: The Philosophy of Surrender', *The Polymath Perspective*, 2009, <http://www.polymathperspective.com/?p=9> (23 August, 2013).

⁹⁴ Brian Eno, 'Generative Music', *In Motion Magazine*, (1996), <http://www.inmotionmagazine.com/eno1.html>, (23 August, 2013).

The idea of surrender has changed culturally over time; in this age characterized by enframing, it has lost its cultural currency. Eno conceives of control and surrender as occupying two ends of a spectrum, with control being significantly more valued. He states, 'We've tended to think of the surrender end as a luxury, a nice thing you add to your life when you've done the serious work of getting a job, getting your pension sorted out. I'm saying that's all wrong'.⁹⁵ Instead, surrender is a natural aspect of being that corresponds to the part that is 'a bit messy and barbarian'. It is the part in which earth is not only acknowledged but honoured as we relinquish attempts at control.

Historically, the act of surrender can be identified in all societies in varying degrees or points on the spectrum which appear in different parts of culture. Eno explains:

You have these different areas of human activity which appear to overlap, which are basically sex, drugs, art and religion...The umbrella that they all exist under is this word, 'surrender' because they are all forms of transcendence through surrender. They are ways of transcending your individuality and sense of yourself as a totally separate creature in the world. All of those things involve some kind of loosening of this boundary that is around this thing called 'yourself'.⁹⁶

The process of surrendering part of yourself and identity is inherently tied to the notion of mystery or the unknown. In the area of human activity which involves art, Eno sees surrender as a way of experiencing an imaginary world or way of being while remaining in complete safety.⁹⁷ Thus, I maintain that the creation of an imaginary world, as presented in the work of art, invites surrender by presenting a unique combination of earth and world; the strife which occurs between the two within the work is reflected by the navigation between control and surrender within the listener or viewer.

Eno has been intrigued by surrender since childhood, although he lacked the terminology at the time to articulate that which was occurring. He describes the first visual art that made an impression on him, a Piet Mondrian painting, which is an unlikely pictorial candidate for creating a strong emotional stirring in a young boy due to its lack of realistic presentation. However, Eno recognized it as generating the

⁹⁵ Stuart Jeffries, 'Surrender. It's Brian Eno', *Guardian*, 2010, <http://www.guardian.co.uk/music/2010/apr/28/brian-eno-brighton-festival>, (23 August, 2013).

⁹⁶ 'Brian Eno: The Philosophy of Surrender'.

⁹⁷ Ibid.

feeling which he sought from art and being an artist where a condition is recreated 'where you're actually out of your depth, where you're uncertain, no longer controlling yourself, yet you're generating something, like surfing as opposed to digging a tunnel'.⁹⁸ The metaphor of surfing denotes the idea of a balance between control and surrender in the water, whereas tunnel-digging suggests necessity and pure control. Thus, the move toward earth as it occurs during surrender necessarily involves a temporary loosening of world which affects our sense of security.

The four key areas in which humans practice surrender can appear in varying combinations which are culturally contingent. However, they serve the same purpose regardless of the combination. However, religion is one such area which offers a narrative explaining and contextualizing the process. While Eno describes himself as an 'evangelical atheist',⁹⁹ he does engage with spirituality as a kind of meta-discourse or as 'the highest level of discussion one entertains in life'¹⁰⁰ while rejecting the various systems which comprise religions. Some Eastern religious perspectives interest him, however, which he encountered first through reading Cage's *Silence*. Two ideas in particular interested Eno from this reading, the first being the idea 'that every moment is a concatenation of hundreds of forces which just meet at that instant, and will never come together in the same way again—synchronicity'.¹⁰¹ This is demonstrated quite obviously in generative music, and more specifically in *77 Million Paintings*, as its very name denotes the possible number of combinations of images accompanied by music which is also randomly combined. As the sonic and visual elements are variable in both duration and combination, one will never see the same combination twice, nor hear the same thing repeated, despite how long the software is run or the installation is viewed. The moment as such will be explored further later on.

The second idea of influence deals with the Eastern conception of time passage which involves a different mental model than that of Western perception. Summarily, instead of looking into the future with the past behind, the Chinese 'look at the past, and the

⁹⁸ Anthony Korner, 'Aurora Musicalis', *Hyperreal*, (1996), http://music.hyperreal.org/artists/brian_eno/interviews/artfor86.html (23 August, 2013).

⁹⁹ 'Brian Eno Interview—Constellations (77 Million Paintings)', *Synthtopia*, 2009, <http://www.synthtopia.com/content/2009/02/16/brian-eno-interview-constellations-77-million-paintings/> (23 August, 2013).

¹⁰⁰ Tamm, *Vertical*, 84.

¹⁰¹ *Ibid.*, 85.

future washes over them'¹⁰² as Eno describes. This concept finds its way into Eno's work as well, again particularly with *77 Million Paintings*, as the viewer observes the overlapping images changing at such a slow rate that the past seems to converge with the present as future images gradually emerge onto the screen(s).

Eno's interest in the notions of synchronicity and temporality indicate a strong parallel with issues addressed in Heidegger's first major work *Being and Time*. In this work, Heidegger explores the ontological structures which enable and shape Being, including temporality. As such, Eno's creative incorporation of these ideas points toward the level of ontology as a natural meta-level of discourse, one which contains the possibility of transcending and thus situating four key areas in which surrender occurs. Thus, perhaps another level of strife is added as Eno's work, particularly that of his generative music, strives to find expression in a meta-language which can encompass the ontological level on which it operates. As such, the interaction which occurs between Eno's creative practice and Heidegger's philosophy as they inform one another manifests a textual strife which reflects that of the earth and world encounter.

Open

Aesthetic ideas which are inherently innovative are not always arrived at by way of inspiration or even intuition; rather, the act of surrendering to an experience can sometimes marry these two concepts which results in the idea coming into being. This was the case with 'ambient music', a term coined by Brian Eno and explained in a manifesto of sorts on the inner sleeve of his album *Music for Airports*. The experience which culminated in the creation of a new musical genre occurred largely as a result of being bed-ridden following a car accident in 1975. Eno describes the situation:

My friend Judy Nylon had visited, and brought with her a record of 17th-century harp music. I asked her to put it on as she left, which she did, but it wasn't until she'd gone that I realized that the hi-fi was much too quiet and one of the speakers had given up anyway. It was raining outside, and I could hardly hear the music above the rain—just the loudest notes, like little crystals, sonic icebergs rising out of the storm. I couldn't get up and change it, so I just lay there waiting for my next visitor to come and sort it out, and gradually I was seduced by this

¹⁰² Tamm, *Vertical*, 86.

listening experience. I realized that this was what I wanted music to be—a place, a feeling, an all-around tint to my sonic environment.¹⁰³

The events and sounds revealed and concealed themselves in such a way that the presence of a new music came into the Open. The Open was the field in which and from which the rain, the notes, and all factors involved were able to appear, manifesting themselves as a unique presence. As such, the music came into view, in the lighted clearing, rather than being composed or arranged, and this characteristic continues in his generative practice. Significantly, this experience came about through Eno's waiting, which allowed his focus to be reoriented to the specific configuration of sounds which were present at that moment. Waiting, as a component of surrender, will be explored later.

This particular experience immediately echoes the philosophical influence of John Cage, to whom Eno was first exposed while at Ipswich via Tom Phillips.¹⁰⁴ The above statement reflects Cage's identification of a false dichotomy between 'noise and so-called musical sounds',¹⁰⁵ which he predicted would be a future point of disagreement which would replace the consonance versus dissonance point of contention occurring at the time from the initial impact of serialism on compositional schools. While Eno's experience involved music which was obviously intended as such, the technology of his sound system, or malfunction thereof, coupled with other sonic elements pre-existing in the environment such as the rain, combined in such a manner to produce a new aural experience. These elements are not sufficient, however, to give rise to a new method of inclusive listening, as described by Cage, without the recognition of a new experience and the accompanying surrender described by Eno in this instance as a gradual seduction. I suggest that one of Eno's defining characteristics is this readiness to listen to sounds as they are and then the subsequent ability to both cognitively and emotively arrange them into a new meaningful form.

Eno's encounter with ambient music thus highlights the nature of perception in relation to the Open; presence is enabled by and within the Open which likewise

¹⁰³ Brian Eno, 'Ambient Music', in Christoph Cox and Daniel Warner (eds.), *Audio Culture: Readings in Modern Music* (New York: Continuum, 2004), 94-97 (95-96).

¹⁰⁴ Bracewell, *Re-Make*, 203.

¹⁰⁵ John Cage, 'The Future of Music: Credo', in Christoph Cox and Daniel Warner (eds.), *Audio Culture: Readings in Modern Music* (New York: Continuum, 2004), 25-28 (26).

enables the subsequent cognitive ordering to occur. The ordering process takes place as contextual boundaries are constructed which enable meaning to arise; the sounds arose and Eno began to experience them as music. Thus, we do not experience the Open as such; rather, we experience new configurations of presence and the conceptual boundaries which arise from our attempts to make sense of that which is revealed within the Open. Eno is acutely aware of such boundaries, whether they are self-imposed or implicitly part of the form of that which he is experiencing. Even in the latter instance, he has repeatedly demonstrated the ability to use boundaries, or 'frames' as Oblique Strategies often reference, in creative and unpredictable ways by either removing them from places in which they are expected, as in ambient music, or using them to emphasize an element which might otherwise be lost. This is articulated on the Oblique Strategy card which states 'Make a blank valuable by putting in an exquisite frame'.¹⁰⁶ The Oblique Strategy cards themselves can be viewed as tools which enable a new cognitive arrangement of the creative boundaries. As such, the cards initiate a new relationship with the Open.

Another example of a creative engagement with boundaries exists in Eno's conception for his album *Music for Airports*, the idea for which was conceived in the Cologne airport in 1977. Eno observed the space and the ways in which it was used, thus creating a kind of music based on observational limitations. These included the fact that it had to be interruptible to make way for announcements, it had to sound outside of both the speaking frequencies and speed of speech of people, and it had to be accommodating to the typical noises of the airport. Most importantly, however, it had to deal with the context of the environment and the reason for occupying it, which for Eno was that of 'flying, floating and, secretly, flirting with death...I want to make a kind of music that prepares you for dying—that doesn't get all bright and cheerful and pretend you're not a little apprehensive, but which makes you say to yourself, "Actually, it's not that big a deal if I die"'.¹⁰⁷ Thus, like generative music which arises from set parameters or boundaries, *Music for Airports* similarly emerged from the use of situational boundaries utilized in the composition process.

¹⁰⁶ Ray, 'Oblique Strategies'.

¹⁰⁷ Eno, 'Ambient', 96.

We do not impose boundaries solely on our environment; we impose them internally as well. As Eno points out, this process becomes evident in listening, during which we hear not only that particular piece but also the entire history of music.¹⁰⁸ The ways in which sounds are perceived are largely influenced by the listener's internal contextual references, thus colouring a piece of music by way of mental relation to that which has been listened to previously. This reveals both how conscious Eno is of his own influences and his awareness of the existence of a hermeneutics of music as such. Additionally, his contextual awareness gives rise to the ability to cognitively position his work both territorially and historically, thus allowing him to use this very awareness as a creative tool. As he states, 'The interesting thing about boundary conditions is that they're extremely useful as thinking tools, but not as experiences. As thinking tools, they say to you, This is as far as you could go in that direction - and suddenly you think, gracious me, I never realised you could go that far'.¹⁰⁹ This preference for creating boundaries rather than experiencing them as such is upheld creatively within the generative music process.

Similarly, Eno continued utilizing the cognitive tool of boundary conditions as he developed his conception and practice of ambient music. The first boundary which seemed to present itself lay in the perceptions of what a 'serious' work of music was considered to be at that time, which largely consisted of writing songs and performing them on instruments. As the studio became a new sonic environment with possibilities of its own, Eno was determined to move the process of making and shaping sound into the foreground as 'one of the distinguishing characteristics of new music' and one that could 'in fact become the main focus of compositional attention'.¹¹⁰ This enabled a new field of boundary conditions to arise as he started utilizing the studio as an instrument in its own right.

Another boundary condition of early ambient music manifested at the level of attention as a shift occurred in the way Eno and his peers were listening to music. They seemed to be using it in a new way; music became something Eno described as 'part of

¹⁰⁸ *Brian Eno—Another Green World*, by Nicola Roberts, 2010, 60 min. (BBC).

¹⁰⁹ Paul Merton, 'Paul Merton's Hour of Silence', *Enoweb*, (2005), <http://enoweb.co.uk/> (23 August, 2013).

¹¹⁰ Eno, 'Ambient', 95.

the ambience of our lives—and we wanted it to be continuous, a surrounding’.¹¹¹ In fact, it was predominately painters and writers who enjoyed and encouraged Eno’s ambient work the most, as they tended to use music as they worked in their respective mediums.¹¹² The arrival of synthesizers also made this new process inviting, as Eno became increasingly lost in the different sonic environments he could create and in which he could become immersed. The new possibilities of the studio and synthesizer coupled with new uses and environments for music interested Eno as both a musician and visual artist; as he noted, ‘it suggested moving the process of making music much closer to the process of painting (which I knew something about)’.¹¹³ Consequently, he made music under the self-imposed label of a ‘non-musician’, as he lacked technical, instrumental skill and music theory knowledge but was able to create and manipulate sound in a manner which was as conceptually and aurally valid as any trained musician through the use of technology.

Technology

One would not expect Eno to be critical of technology given his complete reliance upon it as a creative medium. However, this same reliance is perhaps that which enables both a well-informed critique and also the ability to develop ways to combat or avoid its pitfalls. Thus, as Eno approaches technology from a standpoint of *poiesis*, his creative practice manifests an extension of this mode of revealing rather than succumbing to the enframing which comprises the possible danger. As such, Eno does recognize the presence of danger. However, he locates this danger not in technology as such but rather in a perspective or way of approaching the world. He states:

Everybody knows that science is powerful and could be dangerous, therefore there's a whole lot of criticism on that basis. What people don't realize is that culture is powerful and could be dangerous too. As long as culture is talked about as though it's a kind of nice little add-on to make things look a bit better in this sort of brutal life we all lead, as long as it's just seen as the icing on the cake, then people won't realize that it's the medium in which we're immersed, and which is forming us, which is making us what we are and what we think.¹¹⁴

¹¹¹ Eno, ‘Ambient’, 94.

¹¹² Ibid., 96.

¹¹³ Ibid., 95.

¹¹⁴ Brockman, ‘Big Theory’.

Thus, Eno shares Heidegger's view of science as a potential danger, but this danger is perhaps lessened by its visibility as people generally recognize it as such. The real danger for Eno is the inability to see the constructed, contingent nature of our world and thus how one can play a part in the process. In other words, the danger is that of enframing, and the passage above rearticulates Heidegger's fear of the 'final delusion' in which it appears as though "man everywhere and always encounters only himself".¹¹⁵

Heidegger and Eno both locate the danger not in material objects as such, but rather in an approach or perspective. Similarly, both value engagement rather than a detached perspective in order to reveal truth and set it to work creatively. In this way, technology poses a potential difficulty in its mediation of creativity. The increasing computerization of music-making thus presents this problem of detachment for Eno:

I'm struck by the insidious, computer-driven tendency to take things out of the domain of muscular activity and put them into the domain of mental activity. This transfer is not paying off. Sure, muscles are unreliable, but they represent several million years of accumulated finesse. Musicians enjoy drawing on that finesse (and audiences respond to its exercise), so when muscular activity is rendered useless, the creative process is frustrated.¹¹⁶

This shift from hands-on creation to a cerebral mode is what Eno terms 'screwdriver mode',¹¹⁷ in which one's intuition is thwarted in favour of endless tinkering with details. This, in turn, acts as a barrier to revealing, and thus to creativity. As Eno describes the situation, 'It's as though a new layer of bureaucracy has interposed itself between me and the music we want to make'.¹¹⁸ Thus, as technology becomes an object of focus which replaces engagement, it reiterates the subject-object dynamic reflected in the traditional aesthetic encounter.

Technology consequently obstructs creativity as both the intuitive and physical processes inherent to creativity often become weakened through mediation. As Eno states, 'Intuitive actions confine the detail work to a dedicated part of the brain,

¹¹⁵ Heidegger, *Question*, 232.

¹¹⁶ Brian Eno, 'The Revenge of the Intuitive', *Wired*, (1999), <http://www.wired.com/wired/archive/7.01/eno.html> (23 August, 2013).

¹¹⁷ Paul Tingen, 'Brian Eno', *Audio Technology*, (2005), http://www.audiotechnology.com.au/PDF/FEATURES/AT42_Brian_Eno.pdf (23 August, 2013).

¹¹⁸ Eno, 'Revenge'.

leaving the rest of one's mind free to respond with attention and sensitivity to the changing texture of the moment. With tools, we crave intimacy'.¹¹⁹ This intimacy which exists between the instrument and musician is therefore thwarted by the existence of endless technological options rather than being liberated by them. Consequently, the music which results from technological processes often seems 'stilted' and fails to seem organic and intimate.¹²⁰ The lack of intimacy in the process of creation is thus reflected in the lack of warmth or life in the output.

Thus, part of Eno's creative approach to technology involves the process of giving it a type of personality by accentuating its flaws, and in doing so, I would argue, he disrupts the process of enframing by drawing attention to technology in a non-mastered state. The imperfections of technology are often highlighted and utilized by Eno as a method of introducing both an organic element to an otherwise seemingly sterile digital environment and also as a featured characteristic of his production sound. Sometimes this involves a technique of omission, such as actively resisting the urge to digitally perfect a slightly imperfect drum track. This correction process enabled by technology has a cumulative effect which, if corrections continue throughout the track, results in a homogenized sound which lacks lustre and character. At other times, the choice of sound itself can add personality through imperfection. An example of this process would be the use of 'retro' sounds which inherently contain distortion or static.¹²¹ This serves to contextualize the sounds within a culturally specific time and place and thus introduces the listener to the surrounding cultural conversation, both of which imply a human connection.

Another method of achieving a more humanized sound is by implementing indeterminacy, which reflects another Cagean influence. By implementing chance procedures during the compositional process, the process is thus preserved as such and not solidified into a fixed form. The Oblique Strategy cards can be seen as one example of this indeterminate methodology, as the framework through which the creative dilemma is viewed is determined by which card is randomly chosen. While for Cage this often resulted in chance procedures which occurred as a part of the

¹¹⁹ Eno, 'Revenge'.

¹²⁰ Noah Shachtman, 'New Eno Music Gets "Generative"', *Wired*, (2001), <http://www.wired.com/culture/lifestyle/news/2001/10/47670> (23 August, 2013).

¹²¹ *Ibid.*

performances as well as through the use of the *I Ching* beforehand, Eno approaches the concept in a slightly different, although conceptually similar way. Through his generative works, he focuses on processes and getting 'the biggest effect for the smallest amount of input'.¹²² When considering Cage's use of indeterminacy, one could view it as a surrender of decision making, while it is in fact quite the opposite; Cage shifted the focus of decision making from the direct shaping of the final output to the process of formulating questions which informed the work. These questions were then surrendered to the *I Ching*. Thus, the work became the product of a certain solution to specifically formulated questions, which involved a fundamental shift in focus to how the work comes into being rather than what comes into being specifically.

In the case of generative music for Eno, the input which the computer software uses to combine in infinitely novel ways becomes a parallel to the question formulation by Cage. Eno has not surrendered control of the input, but rather the outcome. The indeterminate outcome, which is new for both Eno and also the listener, is one way in which computers can gain a more humanized quality. As Eno expressed, 'I wanted something that had an organic quality to it. Had some sense of movement and change. Every time you played it something slightly different happened'.¹²³ This sense of movement and change are important elements which serve to de-sterilize computers and their subsequent output, as Eno initially viewed computers and their accompanying influence on music and art as potentially detrimental rather than beneficial. Specifically, he identified and profoundly disagreed with the view that the strength of the computer lies in its ability to 'move huge blocks of data around, such as displaying pre-defined pictures and information'.¹²⁴ Instead, Eno chose to utilize and highlight a completely different function of the computer during which it becomes a 'tool for "growing" things'.¹²⁵

The application of technology to the process of growing something from seeds of input does in theory add a sense of humanity to what is generally perceived as a cold, impersonal process. Although constant change and unpredictability do operate as

¹²² Robert Mills, 'My Ever Changing Moogs', *Hyperreal*, (1996), http://music.hyperreal.org/artists/brian_eno/interviews/qmag96b.html (23 August, 2013).

¹²³ Brian Eno, 'Generative Music', *In Motion Magazine*, (1996), <http://www.inmotionmagazine.com/eno1.html>, (23 August, 2013).

¹²⁴ Ibid.

¹²⁵ Ibid.

humanizing elements, one is still ultimately listening to computer-generated output as determined by a system, therefore raising the relevant question as to how systems-based sound and images can indeed have a humanized essence. The answer lies not in the output, but rather in the process itself; instead of dissecting the music endlessly to a state of compositional and digital perfection, generative music cultivates possibilities. As Eno describes, 'Generative music is more like gardening; you plant a seed, and it grows different every time you plant'.¹²⁶ Thus, I maintain that these possibilities speak directly to Heidegger's saving power which requires one to see within technology the ambiguity and multiplicity of revealings made possible by it rather than succumbing to enframing. I would further suggest that it is the unique configuration of technology and art, of organic movement and digital manifestation, that allows generative music to act as a bridge between *techne* and *poiesis*, between Heidegger and Eno, and ultimately between control and surrender. While Eno and Heidegger articulate surrender differently, both see this process as crucial; Eno sees surrender as a human gift which must be rehearsed. Heidegger sees it as a saving power. The listener hears it as a world of infinite possibilities.

The Second Shift

Thus far, we have explored the aesthetic encounter; this has included various components which comprise the work of art (world, earth, strife) as well as mechanisms which operate between the work of art, the environment and the perceiver (truth, Open). These have been gathered under a mode of aesthetic experience, an experience which gives rise to a field of inquiry (aesthetics) which attempts to explain and inform itself reciprocally. The history of this field has erected barriers to understanding the aesthetic encounter in its full import as it began from a fundamentally flawed configuration between the work and the perceiver, the subject and object. As such, it inserted a space of disinterestedness and disengagement between the work and the perceiver which is not an accurate assessment of that which occurs in the present aesthetic encounter. The present aesthetic encounter begins from a point of engagement, a place at which the perceiver participates in the mutual construction of meaning as it is enabled and initiated by the work through an

¹²⁶ Eno, 'Generative Music'.

interactive process. This engagement, in turn, re-informs and re-situates the environment contextually as it undergoes a similar process.

This engagement has been twofold; one has occurred on the level of the encounter itself, in which linguistic systems of ontological parameters have resonated between two enabling structures (Heidegger, Eno). A second engagement has manifested at the level of the encounter of the encounter, a meta-level at which the reader participates as he or she shifts between a micro-level reading of the text and a macro-level of assimilating larger structures and thus resonances of the text at a level which both transcends and encircles the text. This abstracted level is a necessary component of the experience, and indeed has its correlate in the aesthetic experience; however, to remain at a level of relative disengagement is problematic, as it reinstates the very difficulties of the traditional aesthetic relationship which we seek to transcend. Thus, we reach a point in the path at which both Heidegger and Eno found themselves in varying ways as they attempted to retain unity of experience, either in thought or in music creation, while allowing for something outside of our experience to gain entry into it.

This dilemma necessitates another shift; the present discussion must change its focus from the work of art and its surrounding environment to the perceiver. Thus far, the aesthetic encounter has presupposed one general mode or approach to the work of art when in fact probably as many aesthetic compartments exist as there are perceivers. While certain properties within the work evoke and encourage specific modes of approach which are particular to its unique dynamics, there exists a basic mode with which the perceiver makes the initial approach. This primary way of being at the entrance into an aesthetic encounter represents a point of convergence between the cognitive aspects which the perceiver brings to the encounter and the influence which is exerted from work of art in the process. As such, a perceiver can either block parts of the encounter or invite a more full experience to unfold within it depending upon the orientation present at this particular point. Thus, the aesthetic encounter is not a phenomenon which is detached from everyday life but rather is continuous and this point of orientation is less a point and more of a curve as the perceiver moves throughout the process.

Just as the aesthetic encounter is a continuous process embedded in everyday life, so too is it continuous between the work of art and the perceiver. It is therefore difficult to isolate parts of a continuous process of exchange to one side of the encounter or the other, to that of the work of art or the perceiver as such. Ways in which the work manifests itself become mirrored in its reception; conversely, the perceiver brings elements to the encounter which seemingly become part of the work itself as they are read into the work hermeneutically. Therefore, it becomes necessary to look for a constant presence or guiding thread that can be seen to operate in and between the two sides, as it is this element which will provide the means to view the encounter as a unity which transcends the traditional subject-object duality.

This guiding thread has by definition already appeared in the text, although its role as such has not completely emerged. This has occurred from the beginning, as it features in the title of one of Heidegger's essays, and has subsequently determined our own mode of approach toward technology and thus technological art. This is the mode of questioning, a process which creates a particular relationship between the work of art and the perceiver, or between the text and reader. Questioning as such carries the potential to both transcend the subject-object duality as it acts as a precursor to a second guiding thread, that of surrender. As two processes within a process, questioning and surrender thus constitute constituent components of the aesthetic encounter which exist as trace elements within the work of art and the perceiver.

We thus endeavour to lift questioning and surrender out of their respective positions as they have been delineated thus far and explore them further in the light of the resonances to which they have contributed. As questioning is a mode of thinking which precedes surrender, the textual order of appearance is thus determined. When taken together, however, a process arises which inherently carries a space in which the unknown can emerge and remain as such. This space implicitly acknowledges those aspects of truth which still remain concealed but which resonate within the work of art as possibilities. Thus, through surrender, a mode of both engagement and disengagement arises which enables the perceiver to move out of the realm of a mere experience with an object and into an encounter which transforms his or her mode of being. The perceiver and the work become continuous as the truth of the work is entered into by way of surrender. Therefore, I argue that it is surrender which provides

the key to unlocking the divisive subject-object duality as a third possibility is presented: it transcends the realm of activity and passivity all together.

Gelassenheit and Surrender

Questioning

Questioning is a process which is simultaneously ambiguous and deterministic. It generates a self-perpetuating system which influences its own outputs without being overly constraining. In this way, questioning itself can be conceived as a heuristic¹²⁷ process in which specific results ensue from vague instructions or directional cues; the particular arises from the vague while maintaining traces of the path travelled. It is thus that the process rather than the end result becomes the focal point for both Heidegger and Eno as they approach their respective aesthetics. Additionally, during the process of questioning, multiplicity is generated which could not have been predetermined, thus creating a rich synthesis of interconnectedness which both lends value to the process as such and also elicits a unique range of responses or output.

When Heidegger states that 'questioning builds a way', he is indicating a process which could be considered to have a digital equivalent in heuristics. Eno's heuristics build a way, as he expresses a very similar sentiment while quoting Stafford Beer: 'Instead of trying to specify the system in full detail, specify it only somewhat. You then ride on the dynamics of the system in the direction you want to go'.¹²⁸ The destination to which both Heidegger and Eno want to go is a place of surrender; this is less an event or end point and more of a process in itself. However, it becomes clear upon examination that in order for surrender to be invited or awakened, the system which invites it must contain traces of surrender within itself. Thus, the process of surrender and surrendering to process appear to be inherently linked.

¹²⁷ Kevin Kelly, 'Gossip is Philosophy', *Wired*, (1995), <http://www.wired.com/wired/archive/3.05/eno.html>(23 August, 2013).

¹²⁸ *Ibid.*

Eno's Questioning: Process and Function

One could say that Eno was the product of a specific system; the art school environment of the mid to late 1960s encouraged the active questioning and articulation of artistic ideas. These conditions fostered a natural ability within Eno to analyze and verbalize theoretical abstractions, which proved advantageous during the increasing popularity of the conceptualist art movement. As Eno described, 'The idea became that artists should concentrate on the way they were doing things, not just the little picture that came out at the end, and the picture was even relegated to the status of a memento of the process: the process was the interesting part of the work'.¹²⁹

The new emphasis placed on process over product resulted in a disparity between the aesthetic theories of the time and the work which it attempted to describe. Thus Eno, like Heidegger, found aesthetics to be a problematic field, describing it as a process of 'trying to graft a redundant philosophy onto a set of events that it had not been designed for'.¹³⁰ The solution to this problem, it seemed to Eno, was to speak in extreme generalities which failed to articulate anything. Thus, to state that 'art is the highest achievement of the human spirit' or similar proclamations are what Eno describes as the 'muck of language'; this muck was a state in which aesthetics seemed to thrive.¹³¹

Eno was dissatisfied not only with the seemingly vacuous language of aesthetics, which failed to meaningfully bridge theory and practice, but also with the very presuppositions regarding the structure and function of art itself upon which aesthetics was built. A key thinker with whom he identified was Morse Peckham, who articulated a view which seemed to describe art as Eno both experienced and created it. In *Man's Rage for Chaos*, Peckham discredits the notion that the primary function of art is to 'transform the chaos of human experience into a reassuring vision of order and unity'.¹³² This conception is also extended to suggest that this order is constitutive

¹²⁹ David Whittaker, *Stafford Beer: A Personal Memoir* (Oxon: Wavestone Press, 2003), 53.

¹³⁰ Brian Eno and Russell Mills, *More Dark Than Shark* (London: Faber and Faber, 1986), 73.

¹³¹ *Ibid.*, 73.

¹³² *Ibid.*, 73.

and reveals a hidden order behind nature and even the human mind. Peckham explains:

The claim is (1) that experience comes to us in a chaotic blizzard of phenomena, and (2) that only art offers us order. As for the first part of the claim, is it true? Does experience really come to us in a chaotic blizzard? No, it does not. All behaviour is patterned and all behaviour is styled, including perceptual behaviour; and by 'perception' I mean in this book all data reaching the brain through the various senses...Thus the observer of the work of art already has an order which he uses to perceive it with; not art but perception is ordered...As for the second part, that only art offers us order, this is likewise patently untrue. A work of art is the deposit of artistic behaviour. All behaviour is patterned and styled, or ordered.¹³³

As Eno employs evolutionary theory as an overarching concept to speak about art, the functionality and behavioural elements of Peckham's view naturally appeal to him. Additionally, this view matches how Eno perceives the art experience, as he observes that the experiential value for the viewer or listener actually occurs through developing expectations and then breaking them.¹³⁴ Thus, the key point for both Eno and Peckham would be art's 'disorientative function'¹³⁵ provides an escape from the perpetual process of sensing and ordering in which we are always engaged.

The opportunity for disorder which art offers is also biologically advantageous. Peckham perceives that the work of art creates a false 'world' of disorientation and uncertainty in which the perceiver can practice dealing with 'cognitive tension'. This arises when the world around us does not conform to our mental model of it and the presuppositions therein.¹³⁶ Thus, art provides a way of experiencing disorder in safety. As Eno explains, 'It is what happens to you in life all the time, that you're faced with situations that you didn't choose and you have to somehow make the best of them. You have to survive them'.¹³⁷ This imaginary world gives the perceiver a place of safety to experience disorder without presenting a physical or psychic risk. Eno adopted a phrase of Peckham's that resonated with him, stating, 'Art is the exposure to the tensions and problems of a false world so that man may endure exposing himself to

¹³³ Morse Peckham, *Man's Rage for Chaos: Biology, Behaviour and the Arts* (New York: Schocken Books, 1967), 32-33.

¹³⁴ Eno and Mills, *More Dark*, 73.

¹³⁵ Peckham, *Man's Rage*, 314.

¹³⁶ Eno and Mills, *More Dark*, 73-74.

¹³⁷ *Ibid.*, 73.

the tensions and problems of the real world'.¹³⁸ This explanation afforded Eno assurance that art had a biological function, and that it was a significant force for modifying behaviour patterns.¹³⁹

The notion of the biological significance of art provided support for Eno's conception of surrender as not merely a luxury to be engaged in when possible but instead as a natural, integral part of being itself. Like Heidegger, Eno sees modern Western culture as one which places a high value on control; thus, there are few places where surrender can be practiced. Although it is a part of being, it does not simply subsist below the surface and arise when it is desired; it must be rehearsed. This rehearsal occurs in the four major areas of sex, drugs, art and religion previously discussed, which can exist as independent spheres for surrender or as overlapping variations. Perhaps the underlying principle common to all four areas is the origination from an external source. Surrender must first and foremost be invited from outside of the individual, thus initiating surrender *to* something. Surrender is transcendent, and it cannot be done solely within ourselves. In fact, it is a transcendence of ourselves, which Eno describes as 'transcending your individuality and sense of yourself as a totally separate creature in the world', which involves 'some kind of loosening of this boundary that is around this thing called 'yourself'.¹⁴⁰

A favourite example of this transcendence of self for Eno through art, and more specifically music, is singing with an *a capella* group which he formed. The group meets weekly, and has grown from four to nearly twenty participants. Musical expertise is not required; the song choices are generally familiar to everyone, including songs such as 'Dream', 'Cotton Fields', 'Chapel of Love', and 'I'll Fly Away'.¹⁴¹ Eno has discovered that it is crucial to choose the right songs, and these generally consist of songs 'based around the basic chords of blues and rock and country music'.¹⁴² Other features of the songs include 'word-rich' songs containing long vowel-sounds as well as complex rhythms. As Eno states, 'It's thrilling when you get the rhythm of something right and

¹³⁸ Eno and Mills, *More Dark*, 74.

¹³⁹ *Ibid.*, 73-74.

¹⁴⁰ Tom Flint, 'Brian Eno: The Philosophy of Surrender', *More Dark Than Shark*, (2009), http://www.moredarkthanshark.org/eno_int_sandr-jan09.html (23 August, 2013).

¹⁴¹ Brian Eno, 'Singing: The Key to Life', *NPR*, (2008), <http://www.npr.org/templates/story/story.php?storyId=97320958> (23 August, 2013).

¹⁴² *Ibid.*

you can all do a complicated rhythm together'.¹⁴³ Similarly, the vowels create another opportunity for rich harmony, as he explains, 'To be able to hit exactly the same vowel sound at a number of different pitches seems unsurprising in concept, but is beautiful when it happens'.¹⁴⁴

While singing has been proven to induce physiological and psychological benefits, Eno recognizes another benefit which he terms the 'civilizational benefit' of the activity:

When you sing with a group of people, you learn how to subsume yourself into a group consciousness because *a capella* singing is all about the immersion of the self into the community. That's one of the great feelings — to stop being me for a little while and to become us. That way lies empathy, the great social virtue.¹⁴⁵

While this specific activity affords both an instigation to surrender and also a safe place in which to do so, it also provides a connection to others by way of a shared activity. It is the others who provide another key element of surrender in this instance; a sense of security is essential, but so too is variety and a sense of the unknown. In order for surrender to occur, there must be some element of risk involved, whether real or imaginary. The other singers in this example comprise the community that provides a sense of both something larger than the self and also something which falls exclusively outside of the control of the one who surrenders. Thus, the ability to be surprised is an essential element of surrender.

The uncontrollable situation or world in which surrender occurs generates the possibility of surprise. This paradoxical element of a wilful loss of control, and the inherent acceptance of potentially unpredictable conditions, indicates the necessity of a state of wonder prior to the act of surrender. As surrender is done willingly, the one who surrenders must conceive of something which lies outside of himself or herself and holds some desirable possibility that is worth the act of surrender itself. Surrender to something fixed ceases to be surrender; it is merely submission. Thus, in order for surrender to be successfully initiated, an interaction with the unknown must occur to some degree in order for the instigation of wonder to occur. This, I suggest, makes music particularly suitable as an instigator of surrender; most music contains a degree

¹⁴³ Eno, 'Singing'.

¹⁴⁴ Ibid.

¹⁴⁵ Ibid.

of familiarity through features such as melody, rhythm and structure which establish expectations while simultaneously creating a space in which to break them.

Even when confronted with the perfect conditions which invite surrender, it is still a wilful choice which begins a process; surrender is a way of being or comportment rather than an event. Thus, questioning and surrender are inherently linked, as questioning too is a process which approaches the unknown openly while honouring it as such. In this way, questioning can be conceived as a prerequisite step to surrender. While the question of surrender for Eno is informed by his conception of the function of art and its biological and social implications, surrender also exists as a point of relation between Being and art. Thus, the ontological implications of both questioning and surrender exceed that of an anthropological or scientific treatment.

Heidegger's Questioning

Within both 'The Origin of the Work of Art' and 'The Question Concerning Technology', questioning plays a central role. Indeed, for Heidegger philosophy in its entirety emanates from the central question, which is the question of being. Thus, it is essential to consider Heidegger's questioning process within these essays and not just the resulting conclusions. Similarly, he states, 'The answer to the question, like every genuine answer, is only the final result of the last step in a long series of questions. Each answer remains in force as an answer only as long as it is rooted in questioning'.¹⁴⁶ Conclusiveness is as impossible as it is undesirable; an answer contains within itself both the questions which shaped it and the seed for yet another question.

Questioning, therefore, is a process. Heidegger emphasises this as he states that '[q]uestioning builds a way'.¹⁴⁷ Considering it as such reveals the reason for his meandering etymologies, which otherwise could appear as nostalgic digressions into Greek antiquity. In tracing the lineage and history of key terms in his discussions, a 'way' is being built toward an origin. This evidences his statement that 'philosophers always think backwards',¹⁴⁸ as the origin of something is its 'essential source' or 'that

¹⁴⁶ Martin Heidegger, *Basic Writings*, David Farrell Krell (ed.), (London: Routledge, 2011), 126.

¹⁴⁷ Heidegger, *Question*, 3.

¹⁴⁸ Martin Heidegger, *Country Path Conversations*, Bret W. Davis (trans.), (Bloomington: Indiana University Press, 2010), 13.

from which and by which something is what it is and as it is'.¹⁴⁹ Thus, it is no accident that the essays under consideration consider a 'question' concerning technology and an 'origin' of the work of art, for questioning builds a way to an origin and essence whereby being exists in relation to Being and truth.

What is the 'way' toward which questioning builds? As Heidegger explains, 'The way is one of thinking'.¹⁵⁰ Thus, just as there are multiple levels of truth, so too are there different manners or modes of thinking. The notion of a 'way', and indeed many other aspects of Heidegger's later thought, were influenced by his encounter with the ancient Chinese text *Dao De Jing* in which 'dao' is commonly translated as 'way'.¹⁵¹ The dao in this sense is 'an ineffable, nameless and transcendent metaphysical entity' which provides a form of guidance. This seems harmonious with Heidegger's use of 'way' [*Weg*] as not 'a stretch connecting two places', but rather 'reason [*Vernunft*], spirit [*Geist*], *raison* [*Raison*], meaning [*Sinn*], *logos*'.¹⁵² He describes it as a 'primal word [*Urwort*] which speaks to the reflective mind of man'¹⁵³ and enables man's power to reason that which these words are saying in their essence. Heidegger describes the 'way' as that which lies behind modern methods, which he describes as 'merely the drainage of a great hidden stream which moves all things along its track-drawing way'.¹⁵⁴ He states accordingly in 'The Question Concerning Technology' that '[w]e would be advised, therefore, above all to pay heed to the way, and not to fix our attention on isolated sentences and topics'.¹⁵⁵ The way, or process, is essential.

The way through which Heidegger treads in examining the origin of the work of art is indicative of the way in which he sees art. Art is not a concept derived from a set of characteristics found in the work, nor is the work considered to be art due to its creator. Instead, art happens; it is a propriative event [*Ereignis*] through which Being can be understood. Heidegger leads the reader to this decision through questioning which is left unanswered, as to answer the question would be inconsistent with the

¹⁴⁹ Heidegger, *Basic*, 89.

¹⁵⁰ Heidegger, *Question*, 3.

¹⁵¹ For a more in depth analysis of Heidegger's attempted translation of and interaction with the *Dao De Jing*, see Lin Ma, *Heidegger on East-West Dialogue: Anticipating the Event* (New York: Routledge, 2008), p. 119-143.

¹⁵² Ma, *East-West*, 125.

¹⁵³ *Ibid.*, 125.

¹⁵⁴ *Ibid.*, 125.

¹⁵⁵ Heidegger, *Question*, 3.

essence of art. Art is a way of questioning; thus, the circle created by the questions emulates art's unfolding essence. Heidegger explains:

Thus we are compelled to follow the circle. This is neither a makeshift nor a defect. To enter upon this path is the strength of thought, to continue on it is the feast of thought, assuming that thinking is a craft. Not only is the main step from work to art a circle like the step from art to work, but every separate step that we attempt circles in this circle.¹⁵⁶

The circular movement is necessary to hold open the question of the origin which prevents it from becoming a mere tautology or mimesis.¹⁵⁷ Thus, the circle can be seen as a 'way' which is created by thought engaging in its strongest form. This is indicative of the 'riddle' which art is for Heidegger, about which solving the riddle is of much less importance than seeing the riddle itself.¹⁵⁸

If questioning is one path for thought, another is described in relation to technology. If questioning creates a circle, enframing creates a 'skeleton' or 'bookrack'.¹⁵⁹ That which is revealed is solidified into a structure which prohibits further revealing. Rather than holding open a space where an essence can unfold, enframing is a setting upon which gathers and orders into standing-reserve. As previously discussed, enframing does not occur as a result of technology; rather, technology is a result of the challenging claim of enframing. It situates man and 'puts him in position to reveal the actual, in the mode of ordering, as standing-reserve'.¹⁶⁰ As both questioning and enframing are modes of revealing, they both form a path or way. The revealing in enframing, however, 'reveals to itself its own manifoldly interlocking paths, through regulating their course'.¹⁶¹ The path is pre-determined or calculated in advance as it does not allow for more revealing, as in the circle of questioning. Enframing is a challenging-forth rather than a bringing-forth. Therefore, one could say that Dasein is challenged through enframing and questioned by way of art.

While both enframing and questioning could be considered compartments or ways of being, enframing is something in which Dasein always already is. By way of destining

¹⁵⁶ Heidegger, *Basic*, 90.

¹⁵⁷ Jonathan Dronsfeld, 'The Work of Art', in Bret W. Davis (ed.), *Martin Heidegger: Key Concepts* (Durham: Acumen, 2010), 128-139 (130).

¹⁵⁸ Heidegger, *Basic*, 133.

¹⁵⁹ Heidegger, *Question*, 20.

¹⁶⁰ *Ibid.*, 24.

¹⁶¹ *Ibid.*, 16.

[*Geschick*], which means ‘to start upon a way’ or ‘to send’,¹⁶² Dasein is called upon to view the world in this way. As Hans Ruin explains, ‘*Ge-stell* is not something external to human beings and their free will, but a way in which this will orients itself’.¹⁶³ Thus, a choice exists, if Dasein does not forget, because the will can be reoriented, which occurs during an engagement with art or during the process of questioning. The reorientation of the will reminds Dasein of his role in safeguarding the essence of being. In this way, Dasein is ‘given to belong to the appropriative event of truth’; he is granted ‘entry into something which, of himself, he can neither invent nor in any way make. For there is no such thing as a man who, solely of himself, is only man’.¹⁶⁴

The orientation of will is significant, as this is the point at which the saving power can arise from the danger. In order to reorient the will, a free relation must be entered into with regard to technology. This requires Dasein to consider both how he relates to technology and how this relation affects his being. As Ruin describes, ‘What Heidegger has been working towards...is a mode of thinking that can somehow incorporate the *how* of thinking into its *what*: to bring thinking to a thoughtful awareness of what it accomplishes in its very way of conceptualizing being’.¹⁶⁵ Much like the circular questioning employed when exploring the origin of the work of art, Heidegger does not merely inquire what the nature of technology is—rather, he asks us to look at the essence of enframing itself in order to come into a new relation with it and thus with thought and the enframing within.

Coming into a free relationship to enframing allows us to consider not only technology, but the way of thinking behind it and how it influences and manifests itself within our thinking. If enframing is an orientation of the will, then questioning builds a way which embodies this new orientation. This is the way of *Gelassenheit*.

Gelassenheit

The history of the term *Gelassenheit* can be traced back to the thirteenth century when the German mystic Meister Eckhart coined the term. Since its first use in the

¹⁶² Heidegger, *Question*, 24.

¹⁶³ Hans Ruin, ‘*Ge-Stell*: Enframing as the Essence of Technology’, in Bret W. Davis (ed.), *Martin Heidegger: Key Concepts* (Durham: Acumen, 2010), 183-194 (192).

¹⁶⁴ Heidegger, *Question*, 31.

¹⁶⁵ Ruin, ‘*Ge-Stell*’, 192.

1959 publication of the same name, *Gelassenheit* has been translated as 'releasement', which denotes 'a sense of "calm composure", especially and originally that which accompanies an existential or religious experience of letting-go, being-let, and letting-be'.¹⁶⁶ While it arose within the context of Christianity, Heidegger does not retain in his usage the notion of submission to a divine will, as this would still remain firmly entrenched in the domain of the will. The question for Heidegger is not between activity and passivity; rather, *Gelassenheit* is an active transition out of the domain of willing altogether.¹⁶⁷

While the term *Gelassenheit* can be approximated in translation, the linguistic representation not only fails to denote that which inherently falls within the realm of experience, but also can paradoxically enable its direct opposite, which Heidegger describes as 'constructing a concept...just to be in possession of this concept'.¹⁶⁸ In this sense, the representational role of language becomes emblematic of *Ge-stell*, or enframing, in which humans are called upon to wilfully represent the world as standing-reserve. In this process, things become 'neutralized by the undifferentiated process of information'¹⁶⁹ and it becomes possible to believe that being in possession of a 'correct' understanding of *Gelassenheit* means full comprehension. As the concept is particularly sensitive to representation as such, as it is offered precisely as a point of transition from the domain of the will, Heidegger seeks to demonstrate *Gelassenheit* rather than define it.

This demonstration comes in the form of a conversation on a country path between a guide, a scholar, and a scientist. The conversation addresses the question of the essence of man, which in philosophical tradition has been understood in terms of thinking; thus the topic becomes the essence of thinking as the 'distinguishing mark of the essence of the human'.¹⁷⁰ However, at one point during the conversation the guide states that 'what is essential to this essence, namely the essence of thinking, can be first properly caught sight of only insofar as we look away from thinking'.¹⁷¹ This

¹⁶⁶ Heidegger, *Country Path*, xi.

¹⁶⁷ *Ibid.*, xi.

¹⁶⁸ *Ibid.*, 40.

¹⁶⁹ Bret W. Davis, *Heidegger and the Will: On the Way to Gelassenheit* (Evanston: Northwestern University Press, 2007), 178.

¹⁷⁰ Heidegger, *Country Path*, 68.

¹⁷¹ *Ibid.*, 68.

statement is reminiscent of Heidegger's statement that 'the essence of technology is by no means anything technological'.¹⁷² While seemingly paradoxical, the notion of essence in both cases is dependent upon Heidegger's notion of truth as *aletheia* rather than truth as *veritas*, or correctness, as previously discussed. As truth is a process of revealing and concealing, so too is an essence, whether of technology or of thinking itself, as the essence will necessarily always reflect those characteristics which are unconcealed. As Don Ihde explains, '[B]eings as such are never simply *given*: they appear or come to presence in some definite way that is dependent upon the total field of revealing in which they are situated'.¹⁷³ Thus, that which remains concealed comes to bear on this process, as it helps to determine that upon which we focus.

Ihde goes further to describe Heidegger's truth as a 'complex field theory':

Truth is *aletheia*, translated as 'unconcealedness,' brought to presence within some opening that itself has a structure. Beings or entities thus *appear* only against, from, and within a background or opening, a framework. But the opening or clearing within which they take the shapes they assume, is itself structured. Overall this structure has an invariant feature, a concealing-revealing ratio. Thus one may say that it always has some selectivity factor as an essential feature.¹⁷⁴

Ihde's descriptive theory of truth isn't too distant from Heidegger's own conception, as he discusses aspects of truth as a 'constellation, the stellar course of the mystery'.¹⁷⁵ This constellation is encountered through the confrontation of the saving power and the inherent danger which exist simultaneously within technology, which 'draw past each other like the paths of the stars in the course of the heavens. But precisely this, their passing by, is the hidden side of their nearness'.¹⁷⁶ It is through the movement of passing that 'the essential unfolding of truth propriates'. This process reveals the import with which Heidegger discusses technology; it is not merely anthropological or instrumental, but rather is ontological. Technology, as a way of revealing truth, is an exclusive process in which the 'transforming, storing, distributing, and switching'¹⁷⁷ of enframing excludes the bringing-forth of *poiesis*. In short, it is a way of being which

¹⁷² Heidegger, *Question*, 4.

¹⁷³ Don Ihde, *Technology and the Lifeworld: From Garden to Earth* (Bloomington: Indiana University Press, 1990), 31.

¹⁷⁴ Ihde, *Technology*, 30.

¹⁷⁵ Heidegger, *Question*, 33.

¹⁷⁶ *Ibid.*, 33.

¹⁷⁷ *Ibid.*, 16.

excludes all others. It is the process of questioning which builds a way toward another horizon, or toward the orbit of another star in an adjacent constellation.

Once a way or bridge is created through questioning, one is still within a constellation or framework. As Ihde pointed out, even the Open or clearing itself has a structure. This is due not only to the nature of the revealing-concealing variant, but also to the nature of the horizon itself. When discussing the horizon during the conversation, the scholar states:

Thinking is really nothing other than the representational setting-before [*Vor-stellen*] and setting-toward [*Zu-stellen*] of the horizon, that is, of the circle-of-vision, in which the outward look and the essence of objects...becomes visible to us.¹⁷⁸

The essence of the horizon, then, turns us back to the essence of man, as it is man who projects a representational field. However, unless the world is to be considered merely a cognitive construct, a space must exist in which the horizon is represented. This space is the 'open region', which 'surrounds us and shows itself to us as the horizon'. Thus, the horizon is 'the side of the open-region turned toward our representational setting-before'.¹⁷⁹

The ways in which we conceive of and relate to the horizon is crucial, as evidenced through technology. For Heidegger, modern physics is the mathematical projection of nature through which experiments are conceived of and carried out for the purpose of controlling nature. In this way, technology is 'nothing other than applied physics',¹⁸⁰ as nature becomes both represented and controlled through the human will. In order to conceive of nature or the world as other than objects to be utilized as standing-reserve, man must enter into a new relationship with the open-region in which the horizon is situated. This is to open ourselves to the mystery of Being itself.

As thinking is a representing, and representing is a willing, the problem of becoming open to the open region becomes a problem that involves the realm of the will. This is expressed by the guide during the conversation when he states that 'I will non-willing'.¹⁸¹ While seemingly paradoxical, the non-willing is actually a renunciation of or

¹⁷⁸ Heidegger, *Country Path*, 58.

¹⁷⁹ *Ibid.*, 78.

¹⁸⁰ *Ibid.*, 3.

¹⁸¹ *Ibid.*, 39.

disaccustoming to willing, during which an awakening occurs.¹⁸² This awakening is the first stage toward being let-in to *Gelassenheit*. Significantly, the way in which the discussion arrives at this fruitful turn arises through the process of questioning. The questions did not impose strict definitions; rather, the scientist observes that ‘willing moved into our field of vision’.¹⁸³ Additionally, the path itself and its environment influenced the conversation and the speakers. The night ‘compels concentration without using force’, whereby the men realize that by ‘slowing down our pace, it allows us time to ponder’.¹⁸⁴ These statements not only describe the variables which gave rise *Gelassenheit* within the conversation, but also describe aspects of *Gelassenheit* itself which the men are beginning to experience.

An awakening is a necessary part of the process of *Gelassenheit*, as the guide states that ‘we do not awaken releasement in ourselves from out of ourselves’.¹⁸⁵ Thus, although releasement is effected from elsewhere, one can contribute to its arrival through keeping awake [*Wachleiben*].¹⁸⁶ However, this keeping awake must not be toward an object of expectation, or else it would put one back in the domain of the will. So it becomes a waiting [*warten*], which the scholar describes as a ‘higher activity than that found in all the doings of the world and in all the machinations of the realms of humankind’.¹⁸⁷ As Barbara Dalle Pezze describes, ‘Waiting is a moment of crossing; in waiting the swinging movement between the different kinds of thinking is present. In waiting something opens’.¹⁸⁸ That which opens is both the path and the way we move on the path; it is the moment of the shift between *techne* and *poiesis*.

Eno’s surrender and Heidegger’s *Gelassenheit* contain many points of similarity, particularly the transition out of subjectivity and the will and the conceptual letting-be. While Eno articulates surrender as a central concept that informs his work, it is actually within his work that surrender is both demonstrated and invited. As *Gelassenheit* must be experienced to be understood, we can examine Eno’s generative practice for the

¹⁸² Heidegger, *Country Path*, 70.

¹⁸³ *Ibid.*, 37.

¹⁸⁴ *Ibid.*, 69.

¹⁸⁵ *Ibid.*, 70.

¹⁸⁶ Barbara Dalle Pezze, ‘Heidegger on *Gelassenheit*’, *Minerva*, (2006), <http://www.minerva.mic.ul.ie/vol10/Heidegger.html> (24 August, 2013).

¹⁸⁷ Heidegger, *Country Path*, 70.

¹⁸⁸ Dalle Pezze, ‘Heidegger’.

conditions and traces of *Gelassenheit* within it to ascertain where surrender and *Gelassenheit* overlap.

Perhaps the earliest generative activity of Eno is found on his 1975 album 'Discreet Music' in which he strove to create music that could be 'listened to and yet could be ignored'.¹⁸⁹ This reveals that the value lies in the function of the music, which he later articulates as that of a place of surrender. Thus, surrender in relation to 'Discreet Music', and indeed the computer-driven generative music to come, is one in which the role of the will is reoriented. This is accomplished in such a way that the music is not cognitively represented as such, but rather is accepted as an integral part of the environment. It becomes what Heidegger would term as 'ready-to-hand' [*Zuhandenheit*]¹⁹⁰ in that it is engaged with rather than focused on as a separate object.

Significantly, the processes which Eno employs to achieve this function contain a form of surrender within themselves. Eno seeks to create 'situations and systems that, once set into operation, could create music with little or no intervention on my part'.¹⁹¹ As he favours the roles of 'planner and programmer' rather than 'executor', Eno can be seen to engage in a process whereby questions are put in place which generate their own answers.¹⁹² This allows Eno to join the audience in hearing the questions play out, which generates not only variety but also surprise.

While 'Discreet Music' is an early precursor to the algorithm-driven generative music of *77 Million Paintings*, it remains a 'technological approach'¹⁹³ to the fulfilment of the desire to remain a planner rather than an executor. Like Cage's renunciation of making choices, Eno states, 'It is a point of discipline to accept this passive role, and for once, to ignore the tendency to play the artist by dabbling and interfering'.¹⁹⁴ Thus, the passivity involved in systems-based creativity involves the seemingly paradoxical choice of passivity, or the decision to not make further decisions. This 'discipline' could

¹⁸⁹ Brian Eno, 'Discreet Music', *Hyperreal*, (1975), http://music.hyperreal.org/artists/brian_eno/discreet-txt.html (24 August, 2013).

¹⁹⁰ Heidegger, *Being and Time*, 69.

¹⁹¹ Eno, 'Discreet'.

¹⁹² *Ibid.*

¹⁹³ *Ibid.*

¹⁹⁴ *Ibid.*

be considered as a point of surrender whereby the action of the creator is a deliberate 'willing' of 'non-willing'.

The second side of 'Discreet Music' contains the 'Three Variations on the Canon in D Major by Johann Pachelbel'. The three track titles 'Fullness of Wind', 'French Catalogues', and 'Brutal Ardor' are taken from the 'charmingly inaccurate translation' of the piece recorded by the orchestra of Jean Francois Pillard. This particular version of the work appeals to Eno due to its 'unashamedly romantic rendition of a very systematic Renaissance canon'.¹⁹⁵ In this sense, the dichotomy between emotionless systems and emotive performance is broken down in much the same way as the titles themselves broke down in translation.

In these pieces, the emotive rendition is replicated by The Cockpit Ensemble and systematized, retaining aspects of both the system and the emotions. However, this process is merely a restatement of the original process, which contained its own inherent systematization. As Eno describes, '[T]he "system" is a group of performers with a set of instructions—and the "input" is the fragment of Pachelbel'.¹⁹⁶ So while individual performers create variety within the original system, Eno questions both the score and the hierarchical control pattern from composer to performer which reveal additional variety. He describes the process:

Each variation takes a small section of the score (two or four bars) as its starting point, and permutes the players' parts such that they overlay each other in ways not suggested by the original score. In 'Fullness of Wind' each player's tempo is decreased, the rate of decrease governed by the pitch of his instrument (bass=slow). 'French Catalogues' groups together sets of notes and melodies with time directions gathered from other parts of the score. In 'Brutal Ardour' each player has a sequence of notes related to those of the other players, but the sequences are of different lengths so that the original relationships quickly break down.¹⁹⁷

In this way, the original version is questioned; the systems employed in each section unfold to reveal their essence as they retain their individuality but display other aspects of themselves.

¹⁹⁵ Eno, 'Discreet'.

¹⁹⁶ Ibid.

¹⁹⁷ Ibid.

This process is technologized in the title track of 'Discreet Music', whereby two melodic phrases of varying length are fed through a synthesizer's digital recall system. This signal is then run through a graphic equalizer and echo unit which alters timber. This result is recorded, which is then fed to a second tape recorder which mixes the signals and creates overlap. The technology employed does not determine the sound; rather, it enables variations to emerge which otherwise would be unachievable for human performs. The system itself does not represent a fixed input and output scenario, but rather represents points at which questions have been posed to the signals.

Similarly, the generative software which produces *77 Million Paintings* contains a set of parameters which act as these points of questioning. The software allows the user to define over 200 of these which include timbre, scale, harmony, rhythm, tempo, sound envelope, vibrato, and pitch range.¹⁹⁸ Each setting could be considered a question such as, 'What would it sound like with a slower tempo?'. As the software creates all possible varieties, the technology frees the music rather than controls it; it liberates it from time and space and allows itself to emerge in every possible variation.

The original software used by Eno was developed by Tim and Peter Cole. He began using it in 1996 when he was impressed with its ability to produce music which closely mimicked that created by Eno himself. The creators stated that they 'wanted to create a computer system which could affect you on an emotional level, by enhancing or filtering your perceptions, and provide ever-changing, eventually interactive music'.¹⁹⁹ As with Eno in his endeavour with Pachelbel's Canon in D Major, Tim and Peter Cole knew that the emotional content was not a result of the human performers, but rather of the variety which they contributed.

This software is significantly titled 'Koan', which is derived from a Zen Buddhist practice of questioning. In this system of questioning, the koan is a statement, story or question used by a Zen teacher to challenge and test the student. Significantly, the koan appears to be deliberately nonsensical to the logical, rational mind; it is designed

¹⁹⁸ Paul Brown, 'Is the Future of Music Generative?', *Music Therapy Today (online)*, 6/2 (2005), 215-274 (218) available at <http://musictherapyworld.net>

¹⁹⁹ *Ibid.*, 248-249.

to be accessible through the intuition or lateral thinking. It can be used as a point of concentration during meditation, in which you commence to 'making your whole body one great inquiry'.²⁰⁰ This is directly analogous to both surrender and *Gelassenheit*, as the will is reoriented from the role of representing to that of intuiting or waiting. This software is aptly named as it encourages this activity, despite being a product of technology.

The Final Shift

The process of defining surrender and *Gelassenheit* runs contrary to their essence; thus, we have followed the movements which comprise their mutual essence, as it is within the engaged process that their similarities arise. These lie both in the conditions necessary for them to arise and in the result they both produce; both surrender and *Gelassenheit* are processes in which the will is reoriented whereby one willingly transcends his or her sense of individuality. This is ultimately a reorientation toward the horizon, which in turn affects a reorientation toward the self and Being.

This reorientation of the will implicit in the process of surrender, as situated within the aesthetic encounter, is made particularly manifest in aesthetic processes which incorporate surrender in their own coming to presence. Therefore, I maintain that Eno's generative music particularly elicits this response, as his process-led compositional style surrenders creative choices to a system which in turn invites a reciprocal surrender. This is reflected in his statement that '(l)istening to something is an act of surrender'.²⁰¹ In this act, the subject-object relationship which comprises the traditional aesthetic relationship is transcended as the realm of passivity and activity is abandoned. A new comportment of receptivity is entered into which enables both a full engagement with the possibilities of the aesthetic encounter and also a way of approaching technology which remains open to further revealings.

It is thus that subjectivity itself begins to undergo a shift; this might be characterized as the perceiver no longer experiencing a work of art, but instead undergoing an

²⁰⁰ Zenkei Shibayama, *The Gateless Barrier: Zen Comments on the Mumonkan*, Sumiko Kudo (trans.), (Boston: Shambhala, 1974).

²⁰¹ Franck Mallet, 'In the Enosphere', *Hyperreal*, (2001), http://music.hyperreal.org/artists/brian_eno/interviews/artpress01.html(23 August, 2013).

experience in which he or she becomes part of the work of art experience. This shift indicates a specific moment in time in which one way of being falls away and another way of being takes over. This moment, as an inherently temporal point of focus, engages this subjective split and thus enables a further exploration of that which occurs between the work of art and the perceiver when the process is in motion. We thus turn toward the moment.

Gadamer: The Mediating Moment

*As we build upon the foundation Heidegger provided in the previous chapter, this chapter begins to explore temporality and how this operates in the work of art. How is it that we can have a new experience of time when we can only draw from our own experience of time in the first place? While staying with the linguistic structure implemented in the first chapter, we examine Gadamer's terminology taken from his work *Truth and Method* which helps to elucidate how the work of art, as a foundational event, can transcend our subjectivity. His terminology is examined under the guiding concept of the moment, or an instant of time in which a temporal transformation occurs. Illustrative moments from both Heidegger and Eno demonstrate the kind of listening experience in which some form of mediation enacts a change which originates from outside of the perceiver's subjectivity. Throughout the exposition of Gadamer's terminology, we keep an eye toward its possible application to the conception of Eno's *77 Million Paintings* and the audience's experience of it. This particular experience will serve as a basis, or original instance, of the larger principles in action during other possible generative music listening encounters.*

When Martin Heidegger was a young boy, he was often charged with the task of ringing the bells in the tower of the local Church of St. Martin, to which his father was sexton. While he and his younger brother, Fritz, performed many services and errands for the church, it was the bell-ringing which made a lasting impression and which Heidegger later recalls with glowing commemoration:

The mysterious fugue...in which the church feasts, the days of vigil, and the passage of the seasons and the morning, midday, and evening hours of each day fitted into each other so that a continual ringing went through the young hearts, dreams, prayers, and games—it is this, probably, that conceals one of the most magical, most complete, and most lasting secrets of the tower.¹

Each of the seven bells in the tower had its own name, its own sound, and its own time'.² The bells awoke the town, marked out church holidays, prayer times, school lessons; even their silence indicated a special time. The bells did not mete out time, however; they transformed it. The 'continual ringing' appropriated the awareness of

¹ Rudiger Safranski, *Martin Heidegger: Between Good and Evil* (London: Harvard University Press, 1999), 7.

² *Ibid.*, 7.

the townspeople into a unique temporality above and beyond what Heidegger would term 'everydayness'. Thus, the bells demonstrate Heidegger's insistence that philosophy is first about our attunement towards the world, or mood [*Stimmung*], prior to thought. It is perhaps this early emphasis on comportment as open relatedness that brings Heidegger not so much to explain his thought to us rather than lead us to experience it. This is because experience, like that of the child in the bell tower, is transformative.

An experience which Eno had in 1979 led to his realization of a particular temporal lacking, or 'conceptual poverty',³ among the people in his social circle at that time. He attended a party in a multi-million dollar New York apartment which was hidden away in the heart of a slum. The extreme sense of disconnection between the poverty and luxury which literally bordered the same doorway gave rise to the realization that people's sense of time and place was very limited; 'here' stopped just outside the front door of the luxury apartment and 'now' meant 'this week'.⁴ As Eno recalls, 'No one had any investment in any kind of future except their own, conceived in the narrowest terms'.⁵ Thus he wrote in his notebook after that experience, 'More and more I find I want to be living in a Big Here and a Long Now'.⁶ This temporal awareness was reflected in the type of music he was beginning to create around the same time, which he describes as 'suspended in an eternal present tense'.⁷

Years later, a foundation would come to bear Eno's temporal label as 'The Long Now Foundation', which seeks to 'provide a counterpoint to today's accelerating culture and help make long-term thinking more common'.⁸ The major project of the Long Now Foundation is the construction of a 65-foot high mechanical clock installed inside of a Texan mountain which will keep time for the next ten thousand years. As an 'icon for long-term thinking',⁹ the clock does not measure minutes and hours, but rather years, centuries, and millennia. As ten thousand years is roughly the time span of a

³ Stewart Brand, *The Clock of the Long Now* (New York: Basic Books, 1999), 28.

⁴ Brand, *Clock*, 28.

⁵ *Ibid.*, 28.

⁶ *Ibid.*, 28.

⁷ *Ibid.*, 28.

⁸ Stewart Brand, 'About Long Now', *Long Now Foundation*, (1996), <http://longnow.org/about/>(23 August, 2013).

⁹ Jeff Bezos, '10,000 Year Clock', *10,000 Year Clock*, <http://www.10000yearclock.net/index.html> (23 August, 2013)

civilization, the clock is meant to encourage time consideration on this scale and expand our conception of 'now'. Significantly, the bells of the clock are a product of Eno's generative work, as their chimes will never repeat a melody over the ten thousand years. This is consistent with the primary focus of generative music which aims to transcend temporal limitations.

As Stewart Brand, president of the Long Now Foundation, explains, the Greeks understood time in two different senses, *kairos* and *chronos*. While the latter is closest to our modern day conception meaning roughly 'eternal or ongoing time', the former was an 'opportunity or the propitious moment'.¹⁰ As Brand explains, '*Kairos* is the time of cleverness, *chronos* the time of wisdom'.¹¹ The distinction between cleverness and wisdom symbolizes the subtle shift in temporality that it is necessary to make in order to extend the 'now' into the 'Long Now'.

Hans-Georg Gadamer hears the same thing ringing from Heidegger's bell tower and Eno's clock chimes in the mountain. The festival time which he describes is not something that we enter, but rather something which enters us; it is a suspension of time in which the heightened moment brings to presence a unity of past and present. Festival time, for Gadamer, is 'perhaps...the only way that is granted to us finite beings to relate to what we call eternity'.¹² This unity is that with which Gadamer is most concerned in his hermeneutic project; understanding occurs only through bridging the temporal gap between the past and present, thus creating a fusion of horizons. As the work of art is the example par excellence of this process, the bell tower and clock chimes stand as Heidegger's Greek temple as they demonstrate the temporal shift which transforms in manner or kind rather than direction. This shift allows us to become ready for listening as a transformational experience, one in which *chronos* becomes *kairos* and unending time becomes the eternal now. We become suspended in the infinitely musical present of festivity.

¹⁰ Brand, *Clock*, 9.

¹¹ *Ibid.*, 9.

¹² Hans-Georg Gadamer, *The Relevance of the Beautiful and Other Essays*, Robert Bernasconi (ed.) and Nicholas Walker (trans.), (Cambridge: Cambridge University Press, 1986), 45.

Time

One could say that Gadamer's festival arose directly from Heidegger's bell tower, as he sought to both introduce and further develop Heidegger's thought through his own work. As he explains, 'My philosophical hermeneutics seeks precisely to adhere to the line of questioning of this essay [Heidegger's "The Origin of the Work of Art"] and the later Heidegger and to make it accessible in a new way'.¹³ Thus, Heidegger's work provided the foundation upon which Gadamer would build, particularly with regard to temporality and truth as they come to bear upon understanding. In delineating his aims, Gadamer states, 'My real concern was and is philosophic: not what we do or what we ought to do, but what happens to us over and above our wanting and doing'.¹⁴ This focus firmly establishes Gadamer within the same transcendental phenomenological sphere as that of Heidegger's *Being and Time*, as the very conditions of possibility take precedence over the relationships which arise secondarily.¹⁵ Thus, Gadamer's 'real concern' is as intimately linked to temporality as that of Heidegger in *Being and Time* as the condition which makes possible our 'wanting and doing'.

Gadamer thus carries forward Heidegger's temporal conceptions. For Heidegger, Dasein's understanding of itself is Being-towards-death [*Sein-zum-Tode*], and this understanding of Dasein's most proper possibility serves as a temporalizing structure. Dasein '*stretches along* between birth and death', as Heidegger explains.¹⁶ But Dasein does not merely 'fill up a track or stretch "of life"'; rather, 'the "between" which relates to birth and death already lies *in the Being* of Dasein'.¹⁷ In other words, Dasein's Being is a temporalization as it '*stretches itself*' along:

[I]t is by no means the case that Dasein 'is' actual in a point of time, and that, apart from this, it is 'surrounded' by the non-actuality of its birth and death. Understood existentially, birth is not and never is something past in the sense of something no longer present-at-hand; and death is just as far from having the kind of Being of something still outstanding;

¹³ Robert J. Dostal, 'Gadamer's Relation to Heidegger and Phenomenology', in Robert J. Dostal (ed.), *The Cambridge Companion to Gadamer* (Cambridge: Cambridge University Press, 2002), 247-266 (263).

¹⁴ Hans-Georg Gadamer, *Truth and Method*, 2nd rev. ed., Joel Weinsheimer and Donald G. Marshall (trans.), (London: Continuum, 1975), xxviii.

¹⁵ Dostal, 'Gadamer', 252

¹⁶ Martin Heidegger, *Being and Time*, J. Macquarrie and E. Robinson (trans.), (Oxford: Blackwell, 2001), 374. (italics in original)

¹⁷ *Ibid.*, 374. (italics in original)

not yet present-at-hand but coming along. Factual Dasein exists as born; and, as born, it is already dying, in the sense of Being-towards-death. As long as Dasein factually exists, both the 'ends' and their 'between' *are*, and they *are* in the only way which is possible on the basis of Dasein's Being as *care*. Thrownness and that Being towards death in which one either flees it or anticipates it, form a unity; and in this unity birth and death are 'connected' in a manner characteristic of Dasein. As care, Dasein *is* the 'between'.¹⁸

Thus, the 'stretching oneself along' is 'historicizing', and it is through this movement that Dasein's 'connectedness of life' or 'self constancy' becomes a way of Being for Dasein.¹⁹

The self constancy or connectedness of Dasein's movement [*Bewegtheit*] which stretches it along and constitutes the 'who' of Dasein is a process of perception. This is evident in the fact that Dasein's experience of that which is real or actual is only the present 'now'; Dasein 'hops' between the present-at-hand sequence of 'nows' which exist in time.²⁰ The sense of connectedness arises from Dasein's temporalising. Thus, defining the Self who remains constant despite these changing experiences becomes problematic. This is due to the nature of temporality, which 'has different possibilities and different ways of *temporalizing itself*'.²¹ In this way, the Being 'remains indefinite' but appears to the temporalizing self as definite. This is consistent with Taoist and Buddhist conceptions of self, by which Heidegger was later influenced.

The self can appear definite or achieve a sense of connectedness because the Being of Dasein becomes exhibited as care [*Sorge*]. Care exists as the primordial orientation or connecting structure between past, present and future. Within the structure of care, Dasein's Being is a Being towards the world [*seinzur Welt*] without choosing to be so. In other words, Being does not exist as an entity which at times chooses to have a relationship with the world; rather, as Heidegger states, '[t]aking up relationships towards the world is possible only *because* Dasein, as Being-in-the-world, is as it is'.²² This facticity of Dasein's situation is known as thrownness [*Geworfenheit*]. Thrownness is experienced by Dasein through *Befindlichkeit*, which is translated as 'state-of-mind'

¹⁸ Heidegger, *Being and Time*, 374-375. (italics in original)

¹⁹ *Ibid.*, 375.

²⁰ *Ibid.*, 373.

²¹ *Ibid.*, 304. (italics in original)

²² *Ibid.*, 58. (italics in original)

or 'findingness'.²³ This forms our fundamental attunement, or mood [*Stimmung*], which discloses the 'there' and determines 'how one is'.²⁴ As Heidegger explains:

Being has become manifest as a burden. Why that should be, one does not *know*. And Dasein cannot know anything of the sort because the possibilities of disclosure which belong to cognition reach far too short a way compared with the primordial disclosure belong to moods, in which Dasein is brought before its Being as 'there'.²⁵

Our attunement is thus finding ourselves in a certain state of mind; our understanding is oriented by way of this attunement.²⁶ However, we are unable to conceptualize why this is so, as attunement exists prior to cognition as such. In this way, a mood is not something which Dasein possesses, nor is it to be confused with an emotional state; rather, it is a fundamental way in which Dasein is disclosed to being itself. It is the mode of receptivity prior to any thought regarding Dasein's Being-there. As Heidegger describes, 'Dasein is always disclosed moodwise as that entity to which it has been delivered over in its Being; and in this way it has been delivered over to the Being which, in existing, it has to be'.²⁷ In this way, the state-of-mind 'implies a disclosive submission to the world'.²⁸ It is the way in which Dasein 'constantly surrenders itself to the "world" and lets the "world" "matter" to it in such a way that somehow Dasein evades its very self'.²⁹ During this constant surrendering, there occurs a self-forgetting; this is reminiscent of, and was perhaps rethought by Heidegger as *Gelassenheit*, which can be seen as a re-alignment of the will which thus affects attunement.

As our various attunements are 'fleeting experiences which "colour" one's whole "psychical condition"',³⁰ they are temporally distinctive. As Heidegger states, 'Moods temporalize themselves—that is, their specific ecstasis belongs to a future and a Present in such a way, indeed, that these equiprimordial ecstasies are modified by having been'.³¹ Thus, the basic character of mood 'lies in *bringing one back to something*'.³² This reflects the nature of temporality, which is not 'an entity which first

²³ Heidegger, *Being and Time*, 134.

²⁴ *Ibid.*, 134.

²⁵ *Ibid.*, 135. (italics in original)

²⁶ *Ibid.*, 340.

²⁷ *Ibid.*, 135.

²⁸ *Ibid.*, 138.

²⁹ *Ibid.*, 139.

³⁰ *Ibid.*, 340.

³¹ *Ibid.*, 340.

³² *Ibid.*, 340. (italics in original)

emerges from *itself*, but rather is the 'primordial "outside-of-itself" in and for itself'.³³ As temporality is 'a process of temporalizing in the unity of the ecstases',³⁴ it is the way in which these ecstases are temporally united which gives rise to Dasein's orientation toward the present and thus its attunement. In this process, it is the authentic temporalizing of the future which awakens the Present. A series of infinite 'nows' is considered to be an inauthentic temporalizing.³⁵

The way in which we experience the 'now' is thus intimately linked with our attunement. Despite the fact that this temporalizing as mood exists on a level prior to our cognition, one can and should master mood, according to Heidegger. This is done only through replacing one mood with another; as 'we are never free of moods'.³⁶ Thus, this re-attunement inherently involves a temporal transformation which will re-orient Dasein toward Being through a transcendence of both time and self. While Heidegger does not address music directly, attunement, or *Stimmung*, naturally suggests music, as it not only denotes the tuning of a musical instrument, but also reflects an interpretive way to "'listen" in to some previously disclosed entity as regards it Being'.³⁷ Similarly, while there are various moods through which Dasein can be disclosed, the moods which Heidegger selects to examine the meaning of our fundamental situation are not those 'in tune', but those 'out of tune' or 'out of sorts', such as fear and anxiety which reveal Being as a burden. Therefore, I argue that a re-attunement of our disclosive listening in to Being suggests the temporally transformative properties of sound.

For Eno, Heidegger and Gadamer, art serves as a site at which this transformation can occur. This transformation involves a transcendence of our ordinary experience of time; our sense of temporal continuity is interrupted, reoriented and reconstituted. Like the process of *Gelassenheit*, however, this temporal transformation is not enacted from out of ourselves or our will; rather, the ringing of the church bells and clock

³³ Heidegger, *Being and Time*, 329. (italics in original)

³⁴ *Ibid.*, 329.

³⁵ *Ibid.*, 329.

³⁶ *Ibid.*, 136.

³⁷ *Ibid.*, 140.

chimes become mediators between differing states of temporal awareness. Thus, art constitutes a site or event at and through which subjectivity is transcended.³⁸

How can that which is experienced subjectively transcend subjectivity? The answer lies in the work of art as origin, as previously discussed with regard to 'The Origin of the Work of Art'. For Heidegger, the work of art is an instance of *phusis*, or 'the arising of something from out of itself',³⁹ which provides a ground or 'foundational event' during which 'the work is no longer experienced out of the ground of the spectator's subjective feelings and experience'.⁴⁰ As truth is set to work within the work, it becomes the mode of being of the work itself. We are appropriated to this event of truth as we enter the clearing of openness created through the process of strife. In this way, we encounter truth directly and originally. Like the Greek temple which 'gathers around itself the unity'⁴¹ of the various ways of being for the Greeks and thus makes truth present, so too do the chimes and bells inaugurate the presence and unity of their foundational temporalities.

Gadamer finds this foundational occurrence to be problematic, however, as it presents a lack of temporal continuity. How can one experience the temple or the ringing bells as a distinct, original event when it is our own historicity with which we are being confronted? As Dasein only experiences time through its own reference points of birth and death, there exists no super-historical state from which to form a new temporality. Gadamer explains this as a 'misunderstanding of Heidegger's ontological exposition of the time horizon', as 'people treat Dasein's existential, historical temporality, determined by care and the movement towards death—i.e., radical finitude—as one among many possible ways of understanding existence, and they forget that it is the mode of being of understanding itself which is here revealed as temporality'.⁴² For Gadamer, understanding is not one activity among many that being engages in; rather, understanding is a mode of being which is always already inherently grounded in temporality. In other words, temporality *is* the sense of Dasein's own being. As

³⁸ Ingrid Scheibler, 'Art as Festival in Gadamer and Heidegger', *International Journal of Philosophical Studies*, 9/2 (2001), 151-175 (151).

³⁹ Martin Heidegger, *Basic Writings*, David Ferrell Krell (ed.), (London: Routledge, 2011), 221.

⁴⁰ Scheibler, 'Art', 156.

⁴¹ Heidegger, *Basic*, 106.

⁴² Gadamer, *Truth*, 120.

Heidegger expresses, time is the horizon through which the question of being can be asked.

Thus, Gadamer seeks to explain this apparent experiential discontinuity without denying the very discontinuity which is intrinsic to the aesthetic experience as an event. He seeks to place the discontinuity within the everyday, continual experience of the perceiver while honouring the transcendence of subjectivity with which he concurs. Understanding itself is an event of which the experience of art is the 'exemplary illustration'.⁴³ As the work of art is an *Ereignis*, or event, which 'appropriates' us to itself, the event of transcendence takes on a mediated character. It is through this mediation that the experience reaches continuity with our everyday temporal consciousness. Gadamer describes this temporal, transcendent event through the illustration of a festival.

The Festival

The outstanding attribute of the festival is that it 'possesses its own sort of temporality'.⁴⁴ Gadamer states that 'the mystery of festive celebration lies in this suspension of time'.⁴⁵ This suspension occurs as each recurrent celebration is simultaneously unique and repeatable, such as an annual Christmas celebration which occurs at a unique point in time but makes contemporary the two thousand year-old birth of Jesus.⁴⁶ It also serves as 'something uplifting which raises the participants out of their everyday existence and elevates them into a kind of universal communion'.⁴⁷ The value is not simply negative, however. We are not only lifted out of our everyday lives, but also granted the opportunity to commune in a 'heightened moment' which exceeds specific tasks or purposes. In this way, the festival is a kind of creation which Gadamer compares to a cultic ceremony, which is an analogy likely to be misunderstood:

There is a widespread prejudice among the general public that the essence of all cultic ceremony is to be understood and described in

⁴³ Sheila Ross, 'The Temporality of Tarrying in Gadamer', *Theory Culture Society*, 23/101 (2006), 101-123 (105).

⁴⁴ Gadamer, *Relevance*, 58.

⁴⁵ *Ibid.*, 59.

⁴⁶ *Ibid.*, 59.

⁴⁷ *Ibid.*, 58.

terms of magical practices...It is an account that fails to perceive that the original and still vital essence of festive celebration is *creation and elevation into a transformed state of being*. Anyone who is involved in the regular practice of the particular form of worship we have described as cultic celebration knows what a festival really is...Cultic ceremony...represents a genuine creation: something drawn from within ourselves takes shape before our eyes in a form that we recognize and experience as a more profound presentation of our own reality.⁴⁸

The cultic ceremony thus encompasses not only rituals from pagan antiquity, but also includes the Catholic Mass and even theatre. They all possess a 'cosmic rhythm' which elevates it above normal time.⁴⁹ Unlike the perception Gadamer wishes to dispel, this 'cosmic rhythm' or 'heightened moment', which shall be discussed later, is not attributed to divine favour or magical manipulation. Instead, the elevated, transformed state of being is brought about through the very nature of play and its transformational quality whereby the participant becomes player.

The transformation occurs between two fundamental ways of experiencing time as distinguished by Gadamer. The first sense of time he refers to is 'empty time', which denotes time experienced in the usual sense of a divisible, measured structure which needs to be filled. In empty time we experience the two extremes of 'bustle and boredom',⁵⁰ both of which represent time as something to be either spent or awaited. The temporal structure of empty time readily reflects the representational characteristics of enframing; time is measured and projected within consciousness with direct relation to the will and its calculative ends. The second sense of time is that of 'fulfilled' or 'autonomous' time. This is the time of the festival, which by nature 'fulfills every moment of its duration'.⁵¹ Autonomous time is not specific to the festival or work of art; we are most familiar with it through the process of aging. The continuous temporal flow forms our experience of life while simultaneously containing discontinuous points at which we become suddenly aware that age has occurred.⁵² These points of discontinuity are the 'heightened moments' which enable the temporal transformation. While the resulting autonomous time is both unique to and

⁴⁸ Gadamer, *Relevance*, 60. (italics mine)

⁴⁹ Ibid., 60.

⁵⁰ Ibid., 42.

⁵¹ Ibid., 42.

⁵² Ibid., 42.

shared by everyone, it becomes communal at the point during which the festival 'proffers' time by 'arresting it and allowing it to tarry'.⁵³ During the temporal state of tarrying, Gadamer explains that 'the calculating way in which we normally manage and dispose of our time is, as it were, brought to a standstill'.⁵⁴ Tarrying, therefore, is not merely a distinct temporal relationship with which we approach the festival; rather, it is an outward demonstration that the process of play is occurring.

Summarily, the festival represents a suspension of time which occurs by way of a temporal transformation; two ways of temporalizing coexist in one moment and as a result the participant feels temporarily suspended in a continuous 'now'. This seeming split in our time affects the way in which we experience our being, and thus enables a subjective shift to occur. The temporality of the 'now' moment is one of tarrying, which ceases to exist as a subjective experience and instead occurs when play has overtaken the subject with its own unique way of being.

Play

Play is the mode of operation of the transformation; we do not enact it, but rather it comes over us during the event of the work of art. In other words, play is 'the mode of being of the work of art itself'.⁵⁵ It is a separate entity from the perceiver who is overtaken by it, and this brings about a shift in subjectivity. In this way, the manner in which Gadamer uses the term 'play' differs from the way in which Kant and most aestheticians and philosophers have used it. When Gadamer employs the term, it is used to reference an experience of art which is not purely subjective; it does not refer to the activity of the creator of the work, his or her state of mind, or that of the one perceiving the work. He dismisses these notions of confrontation between consciousness and an object as being far too simplified to describe accurately the process which occurs during play. Furthermore, in his discussion of play, Gadamer

⁵³ Gadamer, *Relevance*, 42.

⁵⁴ *Ibid.*, 42.

⁵⁵ Gadamer, *Truth*, 102.

employs the term to describe both the player of a game and a perceiver of art, which he essentially views as one and the same entity.

When play is used in reference to the aesthetic experience, it is not meant to minimize the seriousness with which we approach the work of art. On the contrary, play and seriousness are inherently linked; we label someone a 'spoilsport' who does not take the game seriously, as Gadamer points out.⁵⁶ In this way, that which is serious both elicits play and gives play its purpose. As Gadamer explains, '[P]lay itself contains its own, even sacred, seriousness. Yet in playing, all those purposive relations that determine active and caring existence have not simply disappeared, but are curiously suspended...Play fulfills its purpose only if the player loses himself in play'.⁵⁷ Thus, like the cultic ceremony, play exhibits a similar sacredness within the aesthetic encounter, as this too is a 'creation and elevation into a transformed state of being'.⁵⁸

As a process of creation and transformation, whether during a game or experiencing a work of art, play cannot be examined by way of an exploration of subjectivity, as it lies outside of it as such and has its own unique mode of being. Instead, Gadamer insists that it is 'the experience of art and thus the question of the mode of being of the work of art that must be the object of our examination'.⁵⁹ In other words, art is the site at which play takes over the perceiver subjectively, and this is the intersection on which he focuses. Within the Kantian aesthetic tradition, only the way in which the work played on our cognitive faculties was considered, thus producing an aesthetics of subjectivity. Additionally, some post-Kantians focused only on the work, leaving the spectator and creator virtually invisible. Gadamer explains a more precise and fruitful way of viewing the relationship between the work of art, the viewer, and most importantly, the dynamics in between, where the art is 'not an object that stands over against a subject for itself'.⁶⁰ Rather, he describes:

Instead the work of art has its true being in the fact that it becomes an experience that changes the person who experiences it. The 'subject' of the experience of art, that which remains and endures, is not the subjectivity of the person who experiences it but the work itself. This is

⁵⁶ Gadamer, *Truth*, 103.

⁵⁷ *Ibid.*, 102-103.

⁵⁸ Gadamer, *Relevance*, 60.

⁵⁹ Gadamer, *Truth*, 103.

⁶⁰ *Ibid.*, 103.

the point at which the mode of being of play becomes significant. For play has its own essence, independent of the consciousness of those who play.⁶¹

Play, therefore, is not limited to subjectivity, as it has its own fundamental nature. In fact, as Gadamer points out, 'The players are not the subjects of play; instead play merely reaches presentation...through the players'.⁶² Play is therefore something that emerges when it has a medium through which to act as opposed to being something that is merely performed. While Gadamer will speak of performance as a type of play, this phenomenon still holds true. He reiterates that 'play is not to be understood as something a person does...the actual subject of play is obviously not the subjectivity of an individual who, among other activities, also plays but is instead the play itself'.⁶³ This once again takes the focus away from subjectivity and the player and instead emphasizes the sole importance of the action of play. It is with this in mind that Gadamer begins his examination of play as play, and not merely as one of many actions that one performs which thus deemphasizes the unique character of play as a distinctive entity.

Gadamer's conceptual analysis on play examines the concept in the 'so-called metaphorical senses'.⁶⁴ This approach naturally lends itself to works of art as the play of sensations is metaphorical as well, such as the play of light, the play of sound, and so on. As Gadamer points out, 'In each case what is intended is to-and-fro movement that is not tied to any goal that would bring it to an end'.⁶⁵ This statement seems counterintuitive when one considers a game in which the object is to win, which would thus bring it to an end. However, in reality it is the game that is played and that which has an end, and not the playing in and of itself. Gadamer reiterates as he states, 'The movement of playing...renews itself in constant repetition. The movement of backward and forward is obviously so central to the definition of play that it makes no difference who or what performs this movement'.⁶⁶ Once again, it is the game which is

⁶¹ Gadamer, *Truth*, 103.

⁶² *Ibid.*, 103.

⁶³ *Ibid.*, 104.

⁶⁴ *Ibid.*, 104.

⁶⁵ *Ibid.*, 104.

⁶⁶ *Ibid.*, 104.

being played, as well as the players, and it is these which serve as the medium for play. In this sense, 'all playing is a being-played'.⁶⁷

Another significant characteristic of play is that, like the festival, it is communal in a sense; one cannot have a game alone. This is directly related to the forward and backward or to and fro motion of play. Gadamer states, 'In order for there to be a game, there always has to be, not necessarily literally another player, but something else with which the player plays and which automatically responds to his move with a countermove'.⁶⁸ Thus, the play that occurs in the encounter with the work of art requires some explanation regarding the structure which perpetuates this to-and-fro movement. This is accomplished through the discussion of games.

The Game

The game is a particularly appropriate illustration with which to examine the notion of play and the work of art, for just as no two works of art are the same, neither are two games identical in object or spirit. This is due to the fact that 'the to-and-fro movement that constitutes the game is patterned in various ways. The particular nature of a game lies in the rules and regulations that prescribe the way the field of the game is filled. This is true universally, whenever there is a game'.⁶⁹ Therefore, there is a determinant structure within which the movement of the game is limited, or a boundary which prohibits the game to be spatially all-inclusive. Within this given space, however, the player may choose how to move in order to interact with the other player or responsive object.

Despite being unique with regard to its patterns, every game shares the characteristic of having a task.⁷⁰ This reiterates the fact that play necessitates a medium and thus 'playing is always a playing of something'.⁷¹ The game, which has a specific task and is demarcated into a specific space, draws the player to alter his or her behaviour in alignment with the game. If one solves the task at hand or wins the game, it may be

⁶⁷ Gadamer, *Truth*, 106.

⁶⁸ *Ibid.*, 106.

⁶⁹ *Ibid.*, 107.

⁷⁰ *Ibid.*, 107.

⁷¹ *Ibid.*, 107.

said that this 'presents it'.⁷² Thus, Gadamer states that '[p]lay is really limited to presenting itself. Thus its mode of being is self-presentation'.⁷³ He goes on to signify the importance of this concept when he states that '[f]irst and foremost, play is self-presentation'.⁷⁴

The act of play's self-presentation during the game is such that, although the player is engaged in 'make believe goals' while participating in the game, it does not matter whether or not these goals or tasks are accomplished.⁷⁵ In fact, Gadamer states that '[o]nly because play is always presentation is human play able to make representation itself the task of a game'.⁷⁶ There is no representation without a first presentation. This presentation is 'potentially a representation for someone'.⁷⁷ Representation inherently requires another player or observer in order to represent; if there is not a viewer then the representation remains itself and without the ability to present. This is another indispensable characteristic of play, as '[t]he directedness proper to all representation comes to the fore here and is constitutive of the being of art'.⁷⁸

Unlike art, games are not always presented to spectators, but rather for the players to move toward the achievement of a task or goal in self-representation as they are 'played' by the game. Yet when it is indeed an art work rather than a game, such as in the performance of a play which is aimed at an audience, the audience is not a detached, invisible entity merely viewing the performance. Rather, in the performance of the play it is as if 'the world of play lets down one of its walls'.⁷⁹ It is in this situation where the best representation of a character is the one closest to self-presentation, or where the to and fro movement between the character being played and the player who performs it reaches its peak. The absence of one of the walls operates as more of a presence as such, as it marks out the open space for the completion of its territory. This space itself becomes transformative, as 'it is not really the absence of a fourth

⁷² Gadamer, *Truth*, 108.

⁷³ *Ibid.*, 108.

⁷⁴ *Ibid.*, 108.

⁷⁵ *Ibid.*, 108.

⁷⁶ *Ibid.*, 108.

⁷⁷ *Ibid.*, 108.

⁷⁸ *Ibid.*, 108.

⁷⁹ *Ibid.*, 108.

wall that turns the play into a show. Rather the openness toward the spectator is part of the closedness of the play. The audience only completes what the play as such is'.⁸⁰

The concept of the audience forming a fourth wall demonstrates that play is 'a process that takes place "in between"'.⁸¹ The performed play even exists as a game in the sense that it has delineated boundaries that exist in the stage and the performers with the audience marking the end of the interior, and the performers delivering representations to the audience. However, in this instance a crucial change takes place in that '[i]t puts the spectator in the place of the player. He—and not the player—is the person for and in whom the play is played'.⁸² A transformation of the audience has occurred as they become absorbed in another world set up by the play. The play is intended to act as reality, and in doing so 'the game is raised, as it were, to its ideality'.⁸³ In this way the actual substance of the play is played out and becomes meaningful for the spectator and performer alike. This process can take place without an audience, as it often does in a gallery or museum setting, during which it is the viewer who is transformed. This is due to the fact that '[a]rtistic presentation, by its nature, exists for someone, even if there is no one there who merely listens or watches'.⁸⁴

Transformation into Structure

This process of change is what Gadamer terms as 'transformation into structure'. It is in this process that 'human play comes to its true consummation in being art'.⁸⁵ The process of play now has its own unique appearance and can be repeated. This holds true for compositions which feature aleatory components, such as that of generative music; an autonomous structure is achieved by way of the manifestation during transformation, and the structure thus becomes repeatable. The transformation has brought absolute autonomy to play.⁸⁶

⁸⁰ Gadamer, *Truth*, 109.

⁸¹ *Ibid.*, 109.

⁸² *Ibid.*, 109.

⁸³ *Ibid.*, 109.

⁸⁴ *Ibid.*, 110.

⁸⁵ *Ibid.*, 110.

⁸⁶ *Ibid.*, 110.

As the transformation is not limited to the subjective bounds of the player, the transformation is distinct from a mere alteration. During an alteration, the initial entity is changed in some way but remains as the same entity. A transformation, however, changes an entity into an entirely different being. Thus, when he describes a transformation into structure, Gadamer is expressing that something which was previously in existence now is not, and 'what now exists, what represents itself in the play of art, is the lasting and true'.⁸⁷ The individual identities of the parts in the process do not make up the whole; rather, they have disappeared entirely. It is only the whole that remains. Thus, the performance of the play is now a distinct object of sorts which is entirely self-supporting. Gadamer explains that '[t]his gives what we called transformation into structure its full meaning. The transformation is a transformation into the true'.⁸⁸ It is the presentation of play that 'produces and brings to light what is otherwise constantly hidden and withdrawn'.⁸⁹

The transformation into structure illustrates the relationship between reality and play in a unique way. As Gadamer explains:

The being of all play is always self-realization, sheer fulfilment, *energeia* which has its *telos* within itself. The world of the work of art, in which play expresses itself fully in the unity of its course, is in fact a wholly transformed world. In and through it everyone recognizes that that is how things are. Thus the concept of transformation characterizes the independent and superior mode of being of what we call structure. From this viewpoint 'reality' is defined as what is untransformed, and art as the raising up...of this reality into its truth.⁹⁰

This excerpt demonstrates the contingency of revealed truth upon recognition of the autonomy of the transformed structure. This recognition of 'how things are' is significant in that reality 'always stands on a horizon' which involves many opportunities toward a resolution or end. This futural orientation is consistent with Heidegger's notion of attunement; the view from the horizon is always that of uncertainty. By definition, this uncertainty is always already just behind the horizon as the future is only capable of one resolution despite the inevitable existence of many

⁸⁷ Gadamer, *Truth*, 111.

⁸⁸ *Ibid.*, 112.

⁸⁹ *Ibid.*, 112.

⁹⁰ *Ibid.*, 112.

desires or expectations. Thus, the playing out of possibilities, both in art and reality, eventually comes around full circle. This process subsequently closes this circle of possibilities and thus exposes the meanings therein.

The concept of recognition within art can be traced to classical art theory, 'which bases all art on the idea of mimesis, *imitation*'.⁹¹ This is reminiscent of Kant, who described the beautiful as being representational in as much as it is tied to nature; the landscape portrait which exemplifies dependent beauty is representing nature. Prior to Kant, however, Aristotle recognized imitation as the basis of art through dancing as 'the representation of the divine'.⁹² The relationship between imitation and representation is demonstrated by Gadamer in the instance of a child's initial play which is by nature imitative. The child dressing up in a disguise is performing an imitative act; he does not want to be recognized as himself but only for the representation to exist and be recognized. As he explains, 'When a person imitates something, he allows what he knows to exist and to exist in the way that he knows it'.⁹³ Representation, therefore, involves first a conception of the thing represented, and secondly an act of imitation which reveals the way in which the representation is individually conceived. Thus, 'the cognitive import of imitation lies in recognition'.⁹⁴

Gadamer's conception of the relationship between recognition and the work of art differs from the traditional aesthetic encounter in which beauty is recognized. For Kant, this occurs through the notion of genius in which the imagination and understanding are united. The reception of an artistic idea becomes contingent upon the gift of its delivery. For Gadamer, however, the skill of the performer or player is only of secondary interest to the perceiver; instead, 'what we experience in a work of art and what invites our attention is how true it is –i.e., to what extent one knows and recognizes something and oneself'.⁹⁵ While Gadamer's conception retains the play of faculties and cognition, it is directed instead toward self-recognition in the work and the truth which resonates from this process. However, recognition in and of itself does not serve as sufficient instigation for this artistic interaction, as merely recognizing

⁹¹ Gadamer, *Truth*, 113. (italics in original)

⁹² *Ibid.*, 113.

⁹³ *Ibid.*, 113.

⁹⁴ *Ibid.*, 113.

⁹⁵ *Ibid.*, 113.

something does not impart a new concept or truth, but rather only serves as a reminder for what is already known.⁹⁶ There exists a pleasure which is derived from self-recognition in the work, however, and the generation of interest in the work on the part of the spectator is ignited here.

Representation

An essential function for both play and the self-recognition involved in the revealing of truth thus becomes representation, for '[w]ith regard to knowledge of the true, the being of the representation is more than the being of the thing represented'.⁹⁷ In previous aesthetic thought going back to Plato, this is thought to occur due to the absence of surroundings from the being of the thing represented which consequently illuminates its true essence for the spectator. The various circumstances and variables surrounding the thing which is represented results in the contingency of the original being while the representation appears as more than what it represents by way of presenting less. Following in this line of thought, classical thought proclaims that '[i]mitation and representation are not merely a repetition, a copy, but knowledge of the essence...They contain in themselves an essential relation for everyone for whom the representation exists'.⁹⁸ Presumably, the stripping of the original thing represented allows for more universal cognitive relations to the representation and allowed for the access for the spectator to the true essence of the thing.

This process presents in Platonic thought 'an insuperable ontological difference between the one thing that is a likeness and other that it seeks to resemble'.⁹⁹ This distance between the spectator and the thing represented the space for both imitation and representation to exist which could place the spectator 'in the third rank'¹⁰⁰ from the original for Plato. Gadamer explains that this process of imitation as representation was significant enough to be considered 'knowledge of the essence' until it lost its force in contrast to the idea of reality as proposed by modern science.¹⁰¹ For this

⁹⁶ Gadamer, *Truth*, 113.

⁹⁷ *Ibid.*, 114.

⁹⁸ *Ibid.*, 114.

⁹⁹ *Ibid.*, 114.

¹⁰⁰ *Ibid.*, 114.

¹⁰¹ *Ibid.*, 115.

reason, Gadamer points out his reason for beginning his examination with play and why the previous ideology associated with the aesthetic consciousness is insufficient:

The work of art cannot simply be isolated from the 'contingency' of the chance conditions in which it appears, and where this kind of isolation occurs, the result is an abstraction that reduces the actual being of the work. It itself belongs to the world to which it represents itself. A drama really exists only when it is played, and ultimately music must resound. My thesis, then, is that the being of art cannot be defined as an object of an aesthetic consciousness because, on the contrary, the aesthetic attitude is more than it knows of itself. It is a part of the *event of being that occurs in presentation*, and belongs essentially to play as play.¹⁰²

Thus, the notion of the process of recognition bringing forth the knowledge of essence through simplification and amplification during representation is clearly not sufficient as a methodology for the derivation of truth from art. This method leaves the spectator to fill in the absent parts which were considered contingencies with what he or she already knows instead of participating in the play of presentation which imparts new knowledge through occurring as a new, singular event.

Gadamer's thesis which characterizes the being of art as not belonging to aesthetic consciousness but rather to play during the event of presentation brings up a new question regarding the ontological state of art. Gadamer has illustrated the location of play, but not what the work is in the proper sense of the word, as play is unable to realize itself without being played despite the fact that it possesses its own autonomy and being during presentation. This inquiry involves further examination of Gadamer's transformation into structure and an examination into the temporality of this process.

Gadamer reiterates his concept of transformation into structure as this is ultimately the transformation into the true. He states that '[p]lay is structure—this means that despite its dependence on being played it is a meaningful whole which can be repeatedly presented as such and the significance of which can be understood. But structure is also play, because—despite this theoretical unity—it achieves its full being only each time it is played'.¹⁰³ The examination of the dependent and reciprocal

¹⁰² Gadamer, *Truth*, 115. (italics in original)

¹⁰³ *Ibid.*, 116.

relationship between play and structure provides the vantage point from which the process of play can be seen as the mode of being of the art work itself.

Double Mimesis

There exists a differentiation between that which is performed by the player and the actual performance or delivery of the work by the player. What is intended by the performance is cognizable by the audience as the actual material as such, but so too is the delivery by the player as a separate entity, although the delivery and the material occur simultaneously and are mutually dependent. This is to say that 'the poet's creativity or the actor's prowess as such are not foregrounded' from what is imitated in imitation, but rather are secondary in nature.¹⁰⁴ The audience is able to distinguish this phenomenon that Gadamer terms as 'double mimesis'. This double mimesis or sort of imitation by an imitator is also one entity which 'brings into existence...what the play itself requires. The double distinction between a play and its subject matter and a play and its performance corresponds in a double non-distinction as the unity of the truth which one recognizes in the play of art'.¹⁰⁵

The process of double mimesis and the unity therein form the structure through which the work both comes into being as a whole and is expressed through the nature of play. Despite the necessity of the player(s) during this process, the structure 'does not remain enclosed in the subjectivity of what they think, but it is embodied there. Thus it is not a question of a mere subjective variety of conceptions, but of the work's own possibilities of being that emerge as the work explicates itself, as it were, in the variety of its aspects'.¹⁰⁶ In this statement, Gadamer refutes subjectivity as encompassing the structure of the work, but recognizes that variations of the work come to be exemplified within subjectivity. Thus, the work presents possibilities of its own which differs from Kant's genius theory in which the performer or composer essentially interprets the work and then relates a meaning in a seemingly singular directional flow.

¹⁰⁴ Gadamer, *Truth*, 116.

¹⁰⁵ *Ibid.*, 116.

¹⁰⁶ *Ibid.*, 117.

Double mimesis thus presents ‘the forms and the action itself’¹⁰⁷ of the work, and comprises the recognizable element for the actor and spectator alike. For double mimesis exists as a unity, in which ‘the same thing...comes to existence in each case’.¹⁰⁸ This is a unique characteristic of the performing arts, as Gadamer explains that the works are ‘explicitly left open to such re-creation and thus visibly hold the identity and continuity of the work of art open toward the future’.¹⁰⁹ The opportunity for re-creation is not endless, however, as Gadamer states that this ‘would not do justice to the binding nature of the work, which imposes itself on every interpreter immediately, in its own way, and does not allow him to make things easy for himself by simply imitating a model’.¹¹⁰

Contemporaneity

Part of the temporally transformative power of the work comes not only from the continuously renewed action presented in play as double mimesis, but also from the simultaneously historical and futural situation of the work. As Gadamer describes works that ‘stretch out of a past into the present as enduring monuments’,¹¹¹ we are reminded of Dasein’s situation as a stretching between birth and death. This coexistence of past and futural orientations does not objectify the work as an historical object, however, for ‘[a]s long as they still fulfill their function, they are contemporaneous with every age’.¹¹² There always remains an original trace of the function of the work and it holds its own origin even if it has been displaced.¹¹³ A work of art in a gallery is still a work of art to be viewed, despite being placed amongst others, however dissimilar they might be. The work ‘affirms itself...by ‘killing’ other things or using them to complement itself’ and yet ‘is still part of itself’.¹¹⁴ Thus, the work of art does not evolve or change over time to the point of no longer existing as itself; all of these changes ‘belong to it’ and ‘are all *contemporaneous* with it’.¹¹⁵

¹⁰⁷ Gadamer, *Truth*, 116.

¹⁰⁸ *Ibid.*, 116.

¹⁰⁹ *Ibid.*, 117.

¹¹⁰ *Ibid.*, 118.

¹¹¹ *Ibid.*, 119.

¹¹² *Ibid.*, 119.

¹¹³ *Ibid.*, 119.

¹¹⁴ *Ibid.*, 119.

¹¹⁵ *Ibid.*, 119. (*italics in original*)

Interpretive contemporaneity, therefore, raises the question as to what sort of temporality most appropriately correlates to the work of art itself. The general philosophical answer is that of timelessness, as Gadamer points out.¹¹⁶ However, the concept of timelessness is problematic in that it is 'primarily only a dialectical feature which arises out of temporality and in contrast with it'.¹¹⁷ As Gadamer explains:

Even if one tries to define the temporality of the work of art by speaking of two kinds of temporality, a historical and a suprahistorical one,...one cannot move beyond a dialectical antithesis between the two. The suprahistorical, 'sacred' time, in which the 'present' is not the fleeting moment but the fullness of time, is described from the point of view of 'existential temporality'...The inadequacy of this kind of antithesis emerges when one inevitably discovers that 'true time' projects into historical existential 'appearance time'.¹¹⁸

As previously discussed, a contrast arises between the existence of a work of art in a sacred time and one of historicity. A sacred time, as distinct from historical time, would infer that the work of art exists in a time which starts from a biblical standpoint of time arising from divine revelation and from an omnipotent temporal perspective. This sort of analogical timelessness 'obscures the real problem, which does not lie in the artwork's being removed from time but in its temporality'.¹¹⁹ Thus, the antithesis discussed serves to only pose the question again while this time foregrounding continuity, for 'it is precisely continuity that every understanding of time has to achieve, even when it is a question of the temporality of a work of art'.¹²⁰

Return of the Festival

As Gadamer stated earlier, play is dependent upon and inseparable from its presentation during which 'the unity and identity of a structure emerge'.¹²¹ Thus it holds true that the entity which is presented as presentation and through presentation remains itself no matter how many changes it endures. It can be repeated numerous times and yet every repetition remains 'as original as the work itself'.¹²² Therefore, the

¹¹⁶ Gadamer, *Truth*, 119.

¹¹⁷ *Ibid.*, 119.

¹¹⁸ *Ibid.*, 119.

¹¹⁹ *Ibid.*, 120.

¹²⁰ *Ibid.*, 120.

¹²¹ *Ibid.*, 120.

¹²² *Ibid.*, 120.

character of the work of art exemplifies a different sort of temporality than is expounded philosophically with regard to people. We thus return to the illustration of the festival which maintains a unique identity and function despite its separate occurrences. Change is inherently part of the festival's continuity with itself. As such, the festival exists as and exemplifies 'an entity that exists only by always being something different [and] is temporal in a more radical sense than everything that belongs to history. It has its being only in becoming and return'.¹²³

This radically temporal event transforms the spectator as he or she becomes part of the presentation through his or her presence and participation. As he or she is both present as oneself and as part of the work that is the festival, being present 'has the character of being outside oneself'.¹²⁴ Gadamer makes this clear as he states:

In fact, being outside oneself is the positive possibility of being wholly within something else. This kind of being present is a self-forgetfulness, and to be a spectator consists in giving oneself in self-forgetfulness to what one is watching. Here self-forgetfulness is anything but a private condition, for it arises from devoting one's full attention to the matter at hand, and this is the spectator's own positive accomplishment'.¹²⁵

It is the spectator who is fully present to the work and not to himself or herself who becomes part of the presentation. It is by way of this self-forgetfulness that contemporaneity, to summarize Gadamer, is a task for consciousness and is not merely something which is presented or given to consciousness. The achievement of this task is demanded, and total presence replaces all mediation.¹²⁶

The Moment

During self-forgetfulness, there exists a space or distance at which the spectator exists. This space prohibits practical participation in the task which is demanded of the spectator. However, this distance or space is 'aesthetic distance in a true sense' as it

¹²³ Gadamer, *Truth*, 121.

¹²⁴ *Ibid.*, 122.

¹²⁵ *Ibid.*, 122.

¹²⁶ *Ibid.*, 124.

thus allows the spectator a true vantage point for viewing. The moment for 'a genuine and comprehensive participation'¹²⁷ is now revealed. Gadamer describes this moment:

What unfolds before us is so much lifted out of the ongoing course of the ordinary world and so much enclosed in its own autonomous circle of meaning that no one is prompted to seek some other future or reality behind it...A spectator's ecstatic self-forgetfulness corresponds to his continuity with himself. Precisely that in which one loses oneself as a spectator demands that one grasp the continuity of meaning. For it is the truth of our own world... that is presented before us and in which we recognize ourselves.¹²⁸

This process which involves the creator, player, and spectator does not exist as apart from the real or outside world of this circle of meaning which is occurring. Instead, it is always grounded in the world of the player and spectator, and it is to this world that 'he comes to belong...more fully by recognizing himself more profoundly in it'.¹²⁹ To lose oneself in something and come away with a different sense of self in the world is perhaps the point of connection for the 'continuity of meaning which links the work of art with the existing world'¹³⁰ and the one involved in the self-forgetfulness which enables a shared but divergent unity with the world by way of the work.

The moment is thus the point of temporal synthesis between time which is everyday and time which is eternal. This moment of contemporaneity is the Kierkegaardian concept of *Augenblick* or 'moment of vision'¹³¹ which both Heidegger and Gadamer adopt. For Heidegger, this 'present' moment is an authentic one which can't be clarified in terms of the 'now' [*dem Jetzt*],¹³² as the 'now' exists within time and the moment exists above time. In the moment of vision 'nothing can occur', and in this way it 'permits us *to encounter for the first time* what can be 'in a time' as ready-to-hand or present-at-hand'.¹³³ The moment 'temporalizes itself...in terms of the authentic future'.¹³⁴ We are thus able to undergo a temporal transformation because of this discontinuous moment which breaks with the past, orients us toward the future, but seems suspended above the present. Gadamer describes it as an

¹²⁷ Gadamer, *Truth*, 124.

¹²⁸ *Ibid.*, 124.

¹²⁹ *Ibid.*, 129.

¹³⁰ *Ibid.*, 129.

¹³¹ Heidegger, *Being and Time*, 338.

¹³² *Ibid.*, 339.

¹³³ *Ibid.*, 339. (italics in original)

¹³⁴ *Ibid.*, 339.

experience which 'is not the ordinary, so-called glossing-over...but the raising of oneself above the historical stream of time which is constantly varying and washing away all fixed limitations and contours. That something suddenly stands still and remains standing still seems to help the truth to speak.'¹³⁵ This is the point at which mediation is replaced with total presence and both temporal transformation and continuity are made contemporaneous.

Conclusion

As Eno rightly states, 'When we know a moment is unique, we look at things differently'.¹³⁶ But how is this uniqueness signalled to us? How do we know to stop in the moment, or indeed which moment to stop in? Perhaps this is best illustrated by Eno himself in a moment of distinct *kairos*, during which he conceived of his generative work *77 Million Paintings* as an installation for the home. This moment occurred as he walked past 'a rather posh house...with a great big huge screen on the wall and a dinner party going on'.¹³⁷ Eno describes his revelation:

Where there would have been a painting on the wall, there was this big, black screen and it looked kind of ugly and stupid. I could see exactly the problem: You're not going to have the TV on when you're having a dinner party. There's nothing on TV that you would want to have showing in a situation like that. ... I thought you need a painting there. But you need a painting that is of now, something that does have movement.¹³⁸

The recognition of the potential 'for having something really beautiful going on'¹³⁹ came to Eno as he stood at a distance. As such, he was already outside of the temporal flow of the dinner party guests, and this afforded him the moment of recognition. However, in order to both enter into their temporal consciousness and transform it, he would necessarily need to occupy the black screen; the movement must take on a

¹³⁵ Gadamer, *Truth*, 237

¹³⁶ 'Brian Eno: Constellations: (77 Million Paintings)', *Baltic Mill*, (2007), <http://archive.balticmill.com/index.php?itemid=37632&fromsearch=brian%20eno&position=0&numresults=69&start=&tab=> (23 August, 2013).

¹³⁷ Dustin Driver, 'Brian Eno: Let There Be Light', *Dustin Driver*, <http://www.dustindriver.com/apple-pro/apple-pro-eno.pdf> (23 August, 2013).

¹³⁸ Marsha Lederman, 'Brian Eno's Mind Altering Experience (in Calgary)', *The Globe and Mail*, (2011), <http://www.theglobeandmail.com/arts/brian-enos-mind-altering-experience-in-calgary/article560715/> (24 August, 2013).

¹³⁹ Dustin Driver, 'Brian Eno'.

mediated character if it is to gain contemporaneity. While the idea occurred to Eno perhaps in a Heideggerian lightning flash, the transmission of it would require a more Gadamerian hermeneutic process of mediation.

The generative work which was inspired by this moment reflects this mediating presence; it contains the potential to lift us out of our 'everyday' time and thus transform our experience and conception of the 'now'. This transformation becomes evident while observing the audiences of *77 Million Paintings*. As Eno describes:

I would sneak in and see people sitting there and I would think what are we actually doing here? We're not seeing a film. There's no beginning, there's no progression, there's no end, there's no narrative, there's no drama. In fact everything is missing that would normally be called art or entertainment.... and yet people were always saying the same sorts of things, the same things that I felt. 'It's so nice to just sit still and not want to change anything. Not feel impatient. Not drumming your fingers.'¹⁴⁰

The temporality of the audience had been re-attuned from the endless 'bustle and boredom'¹⁴¹ of empty, calculative time to an autonomous time which fulfilled every moment of its own duration. The audience had begun tarrying; they ceased to be an audience and had instead been transformed into players.

It is thus that Heidegger's bells and Eno's clock chimes have acted as mediators for our generative experience. Heidegger's bells became temporal mediators through which the townspeople's days were transformed into discrete, meaningful occurrences which, like the festival, were both repeated and unique. They echoed the message of Eno's clock chimes which stretched out our individual temporalities into a millennial communion with a futural civilization. Perhaps part of the unique transformative power of the bell tower and clock chimes lies in their resonating, to-and-fro movement, which raises the listener above time for a moment—just long enough to allow him or her to become conscious of the concurrent temporalization. This reverberation serves as a common point of departure from which we can represent that which we once were to the being which we are becoming.

¹⁴⁰ Lederman, 'Mind-altering'.

¹⁴¹ Gadamer, *Relevance*, 42.

As we have seen, this self-representation can only occur through a self-transcendence. Significantly, the very structure of generative music informs and completes this transformation as technology becomes the counter-move during our representational game. The generative phrases are themselves infinitely repeated while retaining their distinctive identities. In this way, a radically temporal event occurs which both embodies our identity as a temporalizing entity and places us over and above this process as it occurs. Thus, the sounding and resounding of the music generates a continuity of the work which is contemporaneous with the continuity of the self. In other words, the temporality of listener becomes externalized and is re-presented technologically. We, as this temporalizing 'in between', transcend ourselves and recognize within this transformation that which is true.

It is perhaps not an accident that we have chosen a technologically-mediated means of producing art. As modern science has displaced our sense of truth which was previously obtained through artistic representation and the experience thereof, we have seemingly substituted a mimetic structure through which truth can once again be a revealing of *poiesis* whilst simultaneously being representational. I contend that the experience which we have transformed is that of our experience of truth; if we can represent to ourselves how this process occurs, we can re-legitimate this mode of knowing to ourselves. Thus, we understand Gadamer when he states that '[w]hat rends him from himself at the same time gives him back the whole of his being'.¹⁴²

¹⁴² Gadamer, *Truth*, 125.

Levinas: Face to Interface

*In this third chapter, we look to Levinas and his philosophy of alterity in an attempt to understand how subjectivity and otherness relate, including the quasi-otherness of technology. In focusing on Levinas's idea of the face-to-face encounter, we discover both how subjectivity is initially formed through an encounter with alterity and also how it can subsequently be transcended through a similar encounter such as that with generative music. We will thus examine terminology that resonates with the generative music listening experience after a brief exposition situating the ontological and phenomenological roots of Levinas's philosophy. Finally, in order to explore Levinas's face to face theory as it would apply to technology when considered as a quasi-other, we turn to Don Ihde's spectrum of human-technology relations. This helps to demonstrate how our experience of otherness, and thus the face to face encounter, is readily transferrable to technology when coupled with Levinas's focus on the mediating function of discourse. This process highlights a fundamental, radical passivity which is mirrored in Heidegger's *Gelassenheit* and Eno's surrender as well as Gadamer's notion of play. Finally, some reflections on how we might use technology as a rehearsal for the perception of alterity prepare us for the forthcoming conclusion.*

One is scarcely able to know art, despite stripping it of its bygone aesthetic shackles of standards involving natural beauty and morality, unless one has endeavoured to reach beyond to that which lies on the hither or primordial side of art as being or existential reflection. While hermeneutics offers a description of how one might interpret art, and phenomenology presents the ways in which art might feel in a sensorial manner, the two philosophical approaches leave art ontologically wanting and therefore problematic as a source of truth(s). Furthermore, art presents beings with a unique form of ethical relations as people coexist with each other and the art which is created by another for another. It is consequently a responsibility to stand face to face with the art of the other and not merely side by side. Emmanuel Levinas's ethics of responsibility illuminate what it means to be, to be amongst others, and the ways in which meaning is formed from these relations for which art may serve as a medium.

Previous aesthetic considerations contained another limitation in their inherent inability to distinguish aesthetic encounters which were embodied technologically. The technological mediation of art, and subsequently that of being, raises questions of alterity; these questions are deeply embedded and read into technology in

fundamental ways. Does technology induce any form of otherness for us? How do we represent that which is, by definition, wholly other? Can we ask the question of technological art without presupposing its proximity to Being? Perhaps underlying and underpinning the formulation of these questions is an elementary desire for or towards the Other which always eludes both our cognition through its representational capacities and our consciousness as it expresses Being. Thus, we need a mediating concept which points toward the Other or indicates its presence while simultaneously acknowledging its fundamental alterity.

Levinas presents precisely this as he introduces the idea that something has been left out or overlooked in Western metaphysics—the Other. It is thus that his philosophical approach both illuminates the existence of an Other and attempts to demonstrate its presence by creating a space for it conceptually. He allows for another perspective or vantage point on the body of thought which precedes him and through this gesture demonstrates how alterity not only confronts us existentially from the beginning but also how it paradoxically moves within us as manifested desire for the unknown and unknowable. The Other constitutes a foundational encounter during which our subjectivity is formed and our orientation toward ourselves as beings and the world is formulated. The restoration of this possibility or perspective of alterity opens up an entire body of thought in distinctive ways as it highlights the mediation process which is inherently necessary in relating to and with radical alterity I argue that the examination of our need for mediation and its subsequent development into technology as a creative mediator is crucial, as this situates our desire to move beyond ourselves and our being and reveals how we represent this desire to ourselves. As the original encounter with non-mediation continually summons us toward it while simultaneously withdrawing, we begin to think generatively. We continually move conceptually toward an unknown and unspecified point in ever changing configurations in an attempt to reach that which is ultimately the Being of our being, or our becoming. This is perhaps a technologically mediated fulfilment of Heidegger's enigmatic prophecy that 'Being is still waiting for the time when it will become thought-provoking to man'.¹

¹ Martin Heidegger, *Basic Writings*, David Farrell Krell (ed.), (London: Routledge, 2011), 154.

Phenomenology Foundations: The Problem of Ego

The central role of alterity in Levinas's thought is perhaps best understood through investigating its movement and subsequent development through his initial phenomenological thought and then as it passed through the more specific ontological lens to its place in his 'first philosophy' of ethics. Phenomenology was initially both an extremely formative philosophical approach for Levinas and also comprised the substance of a significant contribution to French philosophy, as he translated Edmond Husserl's work from German into French. This was the first introduction of phenomenological thought into France which in turn placed Levinas in a position to effectively and systematically critique it. He was profoundly influenced by this field which contained a heightened concern and radical distrust of anything which was considered inherently or naturally part of knowledge. This reflexive stance would serve as the foundation for Levinas's view of the Other, which will be discussed further later.

Phenomenology was initially meant to distinguish between content and consciousness, as an extension of Kantian thought, or between the nature and spirit notions of Descartes similarly. Edmund Husserl, who largely pioneered the field of phenomenology as an adaptation from Franz Brentano's descriptive psychology, introduced and adapted a method whose infamous motto was 'back to the things themselves'. This was achieved through Husserl's methodology which included 'bracketing' off everything which could not be known for certain, or apodictically, about the object under scrutiny. This presented problems for Levinas as he began to investigate these processes, as although Husserl had provided a method to essentially undo any presumptions and contingencies attached to 'knowledge', which was an approach Levinas viewed as essential, nothing was left after bracketing except for consciousness. In this way, the first phenomenon of which one can be certain through this process is the transcendental ego, upon which all else is founded. This placed consciousness and the ego firmly in the centre of Husserl's methodology, which was both problematic in itself and also left out some crucial points for Levinas.

Firstly, everything always already exists within time and temporality; Levinas felt that Husserl's dehistoricization of both consciousness and the object of its perception was mistaken. A second critique of Husserl's ideas which would become a central

component of Levinas's thought for years to come was that of the bracketing off of the existence of other consciousnesses. There was not an inherent, apodictic way in which one could discover other consciousnesses through Husserl's methodology. Although Husserl addressed this issue in later works, he essentially subsumed knowledge of the other under that of the same, or self; that is, we can know there are other consciousnesses based on the apodictic knowledge that we ourselves have one. For Levinas, this eradicates the inherent alterity of the Other.

Perhaps the most problematic issue of Husserl's phenomenological methodology for Levinas was its implications. If one can only be certain of one's consciousness as a starting point, then it follows that one cannot learn anything about the object in question due to the bracketing off of everything which does not emanate from this source. Therefore, in a sense, one can only confer what one already knows of an object onto that object and the project of phenomenology in itself risks becoming nothing more than a solipsistic exercise.

From Ontology to Alterity

Levinas subsequently turned to Heidegger's new perspective on phenomenology as published in *Being and Time*. The aim of the work as well as its approach was radically different than that of Husserl, as Heidegger sought to explore the very relationship between Being and temporality. As a result, Being became a process rather than a fixed state, consciousness was decentralized, and the concept of historicity was restored. Perhaps as important for Levinas as the decentralized consciousness was the ontological perspective with which Heidegger approached phenomenology.

Heidegger's *Being and Time* was ontologically significant for Levinas because it questioned the very presuppositions upon which Husserl built his phenomenological practices and left unexamined. In this way, Heidegger's work became a practice in fundamental ontology, as it questioned the basis on which other studies of being were constructed. Therefore, Heidegger put to question the very entity which Husserl took for granted in phenomenology, namely Being itself. Husserl began with primarily epistemological questions regarding how Being comes to know what it knows and the ways in which that knowledge is valid rather than what Being is in the first place, which Heidegger objected to as a reversal of the correct order of questioning.

Another significant point of departure from Husserl by Heidegger was his critique of intentionality. This conception, as adapted from Brentano's work, was one which indicated consciousness as being consciousness of something; one could not think unless it was thinking of something. Therefore, intentionality for Husserl was both one's primary mode of relating with the world, as nothing could exist for Husserl in the absence of consciousness, and also acted as a determination of how the world could be experienced. Heidegger maintained, in light of the solipsistic problems ensuing therein, that this mode of accessing the world was not in fact primary, but rather that concern [*Sorge* or *das Besorgen*] was being's initial mode of relation with the world. This concept was an activity as opposed to a mental attitude which subsequently placed being within the world and involved with the objects which Husserl had separated from being in a rather Cartesian way.

Although Heidegger's Being performed actions of care and was thus situated within the world and therefore time as well, Levinas took issue with the idea that concern seemed to demonstrate interaction and control over the objects with which being came into contact. When this involved other consciousnesses, it therefore became problematic for Levinas, as Heidegger had essentially eradicated the possibility of encountering something truly other by concern's very definition, which included 'having to do with something, producing something, attending to something and looking after it, making use of something, giving something up and letting it go, undertaking, accomplishing, evincing, interrogating, considering, discussing, determining'.²

For Levinas, intentionality therefore became an issue of Being's relation with alterity, which was not sufficiently solved by Heidegger's concept of the primary relationship of concern. Thus, as Heidegger's fundamental ontological approach failed to allow room for a radically 'other' to remain as such through Being just as Husserl's system had through consciousness, Levinas ventured beyond ontology in order to acquire the means with which to express alterity without committing the same error of reducing the other to the same. This very expression of the Other even while trying to maintain

² Martin Heidegger, *Being and Time*, J. Macquarrie and E. Robinson (trans.), (Oxford: Blackwell, 2001), 83.

and express its alterity is problematic in that it is a form of reduction itself. This critique will be discussed further.

While the former reflections on phenomenology and Levinas's critiques thereof in no way exhaust the concepts inherent in either Husserl or Heidegger's phenomenological methods, they do serve to illuminate both what was problematic for Levinas and also what is similarly problematic when phenomenology alone is utilized to assimilate music or visual art which is technologically embedded and therefore inherently laden with alterity considerations. As Levinas progressed away from ontology toward his 'first philosophy' of ethics, he developed a foundational relation with alterity which will speak to Being and its proximal relation to technology.

The Originary Encounter with Alterity: Face to Face

Levinas introduces the idea that something has been left out or overlooked in Western metaphysics—the Other [*autrui*]. The Other has been systematically subsumed under concepts such as 'being' and 'consciousness' and this leads to his ultimate break with ontology as a potential space in which to consider alterity. He states that, 'Western philosophy has most often been an ontology: a reduction of the other to the same by interposition of a middle and neutral term that ensures the comprehension of being'.³ He thus rejects knowledge of consciousness, the Ego, or even Being as the ultimate aim of philosophy and instead seeks to establish a basis for alterity, or the Other, which can introduce the concept in such a way that it demonstrates otherness and leaves it as such.

He begins this pre-ontological task in his work *Time and the Other* through utilizing the concept of death. This is adapted and elaborated upon from Heidegger's conception in which death and one's anxious anticipation of it causes Being to consider its very being for the first time. Thus, death serves as the foundation of Being's awareness of its own being. For Levinas, however, death is indicative not only of a point of existential awareness and mortality; it also founds a primal position or orientation of Being which is passivity. Death remains something about which one cannot do anything, and it

³ Emmanuel Levinas, *Time and the Other: and Additional Essays*, Richard A. Cohen (trans.), (Pittsburgh: Duquesne University Press, 1990), 43.

marks the moment when 'the subject loses its very mastery as a subject'.⁴ To lose mastery or control for Levinas is an important concept in alterity, as one lacks any control over the other in the face-to-face relation to be discussed later.

In this moment when mastery by the subject is lost, which crucially involves mastery over oneself, Levinas explains that '[t]his approach of death indicates that we are in relation with something that is absolutely other, something bearing alterity not as a provisional determination we can assimilate through enjoyment, but as something whose very existence is made of alterity. My solitude is thus not confirmed by death but broken by it'.⁵ This statement is significant in that it both provides the foundation of alterity as something purely other and therefore impossible to integrate into any form of experiential cognition, and also introduces the destructibility of solitude. This notion that solitude can be broken leaves a conceptual space for the approach of an Other who can both coexist and remain radically other, which demonstrates that 'existence is pluralist'.⁶

For Levinas, death is an event which is ungraspable to the subject, and this state is mirrored or paralleled in the encounter with the Other, which he terms the 'face to face'. In this relationship:

[T]he face-to-face with the Other, the encounter with a face that at once gives and conceals the Other, is the situation in which an event happens to a subject who does not assume it, who is utterly unable in its regard, but where nonetheless in a certain way it is in front of the subject. The other 'assumed' is the Other.⁷

The Other, as irreducible to the self, is discussed by Levinas as a being posited through the face, but this is only an appearance of the Other as such and not Otherness itself. As such, it is not reducible to one part or image of the body at all, for this would be thematizing and thus reducing the Other to the same. The 'face' can therefore exist in or as 'the whole body—a hand or a curve of the shoulder'⁸ for example. Thus for Levinas '[t]he Other does not only *appear* in his face, as a phenomenon subject to the

⁴ Levinas, *Time*, 74.

⁵ *Ibid.*, 74.

⁶ *Ibid.*, 75.

⁷ *Ibid.*, 78-79.

⁸ Emmanuel Levinas, *Totality and Infinity: an Essay on Exteriority*, Alphonso Lingus (trans.), (Pittsburgh: Duquesne University Press, 1994), 262.

action and domination of a freedom; infinitely distant from the very relation he enters, he presents himself there from the first absolute. The I disengages itself from the relationship, but does so within relationship with a being absolutely separated. The face with which the Other turns to me is not reabsorbed in a representation of the face'.⁹

Levinas states above in reference to the Other that 'he presents himself there from the first absolute'. This is an important concept for Levinas as it orders both divisions within philosophy and also certain formative aspects of being, such as subjectivity, consciousness, and exteriority, which shall be discussed in more detail later. Levinas does not delineate the face-to-face encounter in a chronological, time-based manner, but rather discusses it as occurring in a primordial time of sorts, prior to Being becoming fully so within itself. As one is always already in a situation of coexistence with others, the face-to-face encounter is meant to demonstrate that which initially occurs as the I is approached by an 'other' who essentially calls oneself to selfhood. Therefore, as the face-to-face encounter is the fundamental, originary encounter, the arising relation of ethics becomes a 'first philosophy' for Levinas, which comes prior to metaphysics and even ontology.

The disengagement and absolute separation of the I which Levinas describes above is crucial as it is during this process that one is introduced to the notion that a point of view outside of the self exists. This new perspective is overlaid with the perspective of the self and an attempt is made to perceive the 'objective' world. This brings about a disengagement with the self's perspective, as it constantly attempts to project beyond itself. The Other, however, remains infinitely distant and 'absolutely separated' or 'infinitely distant from the very relation he enters';¹⁰ the two consciousnesses never merge. During this encounter, the Other's perspective is never accessible except through linguistic mediation. It is also through this separation that one becomes 'subject to the action and domination of a freedom',¹¹ as one can now respond to another perspective which is not his own; possibilities are opened up as the I is called to selfhood.

⁹ Levinas, *Totality*, 215. (italics in original)

¹⁰ *Ibid.*, 215.

¹¹ *Ibid.*, 215.

It is during this encounter, as a result of the separation and ensuing freedom, that the I is summoned by the Other. This summoning is expressed in a conceptually similar way to the non-thematization of the Other by the Face as it does not have to exist as a verbal command, but nonetheless calls upon the I before the I can respond or gather itself to do so. As Levinas continues, he states that 'the face summons me to my obligations and judges me' and describes the Other as one 'to whom I am obligated'.¹² This summoning, therefore, is both simultaneously a commanding to which one must respond, even if to respond means a non-verbal action or a lack of response toward the Other, and also a formative event, as the I is transformed by this encounter with the wholly mysterious. For Levinas, this occurrence elicits the formation of consciousness, not as the embodiment of a cognitive practice of beginning to moderate existence to ourselves, but rather as a recognition of the Other, and hence its alterity which by nature overflows knowledge.

This concept runs parallel to that of Levinas's conception of the idea of infinity, which shall be discussed in more depth later, and his related notion of welcoming. As he states in *Totality and Infinity*, 'The idea of infinity, the overflowing of finite thought by its content, effectuates the relation of thought with what exceeds its capacity, with what at each moment it learns without suffering shock. This is the situation we call welcome of the face'.¹³ In this instance, the very alterity of the Other is made possible by infinity, or that which overflows thought. It is by definition beyond that which the I can conceive, and for Levinas this is a positive notion. This positivity is unique, as Levinas contends that Western philosophy has consistently painted it in a negative light. The I does not fight against that which it is unable to comprehend, and hence this produces a welcome, as 'I respond to his expression, to his revelation'.¹⁴

The idea of infinity is paramount in Levinas's development of both the face-to-face encounter, during which the welcoming of the face occurs, and also the very formation of Being and subjectivity. Infinity, therefore, is foundational to understanding our relationship with art and technology, as I argue that these practices recreate interactions which replicate these formative occurrences. These concepts also serve to

¹² Levinas, *Totality*, 215.

¹³ *Ibid.*, 197.

¹⁴ *Ibid.*, 197.

elucidate the ways in which the Other plays a formative role in the ways in which one deals not only with the Other's inherent, radical alterity in general, but also specifically in the creative endeavours resulting therein.

Infinity and Totality

Infinity and totality comprise the theoretical framework for Levinas's 'first philosophy' of ethics as explicated in his 1961 work *Totality and Infinity*. The two concepts named in the title both complement and oppose one another, as to simply view them as a binary opposition of sorts and to privilege infinity would be to subsume them both under the concept of totality. The subtitle of the work is 'An Essay on Exteriority', as this concept is one which also plays an essential role in the development of Levinas's thought surrounding the event in which the I encounters the Other and the formative events which ensue as a result. As stated above, infinity is 'the overflowing of finite thought by its content',¹⁵ and it is 'produced in the relationship of the same with the other'.¹⁶ As demonstrated in the face to face encounter, the I disengages from itself in an effort to assimilate the Other. The Other, however, is always exceeding his own presence as anything spoken in the process of mediation is constantly being added to both linguistically and by the presence itself.

As infinity by definition overflows thought, Levinas is careful to distinguish conceptually between the idea of infinity as it is presented in language and actual infinity itself; the idea of infinity is not merely a cognitive tool for representing something exterior to Being. Rather, infinity is, like Heidegger's Being, a process. Levinas explains:

The idea of infinity is the mode of being, the *infinition*, of infinity. Infinity does not first exist, and *then* reveal itself. Its infinition is produced as revelation, as a positing of its idea in *me*. It is produced in the improbable feat whereby a separated being fixed in its identity, the same, the I, nonetheless contains in itself what it can neither contain nor receive solely by virtue of its own identity.¹⁷

¹⁵ Levinas, *Totality*, 197.

¹⁶ *Ibid.*, 26.

¹⁷ *Ibid.*, 26-27. (italics in original)

This phrase indicates the way in which the idea infinity comes to be both *to* being and also *within* being. Levinas first delineates the idea of infinity as existing as a mode of being which is completely separate from Being; he introduces the concept of revelation versus that of creation, with the former arising from outside of Being and the latter coming from within Being. Infinity thus is a revelation received from the radical alterity of the Other in its infinite Being.

Another crucial notion in this passage is that of separation. Levinas states that '[t]he idea of Infinity implies the separation of the same with regard to the other'.¹⁸ However, he characterizes this division as something other than a mere opposition. Separation between the Other and the I is the necessary condition for the I to receive the revelation of the idea of infinity, and in fact this very revelation of the idea of infinity is in itself a form of transcendence in relation to the Other. Additionally, the same and the other both repel and call for one another as they form a totality. This totality, however, is relativized by the idea of infinity, and '[a]n absolute transcendence has to be produced as non-integratable'.¹⁹ This is to say that while the idea of totality attempts to integrate the same and the other into a totality, infinity, or the idea thereof, maintains the separation between the two, thus maintaining alterity and leading to the relation of exteriority.

The concept of totality is described as 'outwardly directed but self-centred totalistic thinking that organizes men and things into power systems, and gives us control over nature and other people. Hence it has dominated the course of human history'.²⁰ To subsume the relationship of the self and the Other under totality is to suppress or even to a certain extent destroy the freedom, among other things, which arise from the concept of separation. Totality negates individualization and consequently the Other and thus infinity. It is thus that Levinas is critical of Heidegger's ontology and Western philosophy in general, as it 'subordinates the relationship with the Other to the relation with Being in general, remains under obedience to the anonymous, and leads inevitably to another power, to imperialist domination, to tyranny'.²¹ Individuals are

¹⁸ Levinas, *Totality*, 53.

¹⁹ *Ibid.*, 53.

²⁰ *Ibid.*, 17.

²¹ *Ibid.*, 46-47.

reduced to generalities and concepts replace alterity, thus opening a relationship of potential control.

The individual avoids being merged into a totality by way of his exteriority, which Levinas describes as 'the essence of being'.²² This inability for the Other and the same to merge arises from the separation which initiates infinity; thus the idea of infinity is necessary for exteriority. Levinas states that '[t]o posit being as exteriority is to apperceive infinity as the Desire for infinity, and thus to understand that the production of infinity calls for separation, the production of the absolute arbitrariness of the I or of the origin'.²³ Thus, to receive the revelatory idea of infinity reflects the way in which exteriority is initiated. Exteriority also presents a face, or the being's existence, in the face-to-face encounter. Levinas explains that 'exteriority defines the existent as existent, and the signification of the face is due to an essential coinciding of the existent and the signifier'.²⁴ This does not mean that the face is responsible for the initiation of signs and thus signification, however. Levinas clarifies that '[s]ignification is not added to the existent. To signify is not equivalent to presenting oneself in person. The symbolism of the sign already presupposes the signification of expression, the face. In the face, the existent par excellence presents itself'.²⁵ The way in which signification develops from the face-to-face encounter and exteriority will be discussed further.

Exteriority inherently has an inward side which is that of interiority. This is expressed as 'pure thought',²⁶ and lacks complete integration into a whole for Levinas, as it can never reach completion until death. It is 'the very possibility of a birth and a death that do not derive their meaning from history. Interiority institutes an order different from historical time in which totality is constituted, an order where everything is *pending*, where what is no longer possible historically remains always possible'.²⁷ Thus the interior of the self conversely creates exteriority and is self-referential as it exists as thought exclusively. It is significant in its self-reference because this relation in turn initiates subjectivity. It is subjectivity as founded ultimately by infinity which will bear

²² Levinas, *Totality*, 292.

²³ *Ibid.*, 292.

²⁴ *Ibid.*, 262.

²⁵ *Ibid.*, 262.

²⁶ *Ibid.*, 55.

²⁷ *Ibid.*, 55. (italics in original)

directly although not exclusively on an existent's experience of art, and more specifically that of technologically mediated art.

When dealing with subjectivity, Levinas is careful to avoid reduction of the concept to its former state in the phenomenology of others from which he is seeking to break. He therefore states, when referring to *Totality and Infinity*, that '[t]his book then does present itself as a defence of subjectivity, but it will apprehend the subjectivity not at the level of its purely egoist protestation against totality, nor in its anguish before death, but as in the idea of infinity'.²⁸ This statement is reminiscent of Heidegger's concept of Being-towards-death which is Dasein's most prominent source of anxiety. It also does not provide the purely phenomenological sense of resistance toward totality and hence stress the Ego as a transcendent over all.

Instead, Levinas finds the subjectivity of self from the infinity which arises from the face-to-face encounter and separation with the Other. In this way, the summoning which occurs during this encounter is an initiating element, and thus the concept of alterity and its accompanying components are catalysts for subjectivity. That which accompanies the face-to-face encounter first and foremost is responsibility. As clarified in Levinas's *Otherwise than Being or Beyond Essence*, 'Responsibility is in fact a relationship with the other, in his very alterity. Then a relationship with alterity as such is constitutive of subjectivity'.²⁹ Thus, subjectivity transcends a mere theoretical status and becomes always already ethical. It is this sense of responsibility, as founded by our encounter with alterity, which orients our subjectivity and not the 'egoist' aims which proceed from the phenomenologically isolated consciousness of self.

Separation with the Other holds a special significance in *Totality and Infinity*, as it finds language within the face-to-face encounter. Levinas states that '[s]peech proceeds from absolute difference',³⁰ during which the '*discourse* relates with what remains essentially transcendent'.³¹ While one can and does thematize during speech with the Other, due to the presence of the Other, '[t]he fact that the face maintains a relation with me by discourse does not range him in the same; he remains absolute

²⁸ Levinas, *Totality*, 26.

²⁹ Emmanuel Levinas, *Otherwise than Being, or Beyond Essence*, Alphonso Lingis (trans.), (Pittsburgh: Duquesne University Press, 1998), xix.

³⁰ Levinas, *Totality*, 194.

³¹ *Ibid.*, 195.

within the relation'.³² This is to say that the Other does not become 'reabsorbed' in the thematization process. For Levinas, '[t]he formal structure of language thereby announces the ethical inviolability of the Other'.³³

Additionally, during speech as it arises during the face-to-face encounter, alterity is maintained not only through the very presence of the Other, but also through exteriority as this is inherently tied to presence. Both beings in the encounter resist falling under a totality, as 'the exteriority of discourse cannot be converted into interiority. The interlocutor can have no place in an inwardness; he is forever outside'.³⁴ Levinas describes language and discursive exchange as an 'unrelating relation',³⁵ not because he denies the possibility of the transfer of knowledge, but rather because expression, which is synonymous with the face and is the source of all signification, overflows exteriority.³⁶ The formulation goes on to establish the possibility of truth formation through something which one is unable to derive from one's own interior state, from a place outside of one's own subjectivity.

Truth

Levinas continues on from Heidegger's conception of truth and builds upon it, but elaborates on how truth, as a process, is bound up in our temporality. As Levinas states early on in the work, 'Truth is something promised. Always promised, always future, always loved'.³⁷ The precise linguistic construction of his sentences are significant throughout the text, as they mirror the content expressed therein. In this instance, truth is referred to in the present tense, but retains both a sense of the past in 'promised' and echoes of the 'future'. The fragmentary style serves to illustrate another element of truth, as Levinas states, 'The search for truth has to draw being out of appearance...every manifestation is partial, and in that sense apparent, whereas truth cannot be fractioned without being altered. Consequently truth is a progression, and is exposed in several moments, remaining problematical in each'.³⁸ This statement

³² Levinas, *Totality*, 195.

³³ *Ibid.*, 195.

³⁴ *Ibid.*, 295.

³⁵ *Ibid.*, 295.

³⁶ *Ibid.*, 297.

³⁷ Levinas, *Otherwise*, 29.

³⁸ *Ibid.*, 24.

draws out the distinction between being and appearance, which clearly demarcates a perspective other than that of a strictly phenomenological one. It also demonstrates the way in which truth is bound by temporality in the same way in which beings are; truth is undiscoverable as a whole entity in static time, and therefore the progression of time which fractures its unity does not leave truth unaffected. In other words, truth never appears as a complete whole in our subjective apprehension of it; our experience of truth is always a striving to piece the fragments together. This striving continually delays our full comprehension to some future time which never arrives.

Levinas explains this concept further as he describes truth from both a time-based and psychologically-oriented perspective:

Truth is rediscovery, recall, reminiscence, reuniting under the unity of apperception...there is not a pure distancing from the present, but precisely re-presentation, that is, a distancing which the present of truth *is already or still is*; for a representation is a recommencement of the present which in its 'first time' is for the second time; it is a retention and a protention, between forgetting and expecting, between memory and project. Time is reminiscence and reminiscence is time, the unity of consciousness and essence.³⁹

Reflected in this statement is the discontinuous time or the apparent gap in which both a drawing back and concealing occurs. This is the time during which the manifestation of truth gets 'out of phase' with itself, hence its ability to appear for the first time while reappearing. The fragmentation referenced in the previous quote occurs in this intermittent time. Levinas points out that since totality includes everything, and becoming out of phase with itself it leaves nothing out as totality, then 'the transcendence of the totality thematized in truth is produced as a division of the totality into parts'.⁴⁰ These parts become images, which are both sensible and present in the immediate, but are unable to reflect the whole of truth in their incomplete state, and thus Levinas states that this 'is intentionally turned into a search for a more complete presence'.⁴¹ Thus, truth is always future; its completion lies in a constant and infinite state of deferral.

³⁹ Levinas, *Otherwise*, 29. (italics in original)

⁴⁰ *Ibid.*, 29.

⁴¹ *Ibid.*, 29.

For Levinas, this demonstrates both the formation of truth and also that of the space in which truth can exist, or more accurately, the beyond-truth. 'Truth' has become thematized as demonstrated in the quote above, and themes exist as the products of rationality which attempt to understand and make intelligible the essence of things which inevitably become neutralized or incompletely signified. Thus, we shall see how technological art is in a unique position to reveal and reflect truth which preserves its discontinuity and fragmentation as it mediates alterity.

The Truth of Technology

There exists a fundamental problem of representing otherness and this is a central question which is embodied and worked out through art. Additionally, this same question of representing otherness is played out technologically, and our very dilemma with alterity can cause us to either tend toward totality and overlook alterity or to favour infinity and lose the concreteness of the relation altogether. Perhaps the first point of clarification must exist linguistically, as this is our first point of mediation with technology. Thus far, 'technology' has largely been discussed in terms of 'Technology', or as a somewhat ambiguous metaphysical generality. While this has been useful to a point, as it has facilitated a discussion of what technology can mean in all of its manifestations, it also creates at least two difficulties which must be surmounted if further investigation is to occur into its fundamental nature. 'Technology' has served as a linguistic marker for a specific type of mediated experience or relation. But the first difficulty lies in the fact that technology is always already embedded, both in our daily praxis and within our culture; it is a metaphysical construct to discuss 'Technology' as from an objective standpoint, whether that be as something we control or something which controls us. But the second difficulty lies in overly stressing the materiality or instrumentality of technology, as this hides the way in which the technology disappears within use and transforms us.

Don Ihde offers a useful navigation through the various streams of technology/Technology, of which he describes three routes, which provide points of reference rather than absolutes, and which all coexist with each other in unique relations on various levels. Before differentiating between the three levels, however, he broadly situates technology. As technology is both culturally and historically

embedded throughout every civilization on some level, one could say that ‘material culture’ represents ‘technology in the very broadest sense’. To further delineate the field, Ihde uses the term ‘technics’ to denote ‘human action employing artifacts to attain some result within the environment’.⁴² In this way, he avoids some common pitfalls. This sense of technology retains its materiality, which is important for Ihde, who states that ‘the concreteness of such ‘hardware’ in the broadest sense connects with the equal concreteness of our bodily existence’.⁴³

His approach does not remain centred on the artifactual level, however; he adopts a phenomenological approach which centres on a relativistic account of a range of human-technology relations. He delineates three advantages to this approach. Firstly, technology won’t be ‘reified’ into ‘Technology’, or absorbed into a specific practice or technique that is so general that it fails to account for the rich diversity of particular instances of human-technology relations. Secondly, his approach negates the potential to view technology as neutral, which invariably arises from non-relativistic accounts. Thirdly, he retains a sense of action as is implied in both our being and our human praxis. Taken together, these three dimensions help temper what potentially exists as Heidegger’s ‘overly metaphysical claims’ and place us squarely in the realm of a relation without undue focus on either the human side or that of the artefact.⁴⁴

The three relations are discussed not as discrete instances but rather as points on a continuum of ‘human-technology-world relations’.⁴⁵ They configure in varying ways as points with shifting ratios between material objectness and transparency. First, he discusses the ‘embodiment relation’, which he defines as taking technologies ‘into my experiencing in a particular way by way of perceiving *through* such technologies and through the reflexive transformation of my perceptual and body sense’.⁴⁶ In this relation, the technology is ‘actually between the seer and the seen, in a *position of mediation*’.⁴⁷ This is exemplified in Heidegger’s early example in *Being and Time* of the hammer as equipment, which disappears into absorption during use during ‘concernful

⁴² Don Ihde, *Technology and the Lifeworld: From Garden to Earth* (Bloomington: Indiana University Press, 1990), 12.

⁴³ *Ibid.*, 26.

⁴⁴ *Ibid.*, 26.

⁴⁵ *Ibid.*, 107.

⁴⁶ *Ibid.*, 72. (italics in original)

⁴⁷ *Ibid.*, 73. (italics in original)

dealings',⁴⁸ which Heidegger says 'has its own kind of sight'⁴⁹ and thus serves the function of discovery. We do not experience the hammer as an object during its use; rather, we experience the world through the hammer in a new way with our extended capabilities ensuing there from. The hammer does not return to its object status until it somehow malfunctions, or exhibits a damaged user-interface. This negative self-revealing enables the discussion of embodiment, or absorption, but conceals the second level of relations.

The second relation is the hermeneutic relation, during which the first point of contact is the technology, as perception is directed toward the instrumentation.⁵⁰ As Ihde explains, 'A hermeneutic relation mimics sensory perception insofar as it is also a kind of seeing as___; but it is a referential seeing, which has as its immediate perceptual focus seeing ... [instrument]'.⁵¹ An example of this occurs through writing, as the text becomes 'an embodied hermeneutic technic';⁵² the writing instrument disappears in use and becomes akin to a bodily extension (embodiment relation) and the world of text is perceived through the text (hermeneutic relation).

The third relation of alterity is any relation '*to or with a technology*'⁵³ and can be located at various points within both the embodiment and the hermeneutic relations. Ihde makes the point that technology can never be wholly other by definition as he states, 'Were the technofact to be genuinely an other, it would both be and not be a technology. But even as a quasi-other, the technology falls short of such totalization. It retains its unique role in the human-technology continuum of relations as the medium of transformation, but as a recognizable medium'.⁵⁴ As we have seen, Heidegger tends toward the totalization of technology negatively. Additionally, the alterity relation itself is cast in a negative light, as the hammer becomes useless as an 'other' which is not embodied. Thus, although alterity does not exist as a complete 'other' within technology, its quasi-otherness is sufficient to make it a 'medium of transformation'. It is this point of relative alterity, as it potentially incorporates embodiment and

⁴⁸ Heidegger, *Being and Time*, 70.

⁴⁹ *Ibid.*, 69.

⁵⁰ Ihde, *Technology*, 87.

⁵¹ *Ibid.*, 85.

⁵² *Ibid.*, 84.

⁵³ *Ibid.*, 97. (italics in original)

⁵⁴ *Ibid.*, 106.

hermeneutic relations, and the ensuing transformative relationship which we shall consider in more depth.

Desire and the Technological (quasi-) Other

As Levinas has demonstrated in the face to face encounter with the Other, exteriority and its resulting separation ignites a desire for the infinite which is revealed from outside of Being and placed with Being. The exteriority of technology similarly produces or reactivates the infinity process within us, and this desire exists in the space between embodiment and alterity. Ihde articulates the existence of a desire with regard to technology which is both double and contradictory, as we wish for 'total transparency' or 'total embodiment' in which the technology truly 'becomes me'.⁵⁵ The other side of this desire is to have the transformative effects which the technology enables, but to have my 'naked capacities' seamlessly enhanced without being encumbered by technological instrumentation.⁵⁶ Ihde points out that '(w)ere this possible, it would be equivalent to there being no technology, for total transparency would *be* my body and senses; I desire the face-to-face that I would experience without the technology'.⁵⁷

In other words, we want access to the worlds and abilities which technology enables, but without the technology while simultaneously remaining unchanged as an individual. Significantly, Ihde states that we 'desire the face-to-face' of the non-technological encounter. This, I suggest, indicates that which is truly at stake in these relations, either technological or otherwise; we desire unmediated experience of the Other while remaining wholly individual. While the non-technological encounter is still mediated through language, the originary one which occurs in Levinas's face to face encounter is unmediated. In fact, it comprises the genesis of signification and representation which results from the pure difference.

While this double/contradictory desire is ultimately 'illusory' due to the impossibility of its fulfilment, it nonetheless carries a danger as the desire shapes our pursuits.⁵⁸ The

⁵⁵ Ihde, *Technology*, 75.

⁵⁶ *Ibid.*, 75.

⁵⁷ *Ibid.*, 75.

⁵⁸ *Ibid.*, 75.

danger occurs within the embodiment portion of the desire. As Ihde explains, 'Embodiment relations simultaneously magnify and amplify and reduce or place aside what is experienced through them'.⁵⁹ For example, a telescope magnifies the image of the moon but obscures its size and position in the sky.⁶⁰ This would not be problematic were it not for the tendency to forget that which is reduced in favour of the comparatively exciting magnification.⁶¹ Ihde cites phenomenological theory which 'claims that for every change in what is seen (the object correlate), there is a noticeable change in how (the experiential correlate) the thing is seen'.⁶² This highlights the perils of mediation; technology may enhance our existential relation with the world at the expense of our relation with Being if the transformative effects are not properly oriented.

The magnification and reduction ratio can be seen as we move between philosophical categories. Questions similar in nature are disseminated into different philosophical structures which determine order and levels of importance. In this process, it becomes the very difference that exists between the questions and that to which they refer that enables the meaning to arise. A natural order arises which suggests both a radical break with the previous thought's trajectory and also, simultaneously and perhaps inevitably, being re-subsumed under the very category from which it seeks freedom. As Levinas moves from phenomenology to ontology to ethics, we see a literal demonstration of his statement that 'ethics is an optics';⁶³ the ultimate question of what can be termed as wholly other provides a lens through which Being itself is viewed. Like technological embodiment, the Being of being is impossible to isolate, as Being is itself embodied. Thus, the mediating lens through which we operate must be acknowledged in order to reveal that which is reduced during the conceptual magnification. We seek to understand the Other in order to understand Being.

With or without technological aid, alterity by definition remains as such, as does the desire to penetrate it. Thus, while we can't fully know or assimilate the Other, we engage in modelling which represents the alterity we seek to understand. In Levinas's

⁵⁹ Ihde, *Technology*, 76.

⁶⁰ *Ibid.*, 76.

⁶¹ *Ibid.*, 78.

⁶² *Ibid.*, 79.

⁶³ Emmanuel Levinas, *Difficult Freedom: Essays on Judaism*, Sean Hand (trans.), (Baltimore: Johns Hopkins University Press, 1990), 275.

terminology, this would fall within the realm of interiority; it is instigated through our absolute separation which yields the interior thought which is interminably separate and without end or integration. Eno acknowledges this phenomenon and specifically links it to culture:

This kind of playing with other worlds, this ability to move from the world in my head to the possible world in your head, and all the other millions of possible worlds that we can imagine, is something that humans do with such fluency, and such ease, that we don't notice ourselves doing it...My argument is that what the constant engagement in culture does for us, is that it enables us to continually rehearse this ability we have--the use of this big part of our brain that is involved in postulating, imagining, exploring, extrapolating other worlds, either individually or cooperatively.⁶⁴

While he doesn't specifically link the modelling of other minds with generative music, he does conflate artistic practices and culture. Ihde reminds us that 'human activity from immemorial time and across the diversity of cultures has always been technologically embedded'.⁶⁵ Thus, specific artistic expressions within the wider context of culture which employ technology are perhaps comparatively modern manifestations of the 'worlding' of the 'other'.

The rehearsal of alterity perception initially occurs internally through interiority. The need arises, however, to measure the accuracy of these mental models against the Other, and this necessarily involves mediation. As Ihde explains, 'To make measure is to interpret. Humans are self-interpreters, but not necessarily in terms of a self-enclosed self reference. They more often take their measurements in relation to other realms of being'.⁶⁶ While the models can never be accurate as such, they can evolve and transform if they have standards of comparison. One way to enhance accuracy is to employ 'other realms of being' as a touchstone. As Eno rightly stated, culture is the arena in which this occurs, and through specifically, but not exclusively, artistic practices. These artistic practices gain a new level of accuracy when they can be embodied and projected hermeneutically; the world of the Other can be read through this artistic, technological mediation as it is overlaid with the world of the self.

⁶⁴ John Brockman, 'A Big Theory of Culture: A Talk With Brian Eno', *Edge*, 1997, <http://www.edge.org/conversation/a-big-theory-of-culture>(24 August, 2013).

⁶⁵ Ihde, *Technology*, 20.

⁶⁶ *Ibid.*, 14.

However, as previously noted with regard to embodiment practices, this transformational experience comes at a price. Ihde reminds us that '*for every revealing transformation there is a simultaneously concealing transformation of the world, which is given through a technological mediation. Technologies transform experience, however subtly, and that is one root of their non-neutrality*'.⁶⁷ I maintain that the generative innovation lies in the positivity of its non-neutrality; we aren't magnifying elements of the other's world at the expense of those of our own; we are being summoned to magnify our own world as Other. This summoning which is generated creatively is only possible through alterity relations. The quasi-other status of technology enables a situation to arise in which our imagination becomes embodied. As in Levinas's face to face encounter, we are called to selfhood. The innovation here lies in the mediation; the technological summoning is both repeated and repetitive. We are called continually to the realization, during our engagement with embodied imagination, that it is not only the mental models which are refined during this process. Our own resulting transformation is revealed as our ultimate inability to remain the same is illuminated.

This summoning, as a recreation of representation of that which occurs during the face to face encounter, is similarly a questioning. By questioning the Other we question ourselves as we move through endless configurations of totality and infinity, known and unknown, imagined and unknowable. This questioning is a transformative process, and one which Heidegger considered to be the 'piety of thought',⁶⁸ for questioning is thinking on a path which retains a receptive orientation. The question for Heidegger which initiates all thought is that of Being, or more properly Being as question. As we attempt to think the essence of Being, it withdraws. Thus, thought which is properly oriented for Heidegger is a questioning which is engaged in turning away from ourselves toward the essence of Being, or attempting to radically think the difference between Being and being. The turning away from ourselves toward the essence of being is perhaps the same moment explicated by Levinas during the welcome of the

⁶⁷ Ihde, *Technology*, 49. (italics in original)

⁶⁸ Martin Heidegger, *The Question Concerning Technology*, William Lovitt (trans.), (London: Harper and Row, 1997), 35.

face. As questioning gives way to a listening in to being for Heidegger, it similarly gives way to a listening to the Other and for the Other.

This listening suggests a fundamental, radical passivity which exists both in Heidegger's *Gelassenheit* as well as Levinas's summoning. It is the passivity which enables us to distinguish our own dissemination into being as distinct from Being as a whole. While the original summoning occurs as a result of the pure presence of the Other, and is thus unmediated, listening both precedes and follows from signification. During a technologically mediated summoning, a similar trace of radical passivity exists in the process as questioning itself is externalized and embodied in the generative process. Ihde describes the technological application of mathematics:

The visualization of topographies of such mathematical phenomena as fractals, chaos, and other random processes has just begun to show unsuspected phenomena. By turning number patterns into the gestalt instantaneity of perception, the patterning begins to suggest lines of overlap, application and development not previously suspected. Here, a basically hermeneutic process returns its results to perception.⁶⁹

While this process is described from the visual standpoint, it applies equally to the aural perspective. Thus, what we are listening to generatively is relative 'chaos' which is patterned, or questioned, and fed back to us perceptually. This is technologized infinity, which performs the inverse process to enframing; it generates 'chaos' or, more accurately, things which are as yet 'undetermined' to us. It is taking our command and randomizing the result, thus making the I arbitrary. Generativity, I suggest, is our representation of alterity to ourselves—there is a moment within it which exists as separation, cognitively, that both mimics our situation as and within Being and ignites our desire to enter into a more free relationship with infinity (and thus the Other).

While Heidegger views alterity negatively with regard to instrumentation and embodiment, he does acknowledge the positive possibility of a saving power within technology which can save us from the totalizing power of enframing. Interestingly, Heidegger never states what this power is; rather, he demonstrates it through his essay 'The Question Concerning Technology'. The saving power, which is disseminated

⁶⁹ Ihde, *Technology*, 185.

through the structure of the essay, demonstrates a subtle shift in perspective which reorients the reader toward the *poiesis* latent within the Greek *techne*. This is brought about through questioning, as he demonstrates, which directs the reader toward his ultimate goal of thinking, which is to think the Being of being. Levinas covers similar ground conceptually as he attempts to think the 'otherwise than being'. Either way, that which is sought is a perspective from which Being can be glimpsed which is ultimately impossible.

This reiterates the absolute arbitrariness of the I, which grants a certain freedom to our representations of the mind of the Other; accuracy in a calculative sense is unnecessary not only due to its impossibility, but also because of its very erroneousness. The Other, as absolute alterity, can only ever elicit responses which inherently speak to the Same. The challenge undergoes a subtle transformation as it shifts from questioning alterity to celebrating contingency. As generative music 'worlds' worlds and summons us toward the unknown, I propose that we are externalizing this existential process to technology and re-presenting it to ourselves. Generative music, as naturally inquisitive, provides the constancy of surprise and predictability of wonder which we desire. Truth is re-presented for the first time, and our freedom is heard as a promise.

Conclusion: Being Generative, Becoming Music

A New Beginning

Generative music is inherently about music coming into being. It is music coming forth, unfolding, becoming present, and as such, it is not an entity which can be dissected, defined, and delineated. It is a process: it contains an origin (necessarily technological in nature) from out of which it unfolds and builds, possibly without end. Thus, in its infinite iterations it reveals and manifests itself. In this way, it is inherently experiential and temporal; that is, in order to understand its essence, we must engage with it as it unfolds in time. We accomplish this through listening. Listening, therefore, is the point at which music is embodied. It is the process of sonic embodiment, whereby it comes into being and to being, and thus serves as a juncture at which we can actually hear the generative process. Once we are engaged in this process, a path will be made toward a new listening, a listening in to being itself, which is a process Heidegger claims is lost in the modern technological age.

The problem which subsequently arises in aesthetic discourse, which is perhaps one particular example of a general issue within language itself, is that it speaks categorically rather than specifically, and thus departs from the realm of embedded practice, or praxis. It speaks of the work of art, rather than of the work which art performs in us, within our being. Thus, in order to reach the origin of generative music, the typical hierarchical approach whereby music is defined in an objective sense must be abandoned in favour of one in which it is allowed to unfold or spread out into the open of its own accord, thus creating a path. This is what Heidegger would describe as 'coming into a 'free relationship'¹ with it. He states, 'This relationship will be free if it opens our human existence to the essence of technology. When we can respond to this essence, we shall be able to experience the technological within its own bounds'.² This free relationship opens our existence which enables a response. Significantly, the order in which this process occurs is crucial; our existence is opened first, and the response proceeds from this. In this way, we attempt to evade the trap of subjectivity

¹ Martin Heidegger, *The Question Concerning Technology*, William Lovitt (trans.), (New York: Harper and Row, 1977), 3.

² *Ibid.*, 3-4.

in which the entity in question is reduced to some form of presence, which then becomes measurable, orderable, and, by extension, lacking a space for wonder and mystery to reside. Our existence is open, not our subjectivity. The shift is a subtle one, but one of the utmost importance. While it is difficult to define, it can be characterised as a shift from defining to one of questioning, or from decisiveness to inquisitiveness.

Similarly, Eno discusses, and indeed embodies, this shift, as he discusses it as one 'from 'architect' to gardener', where 'architect' stands for 'someone who carries a full picture of the work before it is made', to 'gardener' standing for 'someone who plants seeds and waits to see exactly what will come up'.³ This is Eno's exposition of Heidegger's *techne* (architect) and *poiesis* (gardener), a relationship which he plays out musically just as Heidegger does textually. Thus, as we travel on this path toward generative music, or toward the origin of generative music, or toward generative music as origin (genesis), we return to nature, as in Eno's metaphor. We encounter this movement or growth as it is embodied within these 'plant seeds', and the meaning grows through our relationship with its genesis process. Conversely, we do not encounter architectural constructs which already present a completed structure through which to move.

These seeds, for our purpose, will necessarily be linguistic, as language mediates our being. Heidegger adopts and demonstrates this approach in his etymological explorations. He does not seek to idealize or idolize the ancient Greeks, as some have contended. Rather, he understands and seeks to demonstrate the fact that language is always embedded, and as such, it carries traces of meanings and usages which over time become obscured or forgotten. These meanings reflect specific experiences of the world from another time and place, and thus carry the latent power to speak to our present being. They can strike our ears in a new way, and thus enable or elicit a new listening. So in presenting words and exploring their origins and subsequent paths through time and embodied experience, we enter into the Open in which language informs, structures, and expresses being, and is able to do so in new and exciting ways. Language speaks being; however, this relationship is so intimate and close at hand that

³ Brian Eno, 'Composers as Gardeners', *Edge*, (2011), <http://edge.org/conversation/composers-as-gardeners> (24 August, 2013).

we forget or are unable to witness this linguistic genesis which continually unfolds. However, we can perhaps catch a glimpse of it through retracing our steps.

To Undergo an Experience

In this way, the path toward the origin of generative music might begin with an examination of the ways in which it is defined. While we do not seek to define for the sake of ‘constructing a concept...just to be in possession of this concept’,⁴ an examination of these conceptual constructs can provide the possibility of ‘undergoing an experience with language’,⁵ which Heidegger describes:

To undergo an experience with something—be it a thing, a person, or a god—means that this something befalls us, strikes us, comes over us, overwhelms and transforms us. When we talk of ‘undergoing’ an experience, we mean specifically that the experience is not of our own making; to undergo here means that we endure it, suffer it, receive it as it strikes us and submit to it. It is this something itself that comes about, comes to pass, happens.⁶

In other words, there exists a fundamental, radical passivity in experience; language speaks us, and we are subsequently revealed in this transformational process. Language carries the ability to ‘touch the innermost nexus of our existence’,⁷ which is perhaps another way of saying that our being resonates in and through language. The challenge becomes that of ridding ourselves of the habit of hearing ‘only what we already understand’,⁸ and hearing the process itself. This is the heart of generative listening; we listen to being as it unfolds.

Music

A linguistic exploration of generative music must first perhaps address that which is meant by ‘music’. Music as a concept is certainly not exempt from, and instead demonstrates, the alterations which language both undergoes and exerts. Thus, the history of music as conceptual construct demonstrates radical alterations and

⁴ Martin Heidegger, *Country Path Conversations*, Bret W. Davis (trans.), (Bloomington: Indiana University Press, 2010), 40.

⁵ Martin Heidegger, *On the Way To Language*, Peter D. Hertz (trans.), (San Francisco: Harper and Row, 1982), 57.

⁶ *Ibid.*, 57.

⁷ *Ibid.*, 57.

⁸ *Ibid.*, 58.

revelations in the perceptions and receptions of music, but contains unifying elements. Most definitions involve some configuration of the three key elements of the process: the composer, the sounds, and the listener, and vary in their specifics according to social and cultural conceptions of the ensuing organization and subjective reception. For our purpose, computer music composer Eduardo Miranda's definition is both concise and all-encompassing: 'music is sounds organised in space and time'.⁹ Significantly, if one substituted 'Dasein' for 'music' and 'being' for sounds', we would effectively represent a shorthand or summary of Heidegger's ontological project as articulated in *Being and Time*. I suggest that the validity of this substitutive formulation is indicative of the relationship between music and being which, in its specific embodiment and practice, suggests a manner of listening which exceeds and overflows subjective constructions.

Generative Art

While 'music', both as defined above and in practice, is necessarily a broad space within which to move, so too is 'generative'. It typically references art, with music existing as a subset within generative art. Perhaps the most concise explication is that set forth by Philip Galanter, who states, 'Generative Art refers to any art practice where the artist uses a system, such as a set of natural language rules, a computer program, a machine, or other procedural invention, which is then set into motion with some degree of autonomy to or resulting in a complex work of art'.¹⁰ This definition is significant for several reasons, the first of which is that it denotes a *practice*, which serves to dislodge notions of systems-based works as the abandonment of any creative intervention. Focusing on a practice also serves to ground the process within experience and proceed from it as origin, rather than occupying an abstract conceptual space which tries to map itself onto reality. Another key element is the autonomous (or semi-autonomous) motion which follows from the systemic or procedural inventions. This motion *is* genesis in the Greek sense, which will be discussed further. Finally, generative art is a practice which results in a complex work of art; the relative simplicity of the input is not reflected in the resulting complexity of the output.

⁹ Eduardo Miranda, *Composing Music With Computers* (Burlington: Elsevier, 2001), 1.

¹⁰ Philip Galanter, 'What is Generative Art? Complexity Theory as a Context for Art Theory', (2002), http://www.philipgalanter.com/downloads/ga2003_paper.pdf (24 August, 2013).

Additionally, the materiality of the practice is less of a focal point in the sense of an end product; the results are continually in motion, and this generates complexity on a fundamental level, in addition to other complex sonic configurations which may be present in the work.

Art

Galanter's definition, while concise, presupposes a conception of 'art'. A concise definition which is congruous with that of music and generative music above is that of McCormack and Dorin, who state, 'Fundamentally, art is understood as *experience in context*'.¹¹ This perhaps brings us full circle, as this discussion seeks to explore a specific experience (embodied practice), in a specific context (space and time) and configuration (organized sound) which is, and embodies, motion which is to some degree self-perpetuating or generating.

Despite the extremely broad field opened by the definitions above, not all music which is termed as 'generative' will be under discussion here. As the experience under exploration here is embedded in a practice which is both creative and receptive, some instances will inevitably be excluded, as we seek to explore a specific configuration of creativity and receptivity, or creative reception. Therefore, as practice is bound temporally and spatially to a context, we will seek not to define the practice or its results, but rather to create a conceptual space in which the appropriate elements can unfold, interact and resonate.

The challenge thus becomes how to create a system textually which will elicit experiential resonance with the elements in question while not being overly constraining; the creative balance between specificity and ambiguity must allow for both freedom and distinction simultaneously. In this way, this discussion will serve as a textual analogue for generative music, as each conceptual step will serve to both ground and limit the present space while opening spaces for subsequent possibilities. In keeping with the bottom-up approach, the specific experience of creative reception will serve as a foundation from which to abstract the elements which are present

¹¹ John McCormack and Alan Dorin, 'Art, Emergence, and the Computational Sublime', (2001), <http://www.csse.monash.edu.au/~jonmc/research/Papers/art-2it.pdf> (24 August, 2013). (italics in original)

therein. The experience will find a textual expression through the resonance of its constituent elements rather than being linguistically compelled to appear in an imposed manner. The path is the process, and as we have seen in generative art, the process is essential.

Algorithm

We thus seek to abstract and formalize elements from a specific experience in order to recreate the conditions necessary for that experience to arise again. This is analogous to algorithmic composition, which is ‘composing by means of formalizable methods’.¹² While algorithmic composition is generally associated with computer composition, the formalizable methods, as embodied in the algorithms, are conceptual, and thus may or may not find technological application. As such, ‘algorithmic thinking processes’¹³ have been musically employed for centuries. An algorithm can be described as ‘any well-defined computational procedure that takes some value, or set of values, as input and produces some value, or set of values, as output. An algorithm is thus a sequence of computational steps that transform the input into output.’¹⁴ While the language seems exclusively computational, the crucial elements are not. At an ontological level, an algorithm is a series of steps which transform. The relationship between the initial element and the final element is one of both continuity and change, or that of becoming.

Thus, the algorithm occupies a unique, if not problematic conceptual space, existing as both a highly specified tool and as an abstraction which can exist independently of implementation.¹⁵ Steve Goodman describes an algorithm as an ‘abstract machine’, which can exist ‘independently of their specific physical embodiments’.¹⁶ The algorithm’s formalization exists with the aim to ‘divorce (formal) expression from (material) content completely’.¹⁷ To remain focused on the abstraction, however,

¹² Gerhard Nierhaus, *Algorithmic Composition: Paradigms of Automated Music Generation* (New York: Springer, 2009), 1.

¹³ *Ibid.*, 63.

¹⁴ Thomas H. Cormen, *Introduction to Algorithms* (Cambridge: MIT Press, 2001), 5.

¹⁵ Andrew Goffey, ‘Algorithm’, in Matthew Fuller (ed.), *Software Studies* (Cambridge: MIT Press, 2008), 15-20 (15).

¹⁶ Steve Goodman, ‘Sonic Algorithm’, in Matthew Fuller (ed.), *Software Studies* (Cambridge: MIT Press, 2008), 229-235 (229).

¹⁷ Goffey, ‘Algorithm’, 17.

would be to overlook the fact that ‘algorithms do things’,¹⁸ and this pragmatic link with material action ‘implies a confusion between the mathematics of algorithms and the physics of real processes’.¹⁹ This confusion results from overlooking the dynamic functioning of algorithms in context. As Goffey explains:

[A]lgorithms work as part of a broader set of processes. Algorithms act, but they do so as part of an ill-defined network of actions upon actions, part of a complex of power-knowledge relations, in which unintended consequences, like the side effects of a program’s behaviour, can become critically important’.²⁰

Thus, an algorithm can be conceived as a perceptual pivot point between not only theory and praxis, but also between individual, constituent parts and systemic interactions.²¹ These simultaneously occupied territories suggest a liminality which place algorithms in a powerful position to negotiate conceptually and practically between and within the spaces of various states of being.

Just as the algorithm can operate on a level which is both general and specific, where materiality and abstraction successively interact in increasingly complex formulations, so too is this liminal position similarly occupied by Brian Eno. He exists as a unique intersection between praxis and theory in a specific embodiment. His unique application of avant-garde compositional techniques in a popular music context coupled with his ability to articulate these processes and their significance place him in a unique position to mediate between the realms of philosophy and art as well as popular and avant- garde divides. His presence in these spaces allows for an organic unity to arise and move freely within our thought as it presents a general system of nodal points with which we can interact and explore cognitively. Perhaps most importantly, he exists as an absent presence in his own works by design, as he seeks to divorce identity and ego from his works. He seeks to open a sonic space of possibilities within which listening can unfold. Paradoxically, his works still exhibit an identity which is uniquely Eno’s, despite his deliberate surrender of creative control at crucial points.

¹⁸ Goffey, ‘Algorithm’, 17.

¹⁹ Ibid., 16.

²⁰ Ibid., 19.

²¹ Goodman, ‘Sonic’, 233.

It is this space of possibilities which will be abstracted and discussed—a space in which both mystery and familiarity coexist.

In the Text and Texture

How does one reach this space of possibilities, where materiality and abstraction co-exist and co-mingle? The algorithm is again problematic, as the conception of it as an abstract machine presupposes its arrival into the originary space we seek to inhabit; to think of the algorithm in motion is to already think algorithmically. This issue effectively mirrors the situation in which Heidegger finds himself in thinking the question of being, as to think being is to immediately address ourselves as the question [*Frage*]. As Heidegger explains, ‘We ourselves are in the text and texture of the question...We ourselves are, in the strict sense of the word, put in question by the question’.²² In this way, we, as beings, do not ask questions; we live questions, or rather, our existence is an expression of and destined by questions. These questions are not, therefore, explicit formulations to which we seek answers but instead arise from our fundamental ontological situation and express themselves through our being as they enact successive transformations. In this way, I maintain that the question of the algorithm represents a fundamental pivot point at which we can identify ourselves as embodied questions.

Although we can see our querical ontological reflection in the algorithm’s liminal positioning, this complicates rather than clarifies the issue, as the question exerts a force. It does not exist merely in the ether of thought; instead, it orients and expresses our being at a fundamental level. This means that as we live the question, the question lives us, and thus the question exerts a reciprocal influence on our being. As we live the question, we become the question, and thus our experience is both guided by and transformed by the question. Thus, thinking and questioning are inherently related just as thinking and being are, and when thinking, we ‘undergo an experience’ which is both formative and iterative. Heidegger describes thinking not as a ‘means to gain

²² Martin Heidegger, *Basic Writings*, David Farrell Krell (ed.), (London: Routledge, 2011), 273.

knowledge', but instead as something which 'cuts furrows into the soil of Being'.²³ I propose that these furrows naturally suggest a concrete expression in the algorithm.

The problem for thinking, as Heidegger sees it, comes about when the shift occurred from thinking being to thinking about being, which inserted a space between the questioning and the beings it asked about. It shifted from 'What is being?' to 'What is a being?', which inextricably led to demarcations within the realm of being. This ultimately led metaphysics down the furrowed path toward an all-encompassing subjectivity which instead of attempting to view Being as a whole, as Aristotle's project set forth, fragmented existence into subject-object relationships. As aesthetics receives its source from this same path, it becomes necessary to once again approach being as a whole as the fundamental, guiding orientation of thought. The unity in the work of art must correspond to a unity of and within Being first and foremost. Thus, a new movement must be adopted which springs from the originary question of Being as an embodied action. The question thus becomes, as it operates within us and through us as listeners, what started being on this path of the question? Or as Heidegger articulates it, 'What is it that calls on us to think?'²⁴

The exploration of thinking is inherently self-referential, which presents the difficulty of arriving at an objective view of how to reach the un-thought. Heidegger's conception of this dilemma is encapsulated by the fragment of Parmenides to which he refers, which states, 'Thinking and the thought 'it is' are the same. For without the being in relation to which it is uttered you cannot find thinking'.²⁵ Does this not presuppose an inherent subjectivity in the very act of thought? If thought depends upon and proceeds from being, is it not destined to be infinitely self-referential? This is the crux of the matter for Heidegger in his quest to both think being as a whole and to end the divisive metaphysical tradition: we must think being as a unity. In this way, the unity is expressed in the oneness of the 'I think', rather than the modern conception of the 'I think' creating a false unity, or totality, conceptually or representationally from subjectively demarcated realms of being. It is thus that in the situation of the

²³ Heidegger, *On the Way*, 70.

²⁴ Heidegger, *Basic*, 275.

²⁵ Martin Heidegger, *Early Greek Thinking*, David Farrell Krell and Frank A. Capuzzi (trans.), (San Francisco: Harper and Row, 1975), 5-6.

algorithm, we are not seeking to learn *about* being, but rather *listen in* to being as it unfolds. We seek a transformation from input to output in a series of steps which retains the unity of its being within its becoming: the algorithmic thinking process as a method retains the essential element which binds this unity: movement.

Movement

As with every linguistic construct, 'movement' as a concept has undergone significant alterations over time since Aristotle articulated his notion of *metabolē*. The path of changes between Aristotle and Newton's conceptions of movement demonstrates the emergence of the subject-object split within Western thought. Motion²⁶ in the widest Aristotelian sense is 'the alteration of something into something else',²⁷ which includes as one category the transportation of a body from one location to another. This sense of motion is *kinēsis*, a type of *metabolē*, and finds its basis in the body itself. Movement arises from out of the body, and thus each body has a motion proper to it, as Heidegger summarises: 'Each body has its place *according to its kind*, and it strives toward that place'.²⁸ In other words, a body moves in a certain way according to its embodiment and embeddedness, with being itself serving as the basis or ground for comparison.²⁹

By way of contrast, the Newtonian sense of motion is calculated with respect to space and location, and is conceived as a state into which one enters. It is thus perpetual and presupposed. All types of being can enter into motion, and this conception disregards being as such; the circular motions of the planets and the linear movements of earthly bodies no longer constitute two types being and thus two types of motion. Their unique respective properties are subsumed under the law of motion. As Heidegger paraphrases Newton: 'Every body left to itself moves uniformly in a straight line'.³⁰ Motion goes from being a unique property arising within beings to something which levels the differences among beings: beings don't move in unique ways according to their individual essences and placements. Instead, beings enter into a unified state

²⁶ Heidegger conflates 'change' and 'motion' in his translation; Aristotle seems to suggest both concepts in *metabole*.

²⁷ Heidegger, *Basic*, 196.

²⁸ *Ibid.*, 196.

²⁹ *Ibid.*, 197.

³⁰ *Ibid.*, 198.

which is governed by a law. For Heidegger, the issue is not the validity or utility of the techno-scientific formulation; rather, it is the replacement of one type of thinking with another. As modern Westerners, we find it difficult or even simplistic to attempt to view being as a whole, and thus to conceive of motion as something which arises from within being. Motion, for us, is a state entered into, during which each of us becomes subsumed under Newton's 'every body'. Motion has become disembodied.

As the algorithm, as a series of transformational steps, carries within itself an implicit motion, its position between abstraction and materiality finds the Newtonian laws of motion lacking in explanatory power. Thus, as the input is transformed into output, we find a particular resonance with Aristotle's sense of *metabolē*, as the altering of something into something else. While the algorithm must be executed in relation to a pre-existing data structure, the distinction between the two is a formal one.³¹ In the process of computational application, the two are inseparable. The algorithm carries an impetus toward transformative motion which exists within its structure but which is set in motion through being 'fed' into a computer. The motion arises from the interaction or implementation, but comes about as the unity of form and material. Change is generated. This is the opposite process of formalization of languages, as Goffey explains, 'formalization comes afterwards with natural languages, with algorithms, formalization comes first, the express aim being to divorce (formal) expression from (material) content completely.'³² In this way, the applied algorithm embodies a specific transformative motion in an abstracted way. Aristotle would find this strangely familiar.

Genesis

Just as the algorithm embodies change or movement in an initially abstract way, so too does being. The human being does not merely move around from one location to another. It also embodies a more fundamental movement in its coming to be, or *genesis*. As a movement from non-being into being, genesis occupies a unique position on the cusp of materiality and abstraction, presence and absence. As Aristotle states in *Physics*, 'Change from not-being-there to being-there, the relationship being that of

³¹ Andrew Goffey, 'Algorithm', 18.

³² *Ibid.*, 17.

contradiction, is *genesis*'.³³ Thus, at the heart of genesis is contradiction,³⁴ and genesis holds together and embodies this contradiction. In this sense, genesis is not a movement as such, but rather is a way of movement. Genesis manifests itself as a continual transformation during which becoming as a process is rendered as presence. As Brogan summarizes, 'In *genesis*, a being sustains itself in its being *as long as it is*. The becoming is not such that it comes to be only when it reaches its end. In its coming to be, it already is'.³⁵ Genesis is ontological movement, a way which unifies being and becoming.³⁶

As a unifying movement, genesis not only brings beings to presence, but also becomes manifest itself within and as the presencing process. This presents the difficulty of which Heidegger speaks in forgetting the being of Being; we are so close to the process as beings and it is so self-evident that we begin to overlook it completely. Aristotle addresses this quandary, stating the 'ridiculousness' of proving something which 'appears of and by itself' and which manifests 'everywhere among beings'.³⁷ He admits the possibility that someone would be unable to make the distinction between that which is 'familiar to all knowledge' and that which is not.³⁸ By way of comparison, he explains that '[s]omeone born blind might try through a sequence of reflections, to acquire some knowledge about colors. Of necessity in this case, such people arrive at an assertion about the nominal meanings of the words for colors, but by these means they never perceive the least thing about colors themselves'.³⁹ This comparison encapsulates the sense of that which is occurring for Heidegger in modern techno-scientific thought which finds its origin in enframing; the danger exists in a way of seeing, or rather in a way of not seeing that which one is already viewing. The sense of unity which appears antecedently dissipates through enframing, and thus Heidegger laments that 'what already stands in view is seen with the greatest difficulty, is grasped very seldomly, is almost always falsified into a mere addendum, and for these reasons

³³ Walter Brogan, *Heidegger and Aristotle: The Twofoldness of Being* (Albany: State University of New York Press, 2005), 104.

³⁴ *Ibid.*, 104.

³⁵ *Ibid.*, 105. (*italics in original*)

³⁶ *Ibid.*, 106.

³⁷ Martin Heidegger, *Pathmarks*, William McNeill (ed.) and Thomas Sheehan (trans.), (Cambridge: Cambridge University Press, 1998), 196.

³⁸ *Ibid.*, 196.

³⁹ *Ibid.*, 196.

simply overlooked'.⁴⁰ Genesis, therefore, inherently makes itself known while simultaneously withdrawing from sight.

Physis

It is thus that being is made manifest through genesis; it is a way of movement that is proper to a natural being which has the capacity to 'arise...from out of itself'.⁴¹ Genesis is therefore the essence of *physis*,⁴² which is the cause, or originary ordering, of natural beings. *Physis* is described by Aristotle as 'a lying-forth from out of itself',⁴³ and constituted for the Greeks their notion of nature. This has undergone radical alterations, as nature now indicates a separate realm of being which is calculated and controlled by man. Nature and being were originally one, as Heidegger explains:

In the age of the first and definitive unfolding of Western philosophy among the Greeks, when questioning about beings as such and as a whole received its true inception, beings were called *physis*. This fundamental Greek word for beings is usually translated 'nature'. We use the Latin translation *natura* which really means 'to be born', 'birth'. But with this Latin translation, the originary content of the Greek word *physis* is already thrust aside, the authentic philosophical naming force of the Greek word is destroyed... Now, what does the word *physis* say? It says what emerges from itself (for example, the emergence, the blossoming, of a rose), the unfolding that opens itself up, the coming-into-appearance in such unfolding and holding itself and persisting in appearance--in short, the emerging-abiding sway... *phuein* [the noun form of *physis*] means to grow, to make grow.⁴⁴

As the 'emerging-abiding sway', *physis* exerts a twofold movement. It is the coming into appearance (emerging) and thus the appearance itself (abiding sway) of beings;⁴⁵ it is both an emerging forth and an enduring.⁴⁶ 'Sway' indicates the essence of the movement, the genesis which moves between two contradictory states and unites them. Thus, *physis* names the being of beings which is the crux of Heidegger's

⁴⁰ Heidegger, *Pathmarks*, 196.

⁴¹ Heidegger, *Basic*, 221.

⁴² Due to a lack of one standard transliteration, both *physis* and *phusis* appear in translations of Heidegger's texts. Thus, both spellings will be used interchangeably.

⁴³ Brogan, *Heidegger*, 49.

⁴⁴ Martin Heidegger, *Introduction to Metaphysics*, Gregory Fried and Richard Polt (trans.), (New Haven: Yale University Press, 2000), 14-15.

⁴⁵ Brogan, *Heidegger*, 46.

⁴⁶ *Ibid.*, 34.

ontological project. It is in the forgetting of the togetherness of the twofold movement that the presence of being overtakes the coming into presence of being within thought. As Brogan explains, 'The originary questioning of *phusis* inserts itself at the place of the difference between being and beings and thus sees how the unity of a being in its being occurs'.⁴⁷ It is important to note that unity for Aristotle does not suggest a reduction to a single, common element. Rather, it is a belonging together. This belonging or self-sameness is not a static element, but instead 'originates from a oneness that constantly gathers the many ways of being into a unity and a whole'.⁴⁸ We see this gathering process unfold in genesis, which is the essence of *phusis*, and thus the essence of being.

Genesis, as emergence, is a crucial concept as it both manifests and traces the path for modern thinking back to a remembering or essential thinking of the being of Being. It can elicit this new way of 'seeing' in its sway between presencing and presence, thus allowing a shift in perspective to unfold. It is thus that as the question arises within the sway, we are able to enter into it. This is what it means to be in the text (presence) and texture (presencing) of the question; we enter into an encounter or event of presence with Being through engaging with genesis.

From Genesis to Generative

Generative music, I argue, exists as a technological manifestation of genesis; having its roots in genesis, it unfolds along path in such a manner that it occupies a liminal space between *techne* and *phusis*, between Eno's architect and gardener. As algorithmic thinking, irrespective of technological application, is the *dunamis* (potentiality or force) of generative music, we are able to listen in to this type of thinking as it is embodied in generative music. In this way, I suggest that generative music enables a unique opportunity to rethink an encounter with the twofoldness of Being. As this generative encounter is embedded simultaneously in the work of art and technology, its essence manifests a twofoldness which mirrors that within the being of Being.

⁴⁷ Brogan, *Heidegger*, 82.

⁴⁸ *Ibid.*, 37.

This generative position perhaps provides a path toward disentangling the inherent paradox in Heidegger's thinking which ultimately exists between history and nature, knowledge and praxis. Through Heidegger's illumination of everyday, engaged activity which enables an originary encounter with being and thus truth, we are always already immersed in technique. Arguably, technique reduces meaning to function, but this fundamentally reductive dichotomy itself exists only in the retrospective sense. Indeed, the pinnacle of the paradox of Heidegger's technological critique is similarly retrospective, as Feenberg explains, 'Only in the age of technology is it possible to adopt a synoptic view of the history of being such as Heidegger's'.⁴⁹ That is to say that only via technological means are we able to both view being and separate being as such from cultural and practical embeddedness; that which enables the way of seeing is paradoxically problematized as a reductive form of vision which tends toward exclusion. Heidegger has seen the history of being unfold technologically. Does this not naturally suggest that the return to thinking the being of Being will unfold from a similarly technological perspective?

A Listening Nexus

Technology is reductive not in its materiality, but rather as a way of revealing which has its roots in *telos*: that which is brought forth is 'gathered together in advance...with a view to the finished thing envisaged as completed'.⁵⁰ There exists a fundamental closing off of possibilities which might unfold from out of itself in the sense of *phusis*. The issue thus becomes the freedom of the generative motion. As *techne* is first a way of knowing, an *epistēme*, *techne* thus manifests itself in thought, and man becomes 'destined' down a path shaped from the resulting possibility spaces created. We undergo an experience with *techne*, which is inherently predetermining. Within the predetermination exists the danger, as the presencing process is reified into presence. Significantly, Heidegger envisages the shift from the thinking along a predetermined path to that of one which proceeds from the natural unity of being as a shift involving not sight, but sound. He locates the nexus of freedom in the relationship of destining and listening, as he states: 'For man becomes truly free only insofar as he belongs to

⁴⁹ Andrew Feenberg, *Between Reason and Experience: Essays in Technology and Modernity* (Cambridge: MIT Press, 2010), 12.

⁵⁰ Heidegger, *Basic*, 223.

the realm of destining and so becomes one who listens, though not one who simply obeys'.⁵¹ In this way, I maintain that listening exists as a natural site or point of relations between passivity and action, freedom and determination, creation and reception.

Passivity and Action

In this rich nexus of relations which constitutes listening, a difficulty thus arises in the tension between the level of active engagement and passive embodiment. This tension first manifests temporally. In *Being and Time*, Dasein lives inauthentically in 'everydayness' in an indifferent and habitual existence. But one could claim the same habitual indifference which manifests with regard to the tool's ready-to-hand status; the tool withdraws during use as the world made possible through use of the tool opens up before us. If the tool does not presumably withdraw into everydayness, it certainly demonstrates the notion of distance to which Heidegger refers when discussing thinking and listening in relation to Being. As he states, 'What is ontically closest and most familiar is what is ontologically furthest, unknown and constantly overlooked in its ontological meaning'.⁵² Thus, our level of engagement and embeddedness is the proper condition under which truth can be revealed, and it is also the very condition which most conceals it. This concealment does not take place in our line of vision; rather, it takes place in our thoughts. As such, this relationship of distance develops between thinking and listening, as they are inherently linked: 'to think is before all else to listen'.⁵³ Thinking is first and foremost always already a 'listening into' [*Hineinhören*],⁵⁴ for being itself is what gives us the grant which calls on us to think. But the link becomes one which gets overlooked, and as the source recedes from the horizon, thinking is abstracted from its source of origin. We no longer hear that we are hearing, and thus risk abandoning our creative capacity which is granted us in the reception process.

⁵¹ Heidegger, *Basic*, 230.

⁵² Martin Heidegger, *Being and Time*, trans. John Macquarrie and Edward Robinson (trans.), (Oxford: Blackwell, 2001), 43.

⁵³ Heidegger, *On the Way*, 76.

⁵⁴ Heidegger, *Country Path*, 47.

The seemingly infinite and problematic distance between engagement and embodiment is demonstrated by Heidegger himself with regard to thought, as he states, 'Most thought-provoking in our thought-provoking time is that we are still not thinking'.⁵⁵ The provocation occurs not so much in his assertion, but in the meta-level from which it necessarily proceeds; we are not thinking, and this presumably includes both the author of the text and the reader. So how does thought know that it is not yet thinking? Engagement tells us, as 'we come to know what it means to think when we ourselves are thinking'.⁵⁶ As we encounter limitations, we then become ready to 'learn thinking', at which point we have admitted that 'we are not yet capable of thinking'.⁵⁷ The lack in ability is ascertained from praxis, as once again the negativity of the 'broken tool' speaks louder than the tool which acts as an extension of our hand, or in this instance, the mind. The distance is revealed in the space of limitation, which becomes abstracted from practice as a space of possibilities not yet realized. Thus for Heidegger, the seamless character of embodiment makes for good tool utilization, but is less conducive to authentic temporal engagement and its accompanying awareness.

Freedom and Determination

The space encountered by thought as it attempts to traverse between engagement and embodiment is analogous to the space between thinking and being; it is both infinite and infinitesimal. As thinking is the 'structural relationship between man and Being',⁵⁸ the liminal position of the algorithm is called to mind. In both Being and the algorithm, presence is constituted structurally both by means of and in spite of the abstracted motion of coming to presence. The relationship of the individual being as a specific, material embodiment (presence) is both enabled and navigated by the abstracted motion of coming to presence as Being. Thus, a feedback loop is generated, as '[t]hought, to the extent that it proceeds from man, is in reciprocal relation to thought as it proceeds from Being'.⁵⁹ It is only by way of thought that we can access the Being of being, and this thought is 'called' into motion by Being itself.

⁵⁵ Heidegger, *Basic*, 263.

⁵⁶ *Ibid.*, 261.

⁵⁷ *Ibid.*, 260.

⁵⁸ William J. Richardson, *Heidegger: Through Phenomenology to Thought* (New York: Fordham University Press, 2003), 511.

⁵⁹ *Ibid.*, 505.

Consequently, one side of thought is always already approaching its destination as this is the same as its origin, while the other side must traverse back over its own path and is thus always slightly out of sync with itself, thus altering the way it must walk toward its origin. This loop of dependent movement between whole and constituent parts is otherwise known as the hermeneutic circle, which is dependent on both its own origin and fragmentation for the creation of meaning, or fulfilment of itself.

As we are 'called' to a thinking which is a listening, this circle or loop exists not only as a path; it is also a resonance. One could say that in the swaying, contradictory movement between coming into presence and withdrawing, the 'call' sounds. This is the sound to which we are listening. This sound is not merely sensual; rather, it precedes the sensual plain, as the senses presuppose a temporal gathering in order to make sense of the perceptions. Instead, this sound would seem to both precede and instigate hearing, both in the perceptual and conceptual sense. It is orientational. In this way, thinking is a listening in to the process of becoming as we are unfolding now as it relates to Being, or present existence, as a whole. Thus, although Heidegger never states it as such, thinking is always aiming toward the unity of genesis, while hearing the contradiction produced through its strife. We aim to hear ourselves as complete, but can only recreate completion or unity antecedently.

Listening, therefore, is the thinking called into being by Being through its very withdrawal. As such, man becomes, or embodies, a point of both abstraction and materiality, passivity and action as he becomes the very path between that which withdraws and that which presences. As Heidegger states, '[M]an *is* the pointer. Man here is not first of all man, and then also occasionally someone who points. No. Drawn into what withdraws, drawn toward it and thus pointing into the withdrawal, man first *is* man. His essential being lies in being such a pointer'.⁶⁰ Man's active pointing, which manifests as the questioning thought, coexists with his passive embodiment as 'pointer', as one 'caught in the draft of what draws, attracts us by its withdrawal...our essential being already bears the stamp of that "draft"'.⁶¹

⁶⁰ Heidegger, *Basic*, 295. (italics in original)

⁶¹ *Ibid.*, 265.

As we are 'drafted' into thinking, and this process both marks and gives shape to our being, listening is revealed as a complex nexus of orientations. These orientations do not originate from us, rather, they result from the process of destining, which is 'to send' or 'to start upon a way'.⁶² Heidegger calls it a 'sending that gathers [*versammelnde Schicken*]'.⁶³ In this way, that which is to be thought is granted [*gewähren*].⁶⁴ While this does not mean that our thoughts are predetermined, the very act of thinking is a listening orientation, a listening in to an origin, which we neither initiate nor determine its realm of possibilities. The creative aspect of thought, however, exists in marking out the paths which thought will take. Thus, thinking is not an activity performed to reach some end. Rather, it proceeds from out of being itself. Its instigation is a reflection of the passive state of thrownness in which Dasein finds itself. As such, its freedom arises from its determined origin in the twofoldness of being and its inherent and subsequent movement. Thus, thinking as listening, as the orientation toward creative reception, is not so much an act which is performed as it is a process which is in perpetual development. To use Eno's language, it grows in a bottom-up manner. Eno's gardener, then, is one who safeguards and tends the seeds of thought which are sown in the event of the withdrawal of being. Thinking, and thus listening, is a non-hierarchical, bottom-up process which proceeds from an origin into distinct possibility spaces in which it can unfold.

The point at which the soil furrows in its gathering and sending is the same point at which the gardener is implicated in the creative process. He or she can plow linear rows projected from the coordinate location of the initial bud, or he or she can allow the plant of origin to create its own path through spreading its seed in the 'draft' of the wind's withdrawal. Both processes result in the organization of the plants, but each organizes the actions of the gardener in unique ways. Additionally, each process reveals distinct features of the plants themselves, as one indicates plant behaviour under highly ordered circumstances, and one under variable conditions which allows for more variation in response reciprocally. Thus, although these two possibilities are not mutually exclusive and can exist on a continuum, they demonstrate the basic mechanism of destining: our thoughts will organize (gather and send) our engagement

⁶² Heidegger, *Basic*, 230.

⁶³ *Ibid.*, 230.

⁶⁴ Heidegger, *Question*, 31.

with our environment, and in this way the freedom of man is determined within the 'realm of destining', with the 'one who listens' maximizing freedom over own 'who simply obeys'.⁶⁵

As the gardener turns composer, we hear echoes of a destining, or 'sending that gathers', in the algorithm. The 'sending' would correspond to the originary movement of genesis holding sway within the formal, abstracted algorithmic structure, while the gathering occurs as the transformative steps meet their applied data structure. Thus, the algorithm can generate and organize our experiences with sound which will ring both in our level of everyday experience and also echo our thinking origin as a listening in to the grant. Therefore I argue that we are thus engaged in a twofold listening, a double listening, one on an ontological level as we listen in to being, and one on a perceptual, cognitive level as we engage with music in the context of the art experience. As the sonically applied algorithm makes its way along a path from abstract thought to material implementation, its 'gathering' capacity exceeds that of external data; it gathers experience and thinking into listening and music, thus acting as a possible bridge between the ontic reception of sound with the ontological hearing of being.

Algorithmic Essence

Thus far, the term 'algorithm' has been considered in its most general, abstracted sense. The term is derived from both the Greek word for number [*arithmos*] as well as from name of the Persian mathematician Abu Jafar Muhammad ibn Musa al-Khwarizmi (780-850 A.D.).⁶⁶ Al-Khwarizmi's treatise on calculation was translated into Latin in 1150 A.D., along with a Latinized variation of his name (Algorismus), and served as an introduction of the Indian numerical system to the Western world. The combinatory nature of the term's etymology as well as the translational transformation of his name almost suggest the function it has come to denote.

Certainly very specific, computational definitions exist, as computer scientist Donald Knuth explores in his article 'Algorithmic Thinking and Mathematical Thinking', which

⁶⁵ Heidegger, *Basic*, 230.

⁶⁶ Nierhaus, *Algorithmic*, 2.

seeks to uncover ‘the actual role of the algorithm in mathematical sciences’ while maintaining a relatively broad algorithmic definition himself.⁶⁷As he explains, ‘I tend to think of algorithms as encompassing the whole range of concepts dealing with well-defined processes, including the structure of data that is being acted upon as well as the structure of the sequence of operations being performed; some other people think of algorithms merely as miscellaneous methods for the solution of particular problems, analogous to individual theorems in mathematics’.⁶⁸ Thus, while not every practitioner uses the term ‘algorithm’ in the same way, the definitions which tend toward abstraction can be found among computer scientists and not just composers and philosophers. However, as we wish to situate the algorithm via its action and mediating function on an ontological level, and specifically as this applies to a music composition process which may or may not involve computational procedures as such, the definition previously adopted is both appropriate and suitable for these purposes. This is not to preclude more delineated definitions, but rather examine the algorithm in relation to being in its generative application.

As a series of transformative steps, the algorithm of our delineation is situated toward the general end of a continuum ranging from universal to highly specified definitions. However, both the steps and the transformation which comprise this definition suggest an ontically organizing capability or function, whereby a field is both created and delineated and the ensuing possibilities of variety manifested. In this way, I argue that the algorithm as a practice both of thought and as compositional tool occupies a crucial place between *techne* and *phusis*, destining and enframing. While Heidegger would immediately situate it on the side of technological enframing, our usage demonstrates an inherent movement which exists on a level which precedes that of technological determinism. While this does not preclude the algorithm from being utilized as such, or present the argument that all algorithms in practice behave in one way, it does allow for an algorithmic essence to arise which opens up the problematic area of technological genesis.

⁶⁷ Donald E. Knuth, ‘Algorithmic Thinking and Mathematical Thinking’, *The American Mathematical Monthly*, 92/3 (1985), 170-181 (170).

⁶⁸ *Ibid.*, 170.

Heidegger's argument toward algorithmic enframing would likely, had he ever specified one, be situated in terms of moving in the 'wrong' direction from concrete to abstract, which inherently suggests an aspect of manipulability and control. The directionality of movement, however, is not only reversed in the implementation process (moving abstracted steps into concrete transformations), but ignores the fundamental characteristic currently at stake: the algorithm acts, and in its transformative action, it contains the possibility of remaining sensitive to the present variables in each successive step along the way. If so composed, the algorithm can be self-reacting, and thus the level of control exerted from this motion would only be ascertainable by considering both its compositional structure as well as the data structure on which it is implemented, which necessarily involves a complex web of environmental interrelationships.

Perhaps the unique feature of *The Question Concerning Technology* lies in the fact that Heidegger does not examine technology from a material standpoint. Instead, he locates the origin of technology in thought itself, with technological application and the material manifestation of instrumentation following secondarily. In this way, it is not only historically accurate but also consistent with Heidegger to locate the essence of the algorithm similarly within thought. Indeed, the development of the algorithm as such required developments in thought which trace all the way back to the origin of counting and the creation of related symbolic, and thus abstracted, systems. Another landmark along the developmental path of the algorithm is made by Aristotle himself in the further development and formalization of logic. Nierhaus locates this as the beginning of the 'formalization of thinking processes', as it presupposes a unifying regularity in thought. As he explains, 'The basis for logical reasoning is thinking, which is assumed to be in principle consistent'.⁶⁹ While Heidegger sees ontology as prior to logic and in fact distrusts formal logic, he nonetheless affirms the fundamental assumption that thinking presents unified features. If this were not the case, enframing would not be a concern, as enframing itself would presumably find a unique application within each thought process it encountered, thus disarming itself of any certain danger posed.

⁶⁹ Nierhaus, *Algorithmic*, 15.

Aristotle not only provides the point of origin for the development of logic into a closed system, as explicated in the *Organon* and in *Metaphysics* (Nierhaus points out that these titles mean 'tool' or 'method' and 'after physics' respectively),⁷⁰ but also founds the very genesis of Heidegger's own line of philosophical questioning regarding being. In his letter to William Richardson, Heidegger explains that the first philosophical work which he examined was Franz Brentano's dissertation, entitled 'On the Manifold Sense of Being in Aristotle'. In this work, he encountered a phrase by Aristotle which translates: 'A being becomes manifest (sc. with regard to its Being) in many ways'.⁷¹ This phrase would prove to be the most influential on Heidegger, as he explains:

Latent in this phrase is the *question* that determined the way of my thought: what is the pervasive, simple, unified determination of being that permeates all of its multiple meanings: This question raised others: What, then, does Being mean? To what extent (why and how) does the Being of beings unfold in the four modes which Aristotle constantly affirms, but whose common origin he leaves undetermined? One need but run over the names assigned to them in the language of the philosophical tradition to be struck by the fact that they seem, at first, irreconcilable: Being as property, Being as possibility and actuality, Being as truth, Being as schema of the categories. What sense of Being comes to expression in these four headings? How can they be brought into comprehensible accord?⁷²

Heidegger then retraces the subsequent path his thought has taken through time in an attempt to answer this question, as 'a great deal of swerving and straying' through Western philosophy occurred.⁷³ The path was not random, however, as it was always guided by this original question of the Being of beings which thus required Being to remain the 'first and last thing-itself of thought'.⁷⁴ In this way, the question provided an initial input which, through a series of philosophical steps by way of phenomenology and Greek thought, came through the transformation process as the output contained in *Being and Time*, continuing on in a slightly modified form thereafter. While the order of the steps only became apparent to Heidegger in retrospect, one could almost compose an algorithmic path to ascertain the value of the

⁷⁰ Nierhaus, *Algorithmic*, 15.

⁷¹ Richardson, *Heidegger*, x.

⁷² *Ibid.*, x.

⁷³ *Ibid.*, x.

⁷⁴ *Ibid.*, x.

Being of being, starting from the question as origin toward subsequent steps in which their respective conditions contain being as both an initial state and end state to the final ontological formulation as explicated in *Being and Time*.

The suggestion of an algorithmic thinking process latent in Heidegger's philosophical journey is not meant to be reductive; rather, it is an attempt to draw out the rich variety generated from the combination of an initial four relatively simple elements, as evidenced in what is regarded as one of the most seminal philosophical works of the century. The underlying relationship after which Heidegger sought generated a complexity which was virtually unintuitable from the original elements or seeds. While the process is obviously not strictly algorithmic in nature, the presence of elements common to algorithmic thinking as a process might be made further apparent through the examination of a musical application of algorithmic thinking.

Examples of algorithmic composition can be traced back to the Middle Ages, in which the abstracted mapping systems such as that of Guido of Arezzo gave rise to the automatization of melody generation.⁷⁵ But a more recent relative of present day generative music is that of Arnold Schoenberg's twelve-tone technique. By treating the twelve tones of the chromatic scale as equally important in relation to one another, the organization of notes was liberated from the traditional hierarchy of tonality. This new organization based on the twelve tone set initially involved algorithmic thinking as tool to generate material which was subsequently modified during the composition process. As Miranda summarises, 'a twelve-tone piece can be thought of as a perceptual variation on the series using a few prescribed transformational mechanisms'.⁷⁶ He offers an algorithmic transposition of an array of numbers representing the twelve semitones:

```
BEGIN transpose(A[n], amount)
  B[n] = create_empty_array(12)
  FOR x = 1 TO 12
    DO B[x] = A[x] + amount
```

⁷⁵ Nierhaus, *Algorithmic*, 21.

⁷⁶ Miranda, *Composing*, 54.

END transpose(B[X])⁷⁷

He describes the formula, stating:

The input for the algorithm is an array $A(n)$ containing the twelve notes, and the amount to be transposed in terms of semitones. Firstly, the algorithm calls a subroutine to create an empty array $B(n)$ of a size equal to 12; this array will contain the transposed notes. Then, the elements of the array $A(n)$ are retrieved one at a time, transposed and placed in array $B(n)$. Once the loop terminates, the algorithm returns the array $B(n)$ containing the transposed notes. For example, if one calls $\text{transpose}([62, 70, 68, 66, 65, 60, 58, 72, 70, 62, 70, 72], 5)$, then the result will be $[67, 75, 73, 71, 70, 65, 63, 77, 75, 67, 75, 77]$.⁷⁸

The process for retrograde, inversion, and retrograde inversion all involve variations on the ordering and manipulation of the empty array. While the algorithm cited above is a concrete formulation of an algorithmic thinking process, it is in its most abstracted form. A series of steps could be written out to manually test the functioning of each line. In this sense, the algorithm is not strictly computational, as its materially embedded existence historically preceded its computational derivation.

Parataxis

As the twelve-tone technique intrinsically involves the computation of numbers, the comparison with Heidegger's inherently linguistic thought process might still seem elusive. The fundamental connection, however, lies less in the structure of the process and more in its implementation. That is to say that we do not hear the freedom of the dissonance ring in the creation of the algorithm's subroutines; rather, we hear a new organization emerge as sounds are juxtaposed and patterned in ways which become apparent by way of their relative positioning. Similarly, the common denominator of Aristotle's four manifestations of Being emerges paratactically; an array is created and transposed within thought of being's four manifestations, with each step delimiting potential values of a common denominator through the movement between elements. Thus, a new harmony results in both Heidegger's being and Schoenberg's song, as the structure of this harmony is not predetermined by the listener and mapped onto the

⁷⁷ Miranda, *Composing*, 55.

⁷⁸ *Ibid.*, 56.

listening process. Instead, it evolves through the placement and subsequent interactions of the constituent elements.

This paratactic method of placement became one of increasing significance for Heidegger, as he continually sought to move both within and beyond the transcendental language of his earlier works, attempting an approach toward the horizon in which continuity and transcendence intersect. This double desire for both continuity and transcendence is at the very least congruous with the abstraction and materialization tension present in the algorithm's essence, and is virtually identical to the double, contradictory desire present in the human-technology relationship(s) which Don Ihde describes. Thus, in both technological and linguistic praxes, we often desire the transformative results of the ensuing relationship while simultaneously desiring that the transformation still embody the initial state in its original form. We want to transform through mediation without being mediated ourselves.

The manifestation of this double desire and its attempted resolution through parataxis can be seen in Heidegger's introduction and increasing evocation of poetry, particularly that of Hölderlin. It is within poetry that Heidegger locates the site of 'the poetic experience with the word'⁷⁹ and this poetic experience is inherently musical. Heidegger most often evokes the notion of music through repeated references to 'singing' and 'song': '[p]oetry is song'.⁸⁰ Poetry thus becomes a way to draw attention to the sonic attributes of the process of signification as it occurs during reception rather than through its subsequent conferment, as Heidegger states, 'The song is sung, not after it has come to be, but rather: in the singing the song begins to be a song'.⁸¹ Thus, in poetry one can hear the words sound, and this sound contains the echo of Dasein's appropriation into the very process which enables meaning to arise. As Adorno states, 'The transformation of language into a concatenation, the elements of which combine in a manner different from that of judgment, is a musical one'.⁸² In this

⁷⁹ Heidegger, *On the Way*, 73.

⁸⁰ *Ibid.*, 77.

⁸¹ *Ibid.*, 77.

⁸² Babette Babich, 'Mousike techne: The Philosophical Practice of Music in Plato, Nietzsche, and Heidegger', *Articles and Chapters in Academic Book Collection*, Paper 23, (2005), 205 http://fordham.bepress.com/phil_babich/23 (24 August, 2013), original source cited as Rolf Wiggershaus, *Frankfurt School: Its History, Theories and Political Significance*, M. Robertson (trans.) (Cambridge: MIT Press, 1994), 528.

way, I maintain that the importance of the poetic experience with the word lies in its ability to invoke a way of reception which bypasses understanding and the preconceptions which it carries with it. To undergo this experience is to reattune to the origin of being, and this transformation is a musical one.

Heidegger's utilization of Hölderlin's poetry seeks to subvert the ontological distance which arises between our everyday language usage and our awareness of being involved in the meaning-conferring process. Our ears become so accustomed to language that we can no longer hear either what it says or how it sounds. Heidegger explains:

It is just as much a property of language to sound and ring and vibrate, to hover and to tremble, as it is for the spoken words of language to carry a meaning. But our experience of this property is still exceedingly clumsy, because the metaphysical-technological explanation gets everywhere in the way, and keeps us from considering the matter properly.⁸³

Thus, the way in which poetry is organized as well as its musical indication of sonic properties is pre-predicative resonance; the sound exists on a level which both precedes and grounds the possibility of meaning creation. In this way, poetry becomes a tool by which Heidegger attempts to mediate the experience of the pre-predicative, or 'pre-logical manifestness'⁸⁴ level of meaning. As Dasein comes to embody the song whose instrumental properties withdraw during use like the hammer, poetry becomes the 'pointer' toward a musicality which is in constant withdrawal.

The poetic (musical) experience with language reveals a nexus in which sound, organization and signification meet in the locus of Dasein. As Dasein is both the common origin and the point of convergence for these ontic manifestations, the experience of this point intrinsically implicates a systemic abstraction which in turn 'calls' the implementation of a technique (*techne*) into play. Dasein's hammer which withdraws into the background and advances into the foreground is thus not an instrumental novelty; it is an external manifestation of this internal nexus. There exists no quantitative difference and yet every qualitative difference between the world of

⁸³ Heidegger, *On the Way*, 98.

⁸⁴ Stephan Kaufer, 'Logic', in Hubert L. Dreyfus and Mark A. Wrathall (eds.), *A Companion to Heidegger* (Oxford: Blackwell, 2005), 141-155 (148).

the functioning, withdrawn hammer and the world of the broken, protruding hammer. The poetic experience, the musical experience, and indeed the experience of the work of art embodies this strife and calls attention to the extant simultaneities therein, thus facilitating our movement between them. This poetic, musical, artistic experience is thus a transformation not of the world, but of Dasein, and thus of the world.

While poetry, music, art and language occupy various positions on this experiential continuum, it is important to remember that the concepts as such are subjective constructs which perhaps create divisions between ontic distances which are at best minute. This is not to conflate signification and interpretation, nor form and substance, but rather to suggest that on the ontological level, being first receives a call which founds, orients, and patterns all subsequent 'aesthetic' responses. Thus, while it falls outside the present scope to discuss the exact nature of the relationship between music and language in terms of signification, the sonorous properties (sound organized in space and time) serve as foundation both ontologically and for our purposes textually. Furthermore, music shares language's propensity for accustomization, and as such occupies a similar situation to that of technology; it contains the essence of the sonorous saving power which is in danger of fading from earshot when objectified. We seek, after Heidegger, a transformation which has the power to disaccustom Dasein to a way or manner of being which forgets or overlooks its origin from being itself. We seek a transformation which will mediate between ways of thought. As this transformation is always already latent within our thinking experience, we do not seek to simply replace one thinking experience with another. Rather, we seek what Heidegger calls 'the echo of a thinking experience, the possibility of which we are trying to bring before us'.⁸⁵

The possibility of this transformative experience must occur at this nexus of relations which comprises listening as creative-receptive origin. Thus, if we trace listening on its ontological path from Being to Dasein as a receptive, background relation to the creation of a foregrounded, abstracted system of play, we arrive at the point of *techné* which mediates between the internal, embodied call from being and the external echo of this experience as it is heard in the musical experience. As our technology is the

⁸⁵ Heidegger, *On the Way*, 73.

instrumental manifestation of *techne* in its essence, I suggest that the human-technology relationship is the interface at which Dasein can undergo this listening transformation. Thus, Ihde's four human – technology relationships are exactly such points where such a shift may be performed. Due to the ontological closeness of our engagement with technology, language, and even music, we are unable to see or hear the subtle transformations which occur at the point of ontic involvement.

Thus, in attempting to express this quandary about language through the use of language, Heidegger employed two mechanisms by which attention could be drawn to the point at which signification is both received, as in the ringing of the word, and created, as in the song of the ringing. One main feature was the use of paratactic constructions such as those embodied in poetry. Another mechanism, which both necessitated and enabled the implementation of the first, was a reversal, or turn [*Kehre*], during which the direction of his thought changed. This perhaps first manifested in the divisions within *Being and Time*, which began in that order and progressed to *Time and Being*. His initial 'array' consisting of the ontological structures which constitute being was now set into a Schoenbergian retrograde, as the claim and call made to Dasein as being became the focal point. He sought to clarify the bond between Dasein and Being, or the being of Being, by approaching it from the opposite direction. Thus, Heidegger's thought did not change as such; the seeds for the reversal were present both in his thinking and in the nature of the subject of thought prior to his arrival at the turn. Additionally, the reversal requires the presence and continuity of its inverse in the same way in which Schoenberg's derivative sets depend upon the ordering of the initial set.

The reversal, or turn, in Heidegger's thought exists on several levels, and has been interpreted and misinterpreted in numerous ways. Perhaps the key to understanding the turn is that Heidegger received this reversal from the subject matter of his thought. As he explains, 'The reversal is in play within the matter itself. Neither did I invent it nor does it affect merely my thought'.⁸⁶ Thus, I suggest that the transformative space which we seek to inhabit exists in the experience of the reversal; Heidegger locates the possibility of the poetic experience with language within 'the

⁸⁶ Richardson, *Heidegger*, xviii.

being of language—the language of being'.⁸⁷ To hear that we hear and how we hear is to hear both our own implication in and necessity to the process of meaning, the truth of being. Our own appropriation into this process itself necessarily means that any transformation within the process is a transformation of ourselves as being. Heidegger states:

What is at stake is a transformation in man's Being itself. This transformation is not demanded by new psychological or biological insights. Man here is not the object of any anthropology whatever. Man comes into question here in the deepest and broadest, in the genuinely fundamental, perspective: man in his relation to Being—sc. in the reversal: Being and its truth in relation to man.⁸⁸

Thus, the question of the truth of being becomes a listening in to the call, to the sound of destining which appropriates and requires man for its being. Man is an expression of and response to this call first and foremost on the most fundamental level, and the movement inherent in the reversal is not observable as such, but rather is only able to be experienced.

Aesthetic Reversal: Reversing Aesthetics

In the text and texture of the question thus lies man. He has gotten lost in the text into which he is always being written, and the texture has become obscured. He can no longer hear the ways in which he speaks the text, nor the ways it speaks him. To overcome this infinite distance of that which is closest at hand requires a series of steps, a transformative experience with listening, in order to reach our own becoming. To 'become what we are', we must 'hear' 'how' we are. This is a process rather than an event, and its unfolding implicates an essential music. The challenge thus lies in the creation and reception of a music which presents us with hearing, which makes hearing itself present. We must listen past the text, the patterns of melody and rhythm, even past the unity of form and function. We must enter the texture, the unity. Thus, a new listening encounter with the essence of music as a unity requires a new aesthetics.

⁸⁷ Heidegger, *On the Way*, 73.

⁸⁸ Richardson, *Heidegger*, xx. (Richardson retains Heidegger's earlier variation on the spelling of Being from the quotation)

A new aesthetics cannot be created; it has to come to us, arrive at our being from the horizon of thought. We have to be attuned to it; we must listen in for it. It must be positioned both toward and away from us as beings in order to capture the sway of genesis in movement. Its path will not be linear, but circular, as it moves between being and becoming toward genesis. It must approach truth on its operative level, the one which both founds and enables our subsequent subjective constructions of correspondence and reference. To reach this fundamental level is to reveal that truth is not constructed; rather, it grows. It is an invisible garden which surrounds us everywhere, and the only thing required to catch sight of it, or enter into it, or even to hear it, is a subtle shift that occupies the moment between creativity and reception. To approach the movement of this moment requires the creation of a space in which an echo of our presencing can reverberate and call us forward toward presence. This is the infinite unity of music, the sound of which we both hear constantly and listen to seldom. The call is in the endless iterations of infinite generations of sound, sound which rises up only to unite being and Being again.

To move toward a new listening and a new aesthetics, we recall both the reciprocal ontological positioning between being and music and also the reversal which leads beyond subjectivity. We thus turn back to Heidegger's question regarding Aristotle to formulate our guiding questions. It stands thus modified:

What is the pervasive, simple, unified determination of (music) being that permeates all of its multiple meanings...What, then, does (music) Being mean? How can they be brought into comprehensible accord (heard)?⁸⁹

We must read the space between music and Being as one of listening. This is the space of possibilities in which we could hear music not as the sonic correspondence to a recording or performance but rather as a single being which repeatedly raises its head above the sonic horizon in an infinite horizon of space and time. If we could glimpse this unity, a corresponding aesthetic might manifest alongside it. In doing so, we could free more than the dissonance; we could liberate the entire palate of our listening. The binding ties between subject and object would dissolve, as the movement between music and being generate their own rhythmic bond. We could embody music, to

⁸⁹ Richardson, *Heidegger*, x. (parenthetical inserts mine)

indicate it or 'point' to it with and through our being, and dissipate the 'who' of our being into its 'how'. We could rest in the absent presence of its ambiance, knowing that we do not have to infinitely recreate it; we need only call it forth.

We thus seek a reversal of our own. While the unity of both music and the aesthetic evaluation thereof exists as an aspiration, this aspiration arises from the unity present in our most fundamental orientation to being, in our truth of being. Thus, it is only in the thinking of the aspiration that one might undergo the shift, as the path is the process. As Heidegger insisted, 'the thinking of a reversal *is* a change in my thought';⁹⁰ his thought did not change independently of its path. Therefore, we recall his admonition that 'Instead of the groundless, endless prattle about the 'reversal', it would be more advisable and fruitful if people would simply engage themselves in the matter mentioned'.⁹¹ Thus, we move from being and music to music and being.

An Ambient Origin

We thus arrive back at the beginning, a new transformed beginning that carries with it the retraced steps between its being and becoming. This new origin, or original happening, thus traces and retraces the steps of our cyclical path, encircling the space in which a transformation can occur. Our steps draw around this transformative space in which the call to thinking is drawn out of the echo of listening. We are in the ambiance of the origin, which, as ambient origin, provides further linguistic direction on our path. As Adelio Fusè explains in his essay 'Ambient Music':

Eric Tamm... rightly notes that the word 'ambient' derives from the Latin *ambiens*, present participle of the verb *ambire*, meaning 'to go around'. Tamm also notes that 'the prefix *amb*—is used in words like 'ambiguous', ambidextrous' and — a word Eno might particularly relish — *ambitendency*, 'the state of having along with each tendency a countertendency'.⁹²

This duality of tendencies, as it manifests in ambiguity, echoes Heidegger's 'ambitendency' latent within technology between the danger and the saving power. This places us within a shifting space of decision between two possible paths of

⁹⁰ Richardson, *Heidegger*, xvi. (italics in original)

⁹¹ *Ibid.*, xviii.

⁹² Adelio Fuse, 'Ambient Music', in book with Brian Eno, *Sonora Portraits* (Italy: Materiali Sonori, 788886784146, 1999), 42.

thought, a space between possibilities and actualities. In this way, I suggest that Heidegger's almost complete silence with regard to music presents a fertile space in which to examine Brian Eno's generative music, as the lack of preconceived ideas about music allows new notions to arise which may otherwise have been blocked. We have travelled along a path which found its origin in Heidegger's expressions and expounding of ontological parameters which both place us as beings into the picture and also implicate us as co-creators of the picture.

Thus, we find ourselves, at least certain moments in which we confront ourselves, as living manifestations of the Borgesian Conundrum, which questions whether the writer creates the text or the text creates the writer. And so it is with music. Perhaps this is the most succinct positing of the topic at hand in Heidegger's 'Origin of the Work of Art'. The work of art both proceeds from the artist and finds expression through the artist, thus creating the artist as such in the process. But the space in between, in which the hermeneutic circle circles and certainty and ambiguity are concentric neighbours, is the space in which the possibility of the art working, working on us and in us, occurs. This space is one which Heidegger describes as a sort of infinite, intimate battlefield of revealing and concealing, hiding and appearing, which has annexed its territory of battle within our minds. Our engaged experience with the work of art, indeed with generative music here and now, will determine that which we deem real, that which we see as possible, and that which we create from the two. The space is one which exists in our thoughts. The music, thus, arrives toward our thoughts; we receive it. In this way, the essence of music remains concealed. We cannot arrive at it through analysis or dissection. Philosophy, on its best day, can remind us of those moments of reception in which absolute presence and clarity arrived and our thoughts were for a moment organized accordingly, as if from an outside force which came both from without and within simultaneously and removed us from ourselves for a moment. Metaphorically speaking, it is like that which Eno compares to the experience of a child walking in a forest, an experience which he tries to capture or recreate in his ambient compositions:

The idea is to create the feeling of being in a landscape...It's as though there would be this chaos of events going on, and suddenly they would

knot together and compose themselves in a beautiful way. Something ecstatic happens, and then it all drifts apart again.⁹³

This is how the shift feels. This is a feeling of being slightly out of control. The more it persists, the more we ourselves are lost in the distinction between creator and receiver, as possibilities latent within and echoing through infinite manifestations of sound and phrase and turn of pitches seem to resonate in a prism-like fashion in our minds, uncovering furrows in thought which we could not achieve in and of ourselves alone. This is the space, of generative listening, the moment in which we can hear echoes of freedom. This is Eno's message, and it pervades his music, his creative practice, and his aesthetic thought. This message, however, is potentially lost on an audience that remains trapped in the confines of the frivolity of the subjective art experience, failing to realize both the true liberation at stake and also what is at stake in this freedom. Thus, I suggest that Heidegger has paved a befitting path which, as it meanders through and encompasses Gadamer and Levinas, situates a unique space in which modern day art practices can settle and unlock its subsequent progression. We thus have the message. We have the messengers. What we lack here and now is the music.

The Aesthetic Event

Any person, whether musician, philosopher, or both, who embarks upon the formidable task of writing about music will encounter the inherent impossibility of writing about it and encountering it at the same time. We are always just before it, or just after it. We chase its traces and spectres. Perhaps the problem confounds itself in the case of generative music, as this by definition unfolds autonomously in real time. We seek here to textually explore an experience, and furthermore wish to transcend the subjective nature of this from within. We thus arrive in a space which is perhaps best describable through analogy. Jorge Louis Borges, as one who repeatedly wrote texts about writing itself and embedded traces of other stories toward which he hinted but never arrived, can place us within the area which we need to be. He describes this moment, the 'aesthetic experience' thus:

⁹³ Arthur Lubow, 'Brian Eno', *People*, (1982), <http://www.people.com/people/archive/article/0,,20083291,00.html> (24 August, 2013).

Music, feelings of happiness, mythology, faces worn by time, certain twilights and certain places, want to tell us something, or they told us something that we should not have missed, or they are about to tell us something; this imminence of a revelation that is not produced is, perhaps, 'the aesthetic event'.⁹⁴

Borges not only sets the tone here, but also the time—in his typically non-linear striving for something always future, or always past, or even both, we are placed on the cusp a cyclical time when we await. This awaiting is both initiated by and culminated in the 'aesthetic event', of which music heads the procession. It is within the imminence of a revelation that doesn't arrive in which Heidegger and Eno converge from opposite ends of the same moment to reveal an Opening or space in which the trace of this experience can come forth.

Like the stories Borges references within his own but never quite recounts, so we are with the generative music moment. As our eyes move over the text on the page, we read our future possibilities of this moment into the present actualities of Heidegger's textual world. This hermeneutic reading, during which we read a new world into and through the unfolding of the language, is part of the moment to which we seek to draw attention. The inherent self-referentiality of any mediating presence is part of our experience in this moment, and one that is often glossed over in the process of judgment or rational thinking toward some end. One function of a certain art, as Heidegger found in poetry and likewise Eno in music, lies in both drawing attention to this process and celebrating it. This is the creative part of the process, during which we receive our own capacity to shape worlds and appropriate meaning. This is part of Borges' elusive revelation.

Eno's approach to text as it appears lyrically reflects a keen awareness of both language's pragmatic and sensorial side; he works both with how it sounds and what it does. As he tells us in 1975's *Another Green World* on 'Sky Saw':

⁹⁴ Jorge Luis Borges, *Labyrinths: Selected Stories and Other Writings*, Donald A. Yates and James E. Irby (eds.), (New York: New Directions, 1962), 168.

All the clouds turn to words
All the words float in sequence
No one knows what they mean
Everyone just ignores them⁹⁵

As if to demonstrate his assertion, he overlays another verse of nonsensically strung together words and we hear both verses simultaneously. While Eno seldom employed lyrics after his initial four solo albums, as further evidenced within his generative output, his utilization of words is often organized around sound, as if to use them as another instrument, though witty combinations often appear. Thus, the vapour-like essence of words and their meanings unfold in relative obscurity to everyone's awareness of this process; as Heidegger similarly laments, 'Most thought-provoking in our thought provoking time is that we are still not thinking'.⁹⁶

Thus on this path, Eno has placed us in the moment and has set a work in motion—set truth to work—in and through his artwork. He has provided the work occasion for the shift. Heidegger, Gadamer and Levinas have been present too, leading up to this moment, each in his own way and capacity. Heidegger has prepared the ground, the origin, from which we will make the leap of and into the moment. He has delineated the parameters of our existence and possibilities for experience of being and with being. Gadamer then steps in to set the process in motion—we enter into the moment and this is the hermeneutic encounter. Levinas follows along immediately behind, just like the knowledge which results from the hermeneutic encounter, to describe and open up the spaces on either side of the moment, between being and becoming (genesis).

We have thus been given [granted] a map toward an experience, a schematic which can signpost our journey. The pieces won't be forced into a [*Gestell*] grid; rather, they themselves will shift and sift and collide and drift into their respective places within this encounter. We seek only to follow the lead of the swaying movement which runs through all the pieces—listener, music, technology, art—and this will trace out and track the path which arises in its wake—the one which we now walk. We now attempt

⁹⁵ Brian Eno, *Another Green World* [original recording remastered] (EMI, 99968452728, 2009).

⁹⁶ Martin Heidegger, *What Is Called Thinking?*, J. Glenn Gray (trans.), (New York: Harper and Row, 1968), 6.

a shift from walking to hearing, from thinking to being. This is the path of generative listening.

Shift

The Ambient Moment

We arrive first at an injured Eno's bedside for our first moment, revisiting a moment previously recounted. The scene is thus:

Lying immobile in bed, grateful for the enforced sabbatical, [Eno] would listen to records played by visiting friends. One day it was harp music, with the volume turned so low that the plucked strings were almost inaudible. 'At first I thought, 'Oh God, I wish I could turn it up,' Eno remembers. 'But then I started to think how beautiful it was. It was raining heavily outside and I could just hear the loudest notes of the harp coming above the level of the rain'. As he listened, Eno decided that this 'melted-into-the-environment quality' was what he wanted in his music and his life.⁹⁷

This was Eno's broken hammer moment in reverse. He is able to turn the obtruding malfunction into an embodied tool of utility. While the site of transformation is clearly internal within his thought process ('but then I started to think'), the focal point of the shift is directed toward external relationships between background and foreground. This is a key point both for the shift and for the future beginning of his generative music—the background is the territory which becomes aesthetically occupied.

It is important to note that the breakdown occurs technologically, thus enabling a pragmatic adjustment which necessitates a shift along the continuum of human-technology relations. The stereo and harp music recording occupy varying positions within thought, as the initial hermeneutic listening is interrupted as the technology malfunctions into alterity, followed by an adjusted hermeneutic-background relation. The movement between relations highlights that the shift occurs within the focus of perception, suggesting that the real broken hammer in this moment was only that of Eno's own immobility; obstructed intentions bred invention.

⁹⁷ Lubow, 'Eno'.

Eno's musical shift toward environmental embodiment through music was thus instigated by a technological encounter. The technology not only inspired but also enabled the shift, as the musical result of implemented processes required technological apparatus capable of semi-autonomous activity. In this way, Eno has played out his role as 'non-musician' through composing almost exclusively through technological instrumentation. As William Duckworth summarizes Eno's technological relationship:

As we consider Eno's complete body of work, we find that a sizeable portion of it was written not only with machines but by them. In fact, his method of composing is dependent on machines, first the reel-to-reel tape recorder of the 1960s (he owned thirty-one at one time and claims to have over one and one-half million feet of recorded tape), then the synthesizer of the 1970s and 1980s (he was partial to the older, less stable ones because they sometimes acted unexpectedly, and because he thinks 'accidents' are often more interesting than the things he does intentionally), and now the computer. Furthermore...he has been one of a rare breed of musicians who considers the recording studio to be his primary musical instrument'.⁹⁸

Thus, the seeds of his computer-generated music via Koan Pro were sown decades earlier, and often involved not only technology but the breakdown thereof. His penchant for using technology in a limiting rather than expanding function was present from the revelatory moment in bed to the 'happy accidents' of unstable synthesizers up through the algorithmic rules which shape his Koan creations.

Eno's ambient music and generative music are thus not distinct categories. His computer-based generative works are first ambient in both compositional style (as listenable as they are ignorable) and temporal quality; the non-terminating, non-repeating generative works preclude their reception of sustained, exclusive attention. Our moment, then, is accordingly ambient. This ambient quality presents the possibility of a shift in and between background and foreground attention. As the music moves between states of perception, Heidegger's ready-to-hand and present-to-hand find alternating resonance. Just as the hammer carries the potential to yield both experiences, so too does the ambient-generative listening experience. The shift, therefore, is centred in perception rather than in the instrument or environment. It is a

⁹⁸ William Duckworth, *Virtual Music: How the Web Got Wired For Sound* (New York, Routledge, 2005), 18-19.

shift in our habitual dealings with our tools and not of the tools themselves. Eno compares this habituated behaviour of the listening brain to that of a frog's eye, which remains fixed on an environment and focuses in on only that which moves. Similarly, when the human stares at something for an extended period of time, the 'common information gets cancelled out' and 'we begin only to notice the differences'.⁹⁹ The listening brain thus mediates between two states or levels of engagement which not only calls to mind Heidegger's hammer, but also the split attention levels necessary to ascertain the saving power and danger which coexist within the essence of technology.

The Transformative Moment

As we leave Eno's moment of convalescence, we depart with a potentially transformed, aestheticized background which needs only a change in focus to access. This focal shift between background and foreground does not play out immediately, however; like the injured Eno's accustomed listening and the frog's fixated eye, we must grow into the shift over time. This temporal unfolding ultimately occupies a space which encompasses both focal levels as well as a moment of in-between or suspension. The next revelatory moment, then, is chronologically a previous one, during which Eno suffers the accident which would later see him bedbound. The date is January 18, 1975:

Brian Eno was walking home... just after producing a pop single at a London recording studio, when the moment of revelation occurred. 'If that song were the last thing I ever recorded, would I mind having that as my final piece of work?' he asked himself. 'Probably not'. Then he slipped on the rain-slick pavement, into the path of a speeding taxi. 'At that instant my mind was operating incredibly fast,' he recalls, 'On one channel, I thought, 'So that *may* be the last thing I do'. Then I thought, 'If I'm going to survive this, I've got to get up as soon as it hits me', because I could see another car following the taxi that would surely swerve around and run over my head. The third thing I thought was, 'Who is going to get in touch with my girlfriend?' And the fourth thing was, 'Isn't the brain an incredible thing? It's like a 24-track tape with all these things going on at once'. It sounds ridiculous, but in that moment I developed a theory about how my brain worked. Then I got hit.¹⁰⁰

⁹⁹ Duckworth, *Virtual*, 24.

¹⁰⁰ Lubow, 'Eno'. (italics in original)

This moment reveals a glimpse into the temporalizing process inherent within the structure(s) of our thought. In a single moment, Eno demonstrated numerous sections of *Being and Time* in a single, musical stroke. Eno's being-toward-death brought about a 'unity of ecstasies'¹⁰¹ between past ('So that *may* be the last thing I do'), present ('I've got to get up') and future ('Who is going to get in touch with my girlfriend?') in an authentic way toward the present. This unity enabled an authentic attunement which manifested as a suspended 'now' or present moment ('Isn't the brain an incredible thing?'). These thoughts, though distinct, coexist as layers which both comprise the overall mood [*Stimmung*] of the thought process and suggest a musical composition amenable to the 24-track tape recorder.

The taxi-induced temporal transformation situates a shift from everydayness to resoluteness [*Entschlossenheit*]. In the aesthetic encounter of generative listening, this resolve is not a byproduct of the 'merely aestheticizing connoisseurship'¹⁰² of the work's formal qualities; rather it is an experiential knowing that means 'standing within the strife that the work has fitted into the rift'. Part of this rift is comprised between background and foreground focal points, which correspond to our experience of earth and world respectively. Resoluteness itself embodies a shift as Heidegger plays on the prefix [*Ent-*] to denote a 'kind of keeping un-closed' rather than the assumed denotation of a wilful closing off of other possibilities.¹⁰³ We see this open resoluteness play out in the continual opportunities presented to perform the focal shift as generative music holds the invitation open.

Whether one is 'standing in the strife' of the work or standing in the speeding taxi's path, in both moments one is about to get 'hit'. The impact is one of displacement and discontinuity. This is the 'thrust' of the work in which the ordinary is thrust down and the extraordinary is thrust up to the surface.¹⁰⁴ The high-end harp notes in Eno's bedroom usher in a reversal of ground [*Kehre*], one in which the continuity of the foreground is disrupted by the emerging discontinuity of the background. This thrust, like the taxi, is a means of transport—transport into the openness of beings. As

¹⁰¹ Heidegger, *Being and Time*, 329.

¹⁰² Heidegger, *Basic*, 125.

¹⁰³ *Ibid.*, 77.

¹⁰⁴ *Ibid.*, 123.

Heidegger tells us, this space is already open, a 'self-opening openness'.¹⁰⁵ We are already there, we need only arrive, and it is by means of the thrust that we may do so. The work thus transports us 'out of the realm of the ordinary'¹⁰⁶ and into this openness. Like Eno's sustained injuries, we too are merely receptive to the process. To undergo the transformation, we need only submit:

To submit to this displacement means to transform our accustomed ties to world and earth and henceforth to restrain all usual doing and prizing, knowing and looking, in order to stay within the truth that is happening in the work.¹⁰⁷

Within this description of submission lies a map for the moment: we transform, restrain and stay. On either side of this process lies displacement in the front, or foreground, and truth happening on the way toward the end, or background. That this map should overlay Eno's ambient revelation so perfectly is perhaps appropriate in that his music bears the rift design of the moment out of which it was born.

The Open Installation

We thus begin to suspect that we continually arrive at the same moment through this process, as if each moment bears a unique rift design which corresponds to or attracts the matching counterpart within the work. The 1975 raindrops and seventeenth century harp music still intermingle and resound in our present generative listening moment. How can this be? This temporal trick of long-separated yet contemporaneous moments is not merely an appearance; it is an actual happening—a happening of unconcealment. The work of art, the generative music of the moment, thrusts forth an awareness that the 'unconcealment of a being has happened here, and that as this happening it happens here for the first time'.¹⁰⁸ That which has already happened is happening anew. In our present generative moment, we hear echoes of the 'has happened' and 'happens...for the first time' in every algorithmic iteration; as each unique sonic cluster is born, so too is the generative sway between being and becoming.

¹⁰⁵ Heidegger, *Basic*, 111.

¹⁰⁶ *Ibid.*, 123.

¹⁰⁷ *Ibid.*, 123.

¹⁰⁸ *Ibid.*, 122.

Interestingly, our generative moment is itself contemporaneous with those of Heidegger's privileged art works, as these tend to maximize the presentation of a space between the creator and creation. The more 'solitary the work' or 'fixed in the figure', the more 'cleanly it seems to cut all ties to human beings', and this results in a more powerful thrust that the work is, that it exists it all.¹⁰⁹ This is echoed in his temple ruins and empty peasant shoes as well as in his semi-abstract painting preferences; the less the presence of the creator, the less likely we are to overlook the original happening in the work. The genesis of the work is crucial, as '[p]recisely where the artist and the process and the circumstances of the genesis of the work remain unknown, this thrust, this "that it is" of createdness, emerges into view most purely from the work'.¹¹⁰ As the work projects or brings forth an Opening which the creator did not create, it was set to work in the work through being provided a place in which to happen. The creator is merely 'a passageway that destroys itself in the creative process for the work to emerge'.¹¹¹ Eno would see a perfect mirror image in this statement. He provides our means of transport to the moment in which the musical genesis unfolds.

Not only do Heidegger and Eno share an envisaged 'emergence', they both locate this happening as an installation. As Heidegger states, 'truth essentially unfolds only by installing itself within a particular being'.¹¹² Eno's aesthetic approach echoes this assertion in his treatment of music as a living, growing entity, a music which has been described as 'music that thinks for itself'.¹¹³ He likens the animate qualities in music to that of an externalized thought: as in Heidegger's projective saying of language, one immediately see facets and implications which remained unclear when strictly internal. Through sounding a life is born. Eno explains, 'It's exactly the same way with music. You work on a piece of music, you put in certain ingredients, and suddenly they react in a way you hadn't predicted. If you're alert to that reaction, that's what you work

¹⁰⁹ Heidegger, *Basic*, 123.

¹¹⁰ *Ibid.*, 122-123.

¹¹¹ Martin Heidegger, *Poetry, Language, Thought*, A. Hofstadter (trans.), (New York: Harper Perennial, 2001), 40.

¹¹² *Ibid.*, 125.

¹¹³ Ian Steadman, 'Brian Eno on Music That Thinks For Itself', *Wired*, (2012), <http://www.wired.co.uk/news/archive/2012-09/28/brian-eno-peter-chilvers-scape> (24 August, 2013).

from. If you're stupid, you try to cancel that reaction out'.¹¹⁴ Thus, the actual site of the installation is not in the art gallery, computer or even recording itself; it lies in the force born of an earth-world collision which settles in the listener. The earth of the internal thought ignites with the external world and possibilities unfold of their own accord.

This actuating force, as embodied in generative music, thus invites us into the moment of the shift. Its invitation arrives ambiently, 'encompassing one on all sides, instead of coming at the listener'.¹¹⁵ Once the invitation is accepted, the experience comes to and takes over the listener with its own unique essence. This is Gadamer's 'play', the mode of operation of the transformation. It emerges when given a medium through which to act. Eno describes this process generatively:

You put the seeds into the system and then it starts growing music for you. And it might make something quite beyond what you had imagined, something you didn't expect and couldn't predict, in fact something that you could never be around long enough to listen to in its entirety. This thrilled me, that you could make music that would have a life of its own.¹¹⁶

This living music has its own fundamental nature contained in the play of its self-renewing movement. Once it has been instigated, it grows of its own algorithmic accord and contains futural unfoldings whose entirety we will never hear. It truly has 'a life of its own'. Like our own being, its parameters limit and define it, giving it its own unique identity and ontological space of possibilities.

As the generative play is 'installed' in our being through listening, its constant 'to-and-fro movement'¹¹⁷ patterns our awareness. We perceptually swing forward and backward, between foreground and background, between actualities of the present moment and possibilities which are carried within and suggested by the movement itself. Our present, engaged, everyday activities which accompany the listening

¹¹⁴ Steven Grant, 'Brian Eno Against Interpretation', *Hyperreal*, (1982), http://music.hyperreal.org/artists/brian_eno/interviews/troup82a.html (24 August, 2013).

¹¹⁵ Fuse, 'Ambient', 42.

¹¹⁶ Richard Williams, 'The Brain of Brian', *Hyperreal*, (1996), http://music.hyperreal.org/artists/brian_eno/interviews/guard96a.html (24 August, 2013)

¹¹⁷ Hans-Georg Gadamer, *Truth and Method*, 2nd rev. ed., Joel Weinsheimer and Donald G. Marshall (trans.), (London, Continuum, 1975), 104.

comprise Gadamer's game; they are raised up to 'ideality'¹¹⁸ in the foreground through the transformation of the background. We, as listeners, are transformed through the embodiment of the play's generative motion, and our 'reality' is reconstituted. As we become absorbed in the listening 'game', we are taken over. Thus, we are freed in the moment from our 'usual doing and prizing, knowing and looking'¹¹⁹ and 'the world of play lets down one of its walls'.¹²⁰ Through listening, are able to discover a window within the wall of subjectivity.

This window, as a space in which and through which the shift occurs, is our entry to the Open. While the generative listening moment affords unique, repeated opportunities for its discovery, the aesthetic path toward the Open itself has a history. The precursors to Eno's creative approach lie in his often cited encounter with Steve Reich's 'It's Gonna Rain', as well as Cornelius Cardew's 'Paragraph Number 5'. Fabio Martini describes the evolution of this listening experience as he locates its predecessors both historically and geographically:

The Americans, who are people of frontier, have opened our eyes, returned music to the senses, and led us by the hand into other worlds. The Americans, and not only Cage but also Emerson, Thoreau, Whitman, Coltrane, Elliott Carter, Noncarrow [sic] and many others, have 'opened windows'; they have taught us to listen to the world, and to consider the artwork not as something inevitably self-contained but as a constant 'opportunity' to meet that which the habits and superstructures of the world we are squeezed into do not allow us to see.¹²¹

The 'opened windows' are situated between earth and world, between 'habits and superstructures' and that which these 'do not allow us to see'. Each successive revealing and concealing pattern through the aesthetic history of the being of music has allowed glimpses of different parts of the same ground, or origin, which comprises the earth. One could summarize Heidegger's immanent technological danger as the closing of the window; without access to these glimpses outside of the room of the artwork, we lose our escape route from subjectivity.

¹¹⁸ Gadamer, *Truth*, 109.

¹¹⁹ Heidegger, *Basic*, 123.

¹²⁰ Gadamer, *Truth*, 108.

¹²¹ Fabio Martini, 'Driving', in book with Brian Eno, *Sonora Portraits* (Italy: Materiali Sonori, 788886784146, 1999) 32.

The Step Back

The generative listening encounter thus leads us not only ‘by the hand into other worlds’, but also by the ear. These ‘other worlds’ correspond with what Eno might call ‘possible musics’;¹²² the music is not a merely a sonic stream of intervallic relationships captured on a recording device. Rather, the recording device, and thus technology, is freeing the sound which then sways in its patterning play into music. It grows and evolves in its own way with each new birth, and we listen in to its infinite origins. In so doing, we become aware of the fact that we are listening; through a lack of pre-determined musical structure, we realize the structuring inherent in our perceptions. We become aware not only of *what* we are hearing, but also *that* we are hearing and *how* we are hearing.

While Heidegger’s neglect of music leaves him seemingly unable to hear this process, he does see it visually unfold. Perhaps this is best evidenced in his love for and identification with Cezanne through the medium of paint. He likens Cezanne’s path in painting to his own in thought, stating that it is ‘the path to which, from beginning to end, my own path as a thinking responds (corresponds) in its own way’.¹²³ This is followed by a lament: ‘if only one could think as directly as Cezanne painted’.¹²⁴ This moment of response and correspondence is born from a seemingly paradoxical quality in both Heidegger’s thought and Cezanne’s painting between thinking more ‘directly’ and taking a ‘step back’. It is this movement between two seemingly opposite directions, background and foreground, in which the in-between is highlighted. Julian Young cites Cezanne’s portrait of a gardener and also his ‘Mont Sainte-Victorie’ as instances of his progressive ‘dematerialization of objects’.¹²⁵ This moment of viewing is thus described:

For a moment, the work confronts us as an entirely abstract, two-dimensional space. But then—miraculously—the objects reconstitute themselves and reappear. Their tenure remains, however, a fragile (and for that reason all the more precious) one: they threaten, always, to disappear again.¹²⁶

¹²² Jon Hassell and Brian Eno, *Fourth World Vol. 1—Possible Musics* (EG: 07777872652, 1980).

¹²³ Julian Young, *Heidegger’s Philosophy of Art* (Cambridge: Cambridge University Press, 2001), 150-151.

¹²⁴ *Ibid.*, 151.

¹²⁵ *Ibid.*, 155.

¹²⁶ *Ibid.*, 155.

This 'flickering alteration' between abstraction and meaning occurs in 'a moment' and embodies a transformation. Young states that the crucial point lies in the transition between states, as this is where we experience 'the happening, the *Ereignis* or "worlding" of world'.¹²⁷ Thus, as we 'step back' from the abstraction, we are able to see directly the projected character of the reconstitutions. We see the being of Being as Cezanne 'thematizes' both 'presence' and 'what presences'.¹²⁸ This is the visual window through which we can glimpse the generative listening process, for if one substituted 'resound' for 'reappear', the description would remain apt.

The reciprocity between the seemingly discrete 'moments' of visual and auditory encounters of this kind suggests a unity which remains concealed when one views different artistic mediums as ontologically distinct. Significantly, Eno approaches music as a painting with sound, adding and subtracting layers and textures as one would with paint. Similarly, *77 Million Paintings* exists 'somewhere between music and painting', combining 'constantly evolving'¹²⁹ images and his painterly 'soundscapes'. Without glossing over unique capabilities of various mediums, or venturing into synaesthesia territory, I suggest that the unity which is reflected in Eno's creative practice is a result of the unifying ground, or earth, toward which the works strive and in which they find their ground. The mountain emerging from abstraction and the notes resounding just above the neighbouring environmental sounds equally raise a question in their state of semi-ambiguity regarding the infinite number of other possibilities which might form similarly in that moment. During this instant of Kierkegaard's *Augenblick*, the perceiver undergoes a shift; the earth is glimpsed as continuous, while the perceiver recognizes a discontinuity in his or her perception. As continuity and discontinuity trade places, we apprehend our appropriation into the process of bestowing meaning and its relative contingency. We receive our creative capacities as a grant.

¹²⁷ Young, *Heidegger's Philosophy*, 155.

¹²⁸ *Ibid.*, 157.

¹²⁹ 'Red Bull Music Academy Presents Brian Eno: 77 Million Paintings', *Red Bull Music Academy*, (2013), <http://www.redbullmusicacademy.com/events/new-york-2013-brian-eno-77-million-paintings> (24 August, 2013).

Alterity and Freedom

As the listener moves in a technologically induced sway between materialisation and abstraction, between being and becoming, he or she similarly moves between levels of engagement. These levels inherently involve differing points of engagement with subjectivity, and this process is that which enables novelty to manifest; music and its ensuing aesthetics can appear as new only when subjectivity is approached and acknowledged rather than automatically assumed and embodied. On one level, the listener is fully engaged with the immediate perception of the sound which is present in the moment. On a second level, the listener hears possibilities; as the organising principle of generative music lies in its process which does not manifest as an aurally discernable organisation, the listener hears the present note as one possibility leading to another rather than as part of a linear, predetermined structure. Similarly, as the pace of note generation is slow, as is consistent with ambient music, the resulting spaces between notes evoke places in which this second engagement level thrives. One has entered a way of listening which both receptive of the momentary sound and creative in the perceptual organization between the notes and the Open from which they emerge.

The ensuing novelty and creative aspects of the listening process necessarily invoke issues of alterity, as this process must contain a way for thought to transcend its own limitations. This dilemma is elucidated by Heidegger who demarcates an environmental space ontologically in which the unknown moves and operates, in which it encounters and shapes our world and our thoughts. Gadamer locates the unknown within the transformative relationship as mediated by play as it takes over the perceiver of the work of art. As such, the environment and the relationship between the work of art and the perceiver have an inherent incorporation of earth, in which the unknown lies and exerts its influence. Levinas, however, continues this dynamic while adding a third and crucial piece to the puzzle; the unknown, or infinite, lies within us as a component of the formation of being itself. Thus, as it is the unknown within us that initiates the formation of subjectivity, it must be subjectivity that subsequently must shift to allow a reconnection with the unknown that exists exteriorly.

In this way, the shift is ultimately one which occurs subjectively, and this is no easy task. As Levinas previously described, it is the 'improbable feat' of infinity to produce a revelation of alterity within a 'separated being fixed in its identity'.¹³⁰ Perhaps the improbability itself lies in the fact that subjectivity attempts to block its entrance by filtering and subsuming all that is unknown under its own categories of cognition. Thus, the mechanism through which revelation gains entrance initially must be repeated in this shift, and this occurs through radical passivity. This occurs in Heidegger's *Gelassenheit* and likewise in Eno's surrender, which can be read as an expansion of the moment of the originary face to face encounter.

Within the generative music listening encounter, a technologically manifested quasi-alterity issues a summons which signals the presence of the quasi-Other, the unknown. This summoning is a visual one for Levinas and arises with the presence of the face but to which it is also not reduced as such. For Heidegger, it is a sonic call to which one is 'listening into'¹³¹ as it issues from Being to being and initiates thinking. Eno initiates the summoning call aurally in his generative music and both visually and aurally in *77 Million Paintings*. As he does so, he both initiates a quasi-face to face encounter via technology and invites the form of surrender which transcends subjectivity as it moves beyond the realm of activity and passivity; the realm of the will is left altogether.

Thus, the experience of the people previously described in the audience of *77 Million Paintings* is situated ontologically as it is read through Heidegger, Gadamer and Levinas. They are undergoing an experience, and as such, they comprise our representative moment of generative listening and the shift which ensues; as they listen to and watch constantly evolving sounds and shapes, they are both fully in the moment of the encounter as they are taken over by the play of the work and also mentally rehearsing alterity perception by means of play. As this process of cognitive representation still lies within the realm of the will, and thus subjectivity, this is not yet fully *Gelassenheit*. Rather, as they enter the second level of engagement in which they are experiencing possibilities, they have taken the necessary step back in which they are allowing what is present in the moment to come to them and suggest the

¹³⁰ Emmanuel Levinas, *Totality and Infinity: An Essay on Exteriority*, Alphonso Lingis (trans.), (Pittsburgh: Duquesne University Press, 1994), 26-27.

¹³¹ Heidegger, *Country Path*, 47.

subsequent path for thought. In other words, as the perceiver engages with the sonic and visual configuration present in the moment, he or she then looks toward the horizon to which the configuration contributes.

The receptive approach to the horizon, one in which the will is not exercised, necessarily transforms not only the experience of the work, but also the one who experiences. In leaving the realm of the will and looking toward the horizon, the perceiver in the audience is looking away from himself or herself. Thus, when attention is subsequently redirected toward self, he or she is arriving in a new place, one which has been transformed by way of the experience. In the process, not only the perceptual structures which confer patterns of meaning onto the un-patterned sounds and images become visible but also the subjective structures which give rise to the identity and will of the perceiver. The contingency of the present configuration of being is only revealed when one looks away from it toward other possible configurations; similarly, it is only by not exercising the will that the ways in which it shapes the perceiver and thus thinking and experience is revealed. Thus, I argue that within the moment of surrender lies the key to the revealing ontological structures which determine our ways of being, and in doing so it confers the possibility of re-navigating and reconfiguring them; this is the key the freedom which transcends the danger of technology, the limitations of subjectivity, and points us toward the Being of being.

Moment of Truth

Eno's creative practice has been influenced by this process of surrender, as it is an experience which he enjoys and seeks to re-invoke through further creations. As such, the inspiration for the album *Another Green World* was inspired by a science fiction story whose plot summarizes this shift in subjectivity:

I was thinking about escaping...I read a science fiction story a long time ago where these people are exploring space and they finally find this habitable planet—and it turns out to be identical to Earth in every detail. And I thought that was the supreme irony: that they'd originally left to find something better and arrived in the end—which was actually the same place. Which is how I feel about myself. I'm always trying to

project myself at a tangent and always seem eventually to arrive back at the same place. It's a loop...You actually can't escape.¹³²

The space exploration resonates with both Heidegger's earth which grounds the world and Levinas's face-to-face encounter, in which our subjectivity is called into formation by way of the exterior presence of a radically other presence. As the planet (the Other) is reached which is preferable in its conditions to the present one, it ironically ends up to be the same. This can be read as either that the exploration enabled a new look at the present conditions which in turn appeared better through having been on the journey, or that we will only ever be able to encounter the same conditions because we are the ones who help determine their nature; we are the common denominators as such. As such, the Other was never effectively reached. In either interpretation, the journey is the necessary part in which one receives a new perspective on his or her present state of being; one had to leave Earth and re-encounter it anew in order to experience it as was. This is Levinas' separation between the same and the Other via space travel; the two Earths never merge, but the original Earth alters as it effectively becomes Other in a sense.

Like this journey to another world, every journey inevitably leads back to its origin in one form or another. This is reflective of the nature of truth, that which is set to work within us by the generative music of the present encounter. Thus, we come to understand Levinas' characterization of truth as 'rediscovery, recall, reminiscence, reuniting under the unity of apperception'.¹³³ It is reoccurring for the first time as it is re-presented in the present for both a first and second time. As the temporal shift enabled by the work and the surrender evoked enable the listener to enter into the swaying movement of genesis, the partial manifestation of truth present in each moment is recognized as such; the fragmented nature of truth is revealed and in the process we are reminded that we are not only being, we are becoming. As such, the truth lies in the process, a sonic process, and this is one in which we become co-creators once we recognize that we exist within the process rather than over it; within this process lies freedom.

¹³² Geeta Dayal, *Brian Eno's Another Green World* (New York: Continuum, 2009), 6.

¹³³ Levinas, *Totality and Infinity*, 29.

The Beginning of the End

So at the end of our path, we encounter a new space of possibilities, one in which the immanence of a revelation can conceal itself for safe keeping. The hiding is not new; it has been within being since origin and throughout its genesis. Only the hiding place is new. It is now cleverly concealed within technology. This technology has the power to pattern and subjugate our perceptions of truth, of reality, and the futural possibilities embedded in the present moment. Latent within its power is also the ability to reveal its own secrets.

Eno uses technology not to order or enframe, but to disorder, to suspend, limit, and thematize the very elements of being which it would seek to subdue. He coaxes it into mistakes and malfunctions, disperses its digital unity and abrupt certainty into a fragmentary flow of questioning. From this process, we can begin to track and trace the force of genesis again, the force which runs through our being, our world, and our ground, which ties it all together into ever-shifting, unique configurations. These configurations comprise the unity of being, the presencing and presence, of all that we hear, of all that we are, and all that we can hear that we are. As this unity fragments and rejoins, reveals and hides, it resounds. It never sounds exactly the same twice. As such, we mistakenly seek to preserve isolated fragments of it as objects of a subjective truth. In doing so, we preserve a reflection of that whose essence escapes us.

In some moments, however, we gain access to a shift, when we can see a crack in the mirror of our technological reflection which reveals the scaffolding of our present reality. We see in this framework monuments built to solidify time and our reconstructions of the faces of others. In the mirror, we see our own eyes watching infinite reflections of ourselves alone, our unity fragmented and distorted without another point of reference. During this shift, we hear the sound of the scaffolding falling away; this is the sound of music's genesis, of its origin. As we listen to the origin, we can hear echoes of the secret, a listening revelation. It manifests in our thoughts and attunes our world, earth, and being in and as music. As our existence stretches out in waiting toward this secret sound, we begin to suspect that our double desire for transformation and continuity is fulfilled in this one thing: that the saving power is not a separate entity which descends on us and saves, but rather exists within the growth

itself. Genesis. The end is thus the same as the beginning, but with a new sound. It sounds like the music of now.

Bibliography

Adorno, Theodore W., *The Jargon of Authenticity*, Knut Tarnowski and Frederic Will (trans.), (Evanston: Northwestern University Press, 1973).

Borges, Jorge Luis, *Labyrinths: Selected Stories and Other Writings*, Yates, Donald A. and Irby, James E. (eds.), (New York: New Directions, 1962).

Bracewell, Michael, *Re-Make/Re-Model: Becoming Roxy Music* (Cambridge: Da Capo Press, 2007).

Brand, Stewart, *The Clock of the Long Now* (New York: Basic Books, 1999).

Brian Eno—Another Green World, dir. Nicola Roberts, 2010, 60 min. (BBC).

Brogan, Walter, *Heidegger and Aristotle: The Twofoldness of Being* (Albany: State University of New York Press, 2005).

Cage, John, 'The Future of Music: Credo', in Cox, Christoph and Warner, Daniel (eds.), *Audio Culture: Readings in Modern Music* (New York: Continuum, 2004) 25-28.

Cormen, Thomas H. *Introduction to Algorithms* (Cambridge: MIT Press, 2001).

Davis, Bret W., *Heidegger and the Will: On the Way to Gelassenheit* (Evanston: Northwestern University Press, 2007).

Dayal, Geeta, *Brian Eno's Another Green World* (New York: Continuum, 2009).

Dostal, Robert J., 'Gadamer's Relation to Heidegger and Phenomenology', in Dostal, Robert J. (ed.), *The Cambridge Companion to Gadamer* (Cambridge: Cambridge University Press, 2002) 247-266.

Dronsfield, Jonathan, 'The Work of Art', in Davis, Bret W. (ed.), *Martin Heidegger: Key Concepts* (Durham: Acumen, 2010) 128-139.

Dreyfus, Hubert L., 'Heidegger on the Connection Between Nihilism, Art, Technology, and Politics', in Guignon, Charles B. (ed.), *The Cambridge Companion to Heidegger* (Cambridge: Cambridge University Press, 1993) 289-316.

Duckwork, William, *Virtual Music: How the Web Got Wired For Sound* (New York, Routledge, 2005).

Eno, Brian, 'Ambient Music', in Cox, Christoph and Warner, Daniel (eds.), *Audio Culture: Readings in Modern Music* (New York: Continuum, 2004) 94-97.

Eno, Brian, *Another Green World* [original recording remastered] (EMI, 99968452728, 2009).

Eno, Brian and Mills, Russell, *More Dark Than Shark* (London: Faber and Faber, 1986).

Feenberg, Andrew, *Between Reason and Experience: Essays in Technology and Modernity* (Cambridge: MIT Press, 2010).

Fusè, Adelio, 'Ambient Music', in book with Eno, Brian, *Sonora Portraits* (Italy: Materiali Sonori, 788886784146, 1999).

Gadamer, Hans-Georg, *The Relevance of the Beautiful and Other Essays*, Bernasconi, Robert (ed.) and Walker, Nicholas (trans.), (Cambridge: Cambridge University Press, 1986).

Gadamer, Hans-Georg, *Truth and Method*, 2nd rev. ed., Weinsheimer, Joel and Marshall, Donald G. (trans.), (London: Continuum, 1975).

Goffey, Andrew, 'Algorithm', in Fuller, Matthew (ed.), *Software Studies* (Cambridge: MIT Press, 2008) 15-20.

Goodman, Steve, 'Sonic Algorithm', in Matthew Fuller (ed.), *Software Studies* (Cambridge: MIT Press, 2008) 229-235.

Hassell, Jon and Eno, Brian, *Fourth World Vol. 1—Possible Musics* (EG: 07777872652, 1980).

Heidegger, Martin, *Basic Writings*, Krell, David Farrell (ed.) (London: Routledge, 2011).

Heidegger, Martin, *Being and Time*, Macquarrie, John and Robinson, Edward (trans.), (Oxford: Blackwell, 2001).

Heidegger, Martin, *Country Path Conversations*, Davis, Bret W. (trans.), (Bloomington: Indiana University Press, 2010).

Heidegger, Martin, *Early Greek Thinking*, Krell, David Farrell and Capuzzi, Frank A. (trans.), (San Francisco: Harper and Row, 1975).

Heidegger, Martin, *Introduction to Metaphysics*, Fried, Gregory and Polt, Richard (trans.), (New Haven: Yale University Press, 2000).

Heidegger, Martin, *On the Way To Language*, Hertz, Peter D. (trans.), (San Francisco: Harper and Row, 1982).

Heidegger, Martin, *Pathmarks*, McNeill, William (ed.) and Sheehan, Thomas (trans.), (Cambridge: Cambridge University Press, 1998).

Heidegger, Martin, *Poetry, Language, Thought*, Hofstadter, A. (trans.), (New York: Harper Perennial, 2001).

Heidegger, Martin, *The Question Concerning Technology*, Lovitt, William (trans.), (New York: Harper and Row, 1977).

- Heidegger, Martin, *What Is Called Thinking?*, Gray, J. Glenn (trans.), (New York: Harper and Row, 1968).
- Ihde, Don, *Technology and the Lifeworld: From Garden to Earth* (Bloomington: Indiana University Press, 1990).
- Käufer, Stephan, 'Logic', in Dreyfus, Hubert L. and Wrathall, Mark A. (eds.), *A Companion to Heidegger* (Oxford: Blackwell, 2005) 141-155.
- Knuth, Donald E. , 'Algorithmic Thinking and Mathematical Thinking', *The American Mathematical Monthly*, 92/3 (1985), 170-181.
- Levinas, Emmanuel, *Difficult Freedom: Essays on Judaism*, Hand, Sean (trans.), (Baltimore: Johns Hopkins University Press, 1990).
- Levinas, Emmanuel, *Otherwise than Being, or Beyond Essence*, Lingis, Alphonso (trans.), (Pittsburgh: Duquesne University Press, 1998).
- Levinas, Emmanuel, *Time and the Other: and Additional Essays*, Cohen, Richard A. (trans.), (Pittsburgh: Duquesne University Press, 1990).
- Levinas, Emmanuel, *Totality and Infinity: an Essay on Exteriority*, Lingus, Alphonso (trans.), (Pittsburgh: Duquesne University Press, 1994).
- Ma, Lin, *Heidegger on East-West Dialogue: Anticipating the Event* (New York: Routledge, 2008).
- Miranda, Eduardo, *Composing Music With Computers* (Burlington: Elsevier, 2001).
- Nierhaus, Gerhard, *Algorithmic Composition: Paradigms of Automated Music Generation* (New York: Springer, 2009).

- Peckham, Morse, *Man's Rage for Chaos: Biology, Behaviour and the Arts* (New York: Schocken Books, 1967).
- Richardson, William J., *Heidegger: Through Phenomenology to Thought* (New York: Fordham University Press, 2003).
- Ross, Sheila, 'The Temporality of Tarrying in Gadamer', *Theory Culture Society*, 23/101 (2006), 101-123.
- Ruin, Hans, 'Ge-Stell: Enframing as the Essence of Technology', in Davis, Bret W. (ed.), *Martin Heidegger: Key Concepts* (Durham: Acumen, 2010).
- Safranski, Rudiger, *Martin Heidegger: Between Good and Evil* (London: Harvard University Press, 1999).
- Schaeffer, Jean-Marie, *Art of the Modern Age* (Princeton: Princeton University Press, 2000).
- Scheibler, Ingrid, 'Art as Festival in Gadamer and Heidegger', *International Journal of Philosophical Studies*, 9/2 (2001) 151-175.
- Sheppard, David, *On Some Faraway Beach: The Life and Times of Brian Eno* (London: Orion, 2008).
- Shibayama, Zenkei, *The Gateless Barrier: Zen Comments on the Mumonkan*, Kudo, Sumiko (trans.), (Boston: Shambhala, 1974).
- Tamm, Eric, *Brian Eno: His Music and the Vertical Colour of Sound* (New York: Da Capo Press, 1995).
- Thomson, Iain D., *Heidegger, Art, and Postmodernity* (New York: Cambridge University Press, 2011).

Whittaker, David, *Stafford Beer :A Personal Memoir* (Oxon: Wavestone Press, 2003).

Wrathall, Mark A., 'Unconcealment', in Dreyfus, Hubert L. and Wrathall, Mark A. (eds.), *A Companion to Heidegger* (Oxford: Blackwell, 2005), 337-357.

Young, Julian, *Heidegger's Philosophy of Art* (Cambridge: Cambridge University Press, 2001).

Internet Sources

Babich, Babette, 'Mousike techne: The Philosophical Practice of Music in Plato, Nietzsche, and Heidegger', *Articles and Chapters in Academic Book Collection*, Paper 23, (2005), 205 http://fordham.bepress.com/phil_babich/23.

Bangs, Lester, 'Lester Bangs Interviews Eno', *Hyperreal*, (1979), http://music.hyperreal.org/artists/brian_eno/interviews/musn79.html.

Bezos, Jeff, '10,000 Year Clock', *10,000 Year Clock*, <http://www.10000yearclock.net/index.html>.

Brand, Stewart, 'About Long Now', *Long Now Foundation*, (1996), <http://longnow.org/about/>.

'Brian Eno: Constellations: (77 Million Paintings)', *Baltic Mill*, (2007), <http://archive.balticmill.com/index.php?itemid=37632&fromsearch=brian%20eno&position=0&numresults=69&start=&tab=>.

'Brian Eno Interview—Constellations (77 Million Paintings)', *Synthtopia*, (2009), <http://www.synthtopia.com/content/2009/02/16/brian-eno-interview-constellations-77-million-paintings/>.

'Brian Eno: The Philosophy of Surrender', *The Polymath Perspective*, (2009), <http://www.polymathperspective.com/?p=9>.

- Brockman, John, 'A Big Theory Of Culture: A Talk With Brian Eno', *Edge*, (1997),
<http://www.edge.org/conversation/a-big-theory-of-culture>.
- Brown, Paul, 'Is the Future of Music Generative?', *Music Therapy Today (online)*, 6/2
(2005), 215-274, <http://musictherapyworld.net>.
- Coon, Caroline, 'Brian Eno', *Hyperreal*, (1977),
http://music.hyperreal.org/artists/brian_eno/interviews/ritz77.html.
- Dalle Pezze, Barbara, 'Heidegger on *Gelassenheit*', *Minerva*, (2006),
<http://www.minerva.mic.ul.ie//vol10/Heidegger.html>.
- Driver, Dustin, 'Brian Eno: Let There Be Light', *Dustin Driver*,
<http://www.dustindriver.com/apple-pro/apple-pro-eno.pdf>.
- Eno, Brian, 'Composers as Gardeners', *Edge*, (2011),
<http://edge.org/conversation/composers-as-gardeners>.
- Eno, Brian, 'Discreet Music', *Hyperreal*, (1975),
http://music.hyperreal.org/artists/brian_eno/discreet-txt.html.
- Eno, Brian, 'Generative Music', *In Motion Magazine*, (1996),
<http://www.inmotionmagazine.com/eno1.html>.
- Eno, Brian, 'Oblique Strategies', *Hyperreal*,
http://music.hyperreal.org/artists/brian_eno/oblique/oblique.html.
- Eno, Brian, 'The Revenge of the Intuitive', *Wired*, (1999),
<http://www.wired.com/wired/archive/7.01/eno.html>.
- Eno, Brian, 'Singing: The Key to Life', *NPR*, (2008),
<http://www.npr.org/templates/story/story.php?storyId=97320958>.

Eno, Brian, 'A Talk Delivered in San Francisco, June 8, 1996', *In Motion Magazine*, (1996), <http://www.inmotionmagazine.com/eno1.html>.

Eno, Brian, 'Transcript of Brian Eno's BBC World Service Interview', *Hyperreal*, (1997), http://music.hyperreal.org/artists/brian_eno/thedrop.html.

Flint, Tom, 'Brian Eno: The Philosophy of Surrender', *More Dark Than Shark*, (2009), http://www.moredarkthanshark.org/eno_int_sandr-jan09.html.

Galanter, Philip, 'What is Generative Art? Complexity Theory as a Context for Art Theory', (2002), http://www.philipgalanter.com/downloads/ga2003_paper.pdf.

Grant, Steven, 'Brian Eno Against Interpretation', *Hyperreal*, (1982), http://music.hyperreal.org/artists/brian_eno/interviews/troup82a.html.

Higgins, Charlotte, 'Eno Helps Solve the Purpose of Art', *Guardian*, (2010), <http://www.guardian.co.uk/culture/2010/jan/26/london-centre-arts-cultural-exchange>.

Jeffries, Stuart, 'Surrender. It's Brian Eno', *Guardian*, (2010), <http://www.guardian.co.uk/music/2010/apr/28/brian-eno-brighton-festival>.

Kelly, Kevin, 'Gossip is Philosophy', *Wired*, (1995), <http://www.wired.com/wired/archive/3.05/eno.html>.

Korner, Anthony, 'Aurora Musicalis', *Hyperreal*, (1996), http://music.hyperreal.org/artists/brian_eno/interviews/artfor86.html.

Lederman, Marsha, 'Brian Eno's Mind Altering Experience (in Calgary)', *The Globe and Mail*, (2011), <http://www.theglobeandmail.com/arts/brian-enos-mind-altering-experience-in-calgary/article560715/>.

Lubow, Arthur, 'Brian Eno', *People*, (1982),

<http://www.people.com/people/archive/article/0,,20083291,00.html>.

Mallet, Franck, 'In the Enosphere', *Hyperreal*, (2001),

http://music.hyperreal.org/artists/brian_eno/interviews/artpress01.html.

McCormack, John and Dorin, Alan, 'Art, Emergence, and the Computational Sublime',

(2001), <http://www.csse.monash.edu.au/~jonmc/research/Papers/art-2it.pdf>.

Merton, Paul, 'Paul Merton's Hour of Silence', *Enoweb*, (2005), <http://enoweb.co.uk/>.

Mills, Robert, 'My Ever Changing Moogs', *Hyperreal*, (1996),

http://music.hyperreal.org/artists/brian_eno/interviews/qmag96b.html.

Ray, David, 'Oblique Strategies', *Hyperreal*,

http://music.hyperreal.org/artists/brian_eno/oblique/oblique.html.

'Red Bull Music Academy Presents Brian Eno: 77 Million Paintings', *Red Bull Music*

Academy, (2013), <http://www.redbullmusicacademy.com/events/new-york-2013-brian-eno-77-million-paintings>.

Shachtman, Noah, 'New Eno Music Gets "Generative"', *Wired*, (2001),

<http://www.wired.com/culture/lifestyle/news/2001/10/47670>.

Sinker, Mark, 'Taking Modern Culture By Strategy', *Hyperreal*, (1992),

http://music.hyperreal.org/artists/brian_eno/interviews/wire92.html.

Sisario, Ben, 'Pushing Back the Limits of Speech and Music', *The New York Times*,

(2011), <http://www.nytimes.com/2011/07/05/arts/music/brian-eno-and-rick-holland-release-drum-between-the-bells.html>.

Steadman, Ian, 'Brian Eno on Music That Thinks For Itself', *Wired*, (2012),
<http://www.wired.co.uk/news/archive/2012-09/28/brian-eno-peter-chilvers-scape>.

Thomson, Iain, 'Heidegger's Aesthetics', *The Stanford Encyclopedia of Philosophy (Summer 2011 Edition)*, Edward N. Zalta (ed.),
<http://plato.stanford.edu/archives/sum2011/entries/heidegger-aesthetics>.

Tingen, Paul, 'Brian Eno', *Audio Technology*, (2005),
http://www.audiotechnology.com.au/PDF/FEATURES/AT42_Brian_Eno.pdf.

Williams, Richard, 'The Brain of Brian', *Hyperreal*, (1996),
http://music.hyperreal.org/artists/brian_eno/interviews/guard96a.html.