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Eco-Visionary Media: Art as Activism in Björk's Audiovisual Production

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Eco-Visionary Media: Art as Activism in Björk's Audiovisual Production

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An abstract of a dissertation submitted to the Faculty of the James T. Laney School of Graduate Studies of Emory University in partial fulfillment of the requirements for the degree of Doctor of Philosophy Institute of Liberal Arts 2020

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Icelandic artist Björk conceived of her *Biophilia* project, which included an album, accompanying videos, a three-year world tour, interactive musical apps, and educational software, as a means of encouraging an intimate relationship with sound, increasing public receptivity to music, and triggering a corresponding desire to care for the natural world. Believing that nature is the ultimate source of all music, Björk hoped her musical endeavors would result in a renewed love for, and more intimate relationship with, the vast spectrum of life as we know it. If successful, Björk's visionary project would radically alter the sensory perception of her audience, and in so doing, reawaken the human sensitivity to the natural world.

Nearly the entirety of Björk's career as a popular musician has been punctuated by environmental activism in one form or another, making her an excellent subject through which to examine questions pertaining to the function of popular media generally, as well as their potential as technologies of environmental activism. The variety and scope of her work invites analysis from diverse aesthetic and philosophical positions. I draw on Arthur Schopenhauer and Wassily Kandinsky's framing of art as a revelatory device, while exploring parallels between Henry Thoreau's insistent materialism and the literary device of estrangement. Jane Bennet's vitalist treatment of matter informs my approach to Björk's music videos, a format often overlooked, but one ideally suited to her activist intent. Björk's audiovisual production may thus contribute to scholarship in the emerging field of ecomusicology.

Released in 2017, Björk offers her latest album *Utopia* as a proposal to unite technology and nature through the creation of a utopian model accessed through the vivid audiovisual spaces she has created. Ernst Bloch's work on the subject of utopian envisioning is therefore of particular interest for this study. This dissertation asks whether Björk's music, particularly when coupled with visual technologies, imagines a future that might come into being though this same act of imagining.

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I know that my mother Carol would have delighted in reading this dissertation. She was profoundly sensitive to art and music, and she took great joy in the beauty she saw in all living things. I am forever grateful for her having shared these passions with me. I dedicate this dissertation to her memory.

Table of Contents

Introduction	1
1. Avant-Gardes and Activism	16
2. The Ubiquity of Music: Practices of Listening in the Absence of Silence	. 38
3. Sonic Culture and the Function of Music in a Visual Age	66
4. Ecomusicking	92
5. Forward to Nature	118
Conclusion	142
Bibliography	158

Introduction

As society begins to decline and break down in the face of imminent effects of climate change and ecological collapse, then we are going to have to ask ourselves what the actual purpose of art is.

William Skeaping, Extinction Rebellion¹

The New Yorker published a provocative article by Jonathan Franzen in 2019 titled "What if We Stopped Pretending?" that gives a voice to the quiet fears of many involved in environmental activism.² Franzen condemns what he considers to be instances of unrealistic hope in response to impending climate disaster, which he characterizes as unavoidable at this stage. Given worldwide inaction in the face of irrefutable scientific evidence, he writes, we are left with two choices: "You can keep on hoping that catastrophe is preventable, and feel ever more frustrated or enraged by the world's inaction. Or you can accept that disaster is coming, and begin to rethink what it means to have hope." More troubling for this study, Franzen asserts that "a false hope of salvation can be actively harmful."³ The language of hope that Björk employs throughout her 2017 Utopia project may, according to Franzen's ideology, be unethical. If we are already doomed to the predicted climate apocalypse, are efforts to combat it not only pointless, but also potentially harmful? He continues," And then there's the matter of hope. If your hope for the future depends on a wildly optimistic scenario, what will you do ten years from now, when the scenario becomes unworkable even in theory?"⁴ Following this logic, we ought to be investing our time and energy on disaster preparedness rather than fruitlessly struggling to recycle more plastic.⁵

This dissertation asks whether Björk's use of art as a mechanism of revolutionary action might prove effective as a method of environmental activism. I chose Björk as the subject through which to ask such questions because her nearly thirty-seven years as a solo artist have been characterized by innovative and often challenging presentations of the human relationship to the natural world. Björk grew up in the dramatic landscape of Reykjavík, Iceland, a fact to which she attributes a great deal of musical inspiration. As a child she spent a lot of time out of doors exploring the rugged hills and desolate beaches, singing at the top of her lungs through the roaring winds of the Icelandic winters. At the age of five she enrolled in the Icelandic Conservatory of Music where she remained until the age of fifteen. There she was introduced not only to the expected repertoire of classical composers, but also to the work of avant-garde and minimalist composers such as Karlheinz Stockhausen and John Cage whose work greatly appealed to her experimental nature.⁶ Her remarkable vocal abilities were identified very early, and she recorded her first self-titled album at eleven years of age. As might be expected, the album consisted mostly of covers, but as a teenager, Björk's enthusiastic embrace of jazz and punk rock allowed her to create some of the most genuinely original music to have come out of Iceland.7

At the age of fifteen, Björk set out on her own to dedicate her young life full-time to making music. "I got the feeling that time was running out," she recalls, "that there were all these things happening out there and I was missing them."⁸ She gained local notoriety through her role as vocalist in two of Iceland's best-known punk-inspired bands: Tappi Tikarrass and KUKL, the latter of which would eventually spawn the Sugarcubes.⁹ Thanks to some unexpected press in *Melody Maker* magazine, the Sugarcubes' first single, "Birthday," thrust the band upon an international audience ready to embrace their playful indie rock sensibilities. Released on friend Derek Birkett's new label One Little Indian in 1988, the popularity of their debut album *Life's Too Good* afforded Björk the opportunity to travel the world. The group recorded and played together for six years, but they never matched the success of their first offering. During this time, Björk's already eclectic musical interests had expanded to include the British dance music scene, complete with its drum machines and electronic keyboards. Eager to weave her diverse tastes into a signature sound, Björk set out on her own, moving to London in 1993 and releasing *Debut* – the album that would make her a household name – later that same year.

The combination of avant-garde artistry, exuberant sexuality, and infectiously catchy pop melodies that characterized *Debut* won Björk nearly universal accolades. Her unmatched proclivity for identifying and securing collaborators – be they video artists, musicians, or photographers – resulted in a look and sound unlike anything that had come before her. Thus would begin her solo career which, as of the start of 2020, has yielded nine full-length albums, an appearance at the 2004 Olympic Games opening ceremony, Academy Award and Golden Globe nominations for Best Original Song, and fifteen Grammy nominations. Her extraordinary music videos helped transform the medium from a largely commercial format to a new art form in its own right, and introduced Iceland as a new cultural epicenter. As this dissertation will demonstrate, Björk's audiovisual output throughout the course of her career has taken on an increasingly activist character. Whether blurring the boundaries between human, animal, and mechanical life in her videos or launching a full-fledged educational program as she did with 2011's *Biophilia*, Björk has consistently used her artwork as a technology of environmental activism. What Jonathan Franzen seems to suggest is that not only has she been misguided in her efforts, but more importantly, that the fight is already lost.

The chapters that follow will chronicle Björk's endeavors as an artist and activist. Her approaches to "nature" range from the pastoral to the cyborgian, exhibiting a willingness to explore all available philosophical and scientific avenues as she envisions forms of environmentalism that challenge conventional notions of ecosystems and the human experience therein. At one moment, she exuberantly celebrates the flora and fauna of the Earth, playfully anthropomorphizing her subject matter. In other instances, she turns her attention to the latent potential of technological systems to participate in the greater network of life. Her approach is thus potentially plagued with inconsistency, but it is this very tension that best characterizes her environmentalist work.¹⁰ Her most recent project insists on the necessity of creative envisioning as a means of bringing about a world in which such relationships might flourish, to the benefit of all. Björk thus refuses to abandon hope, even in this time of seemingly inescapable crisis, and she continues to employ novel strategies in her fight for a brighter future.

If utopian projects do indeed function by virtue of the hope that fuels them, as Ernst Bloch suggests, do they offer a way forward, or do they act as elixirs of sorts, masking the futility of the situation at hand? Franzen's argument hinges on the idea that the kinds of immediate, radical changes necessary to stave off the worst of the impending environmental collapse lie beyond the scope of human will to implement them. It is true that the human capacity to adapt to adversity often appears greater than its ability to foresee and to prevent hardship from occurring in the first place. But might it not be a failure of the collective imagination that is in part to blame? In her book *Eco-Republic*, Melissa Lane argues that this may very well be the case.¹¹ Lane believes that the reason readily available technologies are not embraced, and necessary legal plans are not implemented in the battle against climate change, is that first we need "enough individuals with the new vision and values to give politicians courage, and political cover, to act."¹² She points out that regulations can feel like tremendous sacrifices if they do not already appeal to a public's habits and desires. "Imaginative transformation" is a necessary prerequisite toward wider implementation.¹³ Individuals must first be able to imagine a different way of being if they are to make the effort to realize it. Toward this end, Lane proposes that we need a new mythology, noting that this is the lament of both financial and environmental leaders today.¹⁴ What she means is that we need to reconsider the basic units of value and meaning which we perceive and in light of which we reason. As I demonstrate throughout this dissertation, art may be uniquely situated to perform such a task.

In his fascinating study of ecocriticism and popular music, David Ingram examines the legacy of environmentally focused music in an effort to document and assess their various aims and strategies. He observes that the potential problem with overt messages in the socialist realist variety, a category into which *Biophilia* might comfortably fit, is that an audience may feel that it has done its duty by simply listening to it.¹⁵ Ingram explains, "Yet the crucial question of agency, of how an artistic subculture of musicians and their audiences might connect with wider social or political movements, including those in defense of the environment, remains vague."¹⁶ As we will see in Chapter Five, anthropologist Mark Pedelty argues that the activist function of music remains largely an act of faith. What I will argue in this dissertation is that, regardless of a potentially flawed philosophy or lack of scientific evidence for the effectiveness of artistic projects, the human emotional response to music is undeniable. In Chapter Two, Anihid Kassabian observes that music produces bodily responses in the listener that translate directly into emotions. It is this affective potential of environmentally focused art that inspires the desire for action and cultivates the imagination necessary to carry it out. Certainly, as Ruth Levitas observes, it is "something of a last resort to require artistic production to be *the* source of transformative energy in society."¹⁷ "Yet the idea that [art] prefigures a better society," Ingram notes, "including a better relationship between human beings and the natural world, is an attempt to account for the profound effect that music has on its listeners."¹⁸ Such is the task of ecomusicology in the twenty-first century. Whether music itself might tangibly contribute to a healthier Earth remains to be seen, but there is undeniably meaning in the act of creation.

Jonathan Franzen believes that we need to scale back our expectations, but that we should nevertheless continue to do good work for the sake of it. Just as Peter Singer has argued that we should act ethically even if individual actions cannot and will not make any meaningful difference in the face of institutionalized abuses in the factory farming industry,¹⁹ Franzen urges us to delight in small environmental victories:

Keep doing the right thing for the planet, yes, but also keep trying to save what you love *specifically* – a community, an institution, a wild place, a species that's in trouble – and take heart in your small successes. Any good thing you do now is arguably a hedge against a hotter future, but the really meaningful thing is that it's good today.²⁰

I agree that it is important not to understate the situation in which we find ourselves. As I write these words, well over one billion animals are estimated to have perished in the uncontrolled wildfires ravaging Australia. Climate disaster is not a threat in the distant future; it is upon us today. Timothy Morton makes a strong case for changing our approach to making art in the service of the environment. He writes:

All those apocalyptic narratives of doom about the 'end of the world' are, from this point of view, part of the problem, not part of the solution. By postponing doom into some hypothetical future, these narratives inoculate us against the very real object that has intruded into ecological, social, and psychic space.²¹

Here I see Björk doing work Morton might approve of. Both her *Biophilia* and *Utopia* projects are creative imaginings of a present space in which natural forces and objects are celebrated and made magical. She creates spaces in which humans might experience the immediate sensations of ecology and biology, while at the same time positing an imaginary world to come. If the scientific consensus on climate change is any indicator, utopian envisioning is not only a viable option – it may be our best option.

In Chapter One I introduce avant-garde approaches to art and performance which situated the spectator at the center of creativity and meaning, permitting a far more active role for audiences than what had come before and encouraging action rather than contemplation. Through innovative approaches to the creation and presentation of multiple art forms, avant-garde artists established new ideas about beauty, creativity, and the functionality of art. By turning their attention to the sights and sounds of modern life, the Italian Futurists hoped to retune their public to the beauty of their immediate environments. The sheer diversity of media and formal techniques employed by futurist artists and performers contributed to the movement's explosion across the globe, but so too did the less tangible resonance of its energy. Ultimately, the procreative potential of the ideology that manifested itself in so many disparate ways was propelled throughout time and place as a kind of energy. At the same time, Russian artist Wassily Kandinsky united sound and vision in his abstract paintings in an effort to communicate on a direct spiritual level with his audiences and thereby to inspire a transformation in their fundamental values. As I explain at some length in Chapter One, Kandinsky developed an aesthetic philosophy rooted in what he identified as the resonant properties of color and form. His approach to composition was guided by a belief that pictorial content contained within it specific vibrations that would stimulate corresponding responses in the souls of his viewers. As such, Kandinsky's aesthetic theories are helpful in visualizing the process through which utopian envisioning might make real the future it conceives. Life would not imitate art; rather, it would rise out of art. In this way, art might create its own utopia. The new developments in art and music that emerged during this period called into question the cultural and political values upon which modern societies were built, enabling the public to imagine new ways of being in the world. Thus would the experience of art mobilize and empower individuals to revolutionary action.

In order to understand the ways in which Björk's music might act as a tool of environmental activism, Chapter Two explores the ways in which music, and sound more generally, has been understood to act on the human listener. I also discuss the technologies and strategies of the recording industry in an effort to find a place for revolutionary action within mainstream culture. While Björk undeniably achieved pop superstardom at the height of her career, she also managed to navigate the nebulous distinction between mainstream appeal and artistic credibility. The tension between "high art" and popular culture has existed for centuries, and avant-garde movements worked hard to render the two indistinguishable. Björk's mastery of the still-emerging medium of the music video permitted her the platform that an artist such as Kandinsky could never have imagined, enabling her to bring her art to a mass audience.

Chapter Three is devoted to exploring the complex relationship of sound and vision in Björk's work, beginning with her origins in the Icelandic punk rock scene. Caught in the immovable power structures of the day, the suffocating crush of the mundane, and the banality of civilizations' sacred institutions, punk revolutionaries shouted the news of new possibilities. As Greil Marcus succinctly explains, "If nothing was true, anything was possible."²² Unlike many of the artistic movements that came before it, punk was bound by no unifying ethos, save that of an insistent individualism and general contempt for the status quo. Björk took full advantage of the freedom permitted by the format, emerging as one of the most unique musicians in Iceland at the time. The D.I.Y. values instilled during her forays into punk rock equipped her with the ambition to overcome obstacles and the self-confidence to trust her instincts. These qualities would carry over into her work as an environmental activist on the ground in Iceland as well as through her audiovisual work in the studio and on stages throughout the world.

As exemplified by anarcho-punk collective Crass, the communities that formed around punk rock performances participated in a kind of world-creation of their own, imagining better lives and then bringing them into being, even if only for a brief time. Like many avant-garde undertakings, punk rock projects were not intended to last in any concrete way. As manifestations of protest and transcendence, their contributions should not be measured in terms of success or failure. What they offer is art as direct action, as a replacement for the armed conflicts or political rhetoric at the heart of many historical revolutions. Hakim Bey identifies these intense moments of collective outcry as "Temporary Autonomous Zones," characterizing them as "an uprising which does not engage directly with the State, a guerilla operation which liberates an area and then dissolves itself to re-form elsewhere/elsewhen."²³ Thus, the very entropy built into these projects ensures their continual vitality. Their reverberations remain long after the players have disbanded, creating ruptures in the social fabric and manifesting themselves in unexpected places.

As a musician and artist, Björk intuitively grasps connections between the natural world and the sounds and images with which she composes her work. In Chapter Four, I examine several of her songs in the context of the emerging field of ecomusicology, a discipline which seeks to answer how and to what extent nature and music might inform one another, and in what ways this union might promote a healthier ecosystem. Fundamental to the creation of music as a method of environmental activism is the idea that our current climate crisis is as much the result of a failure of culture as it is of politics. Ecomusicologists hope that music might bring the human listener into a relationship of co-presence with the natural world, and in so doing, experience the spaces of the Earth anew. With this in mind, I discuss Björk's work in the fight to preserve her beloved Icelandic wilderness as well as to promote ecological sensitivity throughout the world.

Perhaps the most promising function of art from a utopian perspective lies in its ability to call attention to aspects of the world habitually overlooked in our daily routines, or as Viktor Shklovsky described it, its capacity for estrangement. Shklovsky believed that to walk through life without observing one's surroundings was not to have lived at all. He writes, "And so, held accountable for nothing, life fades into nothingness. Automatization eats away at things, at clothes, at furniture... and at our fear of war."²⁴ While new technologies facilitate communication and access to information at once unimaginable speeds, some fear that our preoccupation with our screens may have a similar effect. As personal listening and viewing devices increasingly govern our daily activities, it has become all too easy to lose sight of the creatures and materials that comprise the world in which we live, obscuring our connection to the greater network of life on Earth. Digital art forms combat this tendency by reinserting an audience of individuals into a greater collective through the very media that threatened to isolate them. The autonomy to remake space through the use of personal listening devices permits the free play of imagination so vital to finding a way "forward to nature," as Björk insists we must do.²⁵

Chapter Five will consider the art and technology Björk employed throughout her epic *Biophilia* project, with a particular focus on the audiovisual aesthetics of the apps through which the album was initially released and accompanying music video suite. By exaggerating or abstracting that which is commonplace through her ecstatic celebration of everyday natural processes in her *Biophilia* videos, art may stimulate public interest in its own environment simply by presenting it in a novel way. This idea supports Jane Bennett's appeal for an enchantment of everyday life, yet another of art's most powerful capabilities. Bennett saw the potential for enchantment even in the most mundane areas of popular entertainment such as televised advertisements, arguing that such sources might be used to fuel an ethical will.²⁶ The capacity for enchantment is of vital importance for Bennett because "the more aware of wonder one is – and the more one learns to cultivate it – the more one might be able to respond gracefully and generously to the painful challenges posed by our condition as finite beings in a turbulent and unjust world."²⁷ Scholars in the field of ecomusicology argue that, of all the art forms, music is ideally situated to reestablish a connection between the human and natural spheres, owing in large part to its ability to establish or to recall a sense of place. As I will discuss in Chapter Five, Aaron Allen proposes that ecomusicology is also a vital component in the cultural study of our current environmental disaster:

The environmental crisis is not just a crisis of science (failed engineering), but also a crisis of culture (failed thinking), so we need to muster all possible humanistic and scientific resources in order to imagine, understand, and confront it... Ecomusicology, as with ecocriticism, contributes to understanding the cultural roots of the environmental crisis – and promoting change.²⁸

I argue that Björk is doing the kind of work that Allen proposes with her *Biophilia* and *Utopia* projects, both through her imaginative presentation of current and future biology and also through her use of multiple technologies as a means of promotion and education. However, the question of efficacy remains. Franzen argues that our efforts would be better served through focused, local actions rather than efforts to save the planet, as it were. Björk's Náttúra campaign, limited as it was to environmental concerns specific to Iceland, would fit this description, but it still relies upon audience action to continue long after the performance has finished.

Whereas Bloch dismissed the visionary potential of lyrical music, deeming it too literal to function as an effective mechanism of utopian creation, my concluding chapter will argue that the synthesis of audiovisual elements in the format of the music video facilitates a more complete sensory engagement than instrumental music could produce on its own. This level of engagement is necessary if one is to enter into the digital spaces of contemporary musical production, guiding one's focus and presenting new worlds in the process of creation. The video for Björk's first solo release "Human Behavior," which I introduce in Chapter One, serves as a textbook example of estrangement and enchantment in popular media.

Björk's playful approach to the position of the human in the world remains a recurring theme even in her most recent output. The video for *Utopia* locates its human musicians in a fantastical landscape of glistening pink flora among which curious animals scuttle and glide. While initially quite foreign, Björk's "future island," as she calls it, begins to look familiar as the video progresses. Orchids and crustaceans are recognizable amongst what appears to be a bed of spawning coral, as fish soar past on wings resembling sea grass. If this is her utopian vision for the Earth, as her lyrics suggest, it appears to have arisen from a bizarre comingling of ecosystems.²⁹ "I guess in my far-fetched humor it serves as some sort of warning," she explains.³⁰ After an environmental collapse, she continues, "we might become mutants made from collisions between plants, birds and humans."³¹ Even in this "post-apocalyptic scifi tale,"³² the vital connections between all life on Earth are reinforced through their strangely magical presentation. Art's ability to awaken our senses, remaking the world in which we already live, is a compelling argument for the necessity and efficacy of art as a driver of social change.

Notes to Introduction

¹ Kate Brown, "Climate Activists From Extinction Rebellion Are Planning Protests During Art Basel Miami Beach," *Artnet* (December 3, 2019),

https://news.artnet.com/market/extinction-rebellion-art-basel-miami-beach-1718208. ² Jonathan Franzen, "What If We Stopped Pretending the Climate Apocalypse Can Be Stopped?" in *The New Yorker*, September 8, 2019.

https://www.newyorker.com/culture/cultural-comment/what-if-we-stopped-pretending.

³ Franzen, "What If We Stopped Pretending?"

⁴ Franzen, "What If We Stopped Pretending?"

⁵ David Wallace-Wells appears to echo many of Franzen's sentiments in his unavoidably bleak assessment of climate change and the lack of human action to combat it, *The Uninhabitable Earth: Life after Warming* (New York: Tim Duggan Books, 2019).

Among the many mistakes made by the most well-intentioned among us is the tendency to focus our efforts on the detritus of our lifestyle rather than the lifestyle itself. He uses the recent obsession over plastic straws to illustrate his point.

⁶ For detailed accounts of Björk's early life and work, see Mark Pytlik, *Bjork: Wow and Flutter* (Toronto: ECW Press, 2003) and Nicola Dibben, *Björk* (Bloomington & Indianapolis: Indiana University Press, 2009).

⁷ In 1979, at the age of thirteen, she drummed for an all-female band called Spit and Snot and then joined a new wave quartet named Exodus. She eventually quit school and moved in and out of her parents' houses before leaving for good at fifteen. ⁸ Pytlik, 13.

⁹ Björk, Einar Ørn, Einer Melax and Sigtryggur Baldursson of KUKL, along with Þór Eldon, Bragi Ólafsson, and Margrét "Magga" Örnólfsdóttir, formed the Sugarcubes in 1986.

¹⁰ A further potential inconsistency, one beyond the scope of this dissertation, is the sizable carbon footprint that the extensive touring and elaborate stage production characteristic of Björk's projects surely entails. This is also not to mention the material production of her albums and their accompanying packaging.

¹¹ M. S. Lane, *Eco-Republic: What the Ancients Can Teach Us about Ethics, Virtue, and Sustainable Living* (Princeton, NJ: Princeton University Press, 2012).

¹² Lane, 10.

¹³ Lane, 11.

¹⁴ Lane, 9.

¹⁵ David Ingram, *The Jukebox in the Garden: Ecocriticism and American Popular Music since 1960* (Amsterdam: Rodopi, 2010), 108.

¹⁶ Ingram, 240.

¹⁷ Quoted in Ingram, 240.

¹⁸ Ingram, 240.

¹⁹ Peter Singer, Animal Liberation (New York: Avon Books, 1977).

²⁰ Franzen, "What If We Stopped Pretending?"

²¹ Timothy Morton, *Hyperobjects: Philosophy and Ecology after the End of the World* (Minneapolis: University of Minneapolis Press, 2013), 103-104.

²² Greil Marcus, *Lipstick Traces a Secret History of the Twentieth Century* (Cambridge: Harvard University Press, 1990), 6.

²³ Quoted in Peter Webb and John Lynch, "'Utopian Punk': The Concept of the Utopian in the Creative Practice of Björk," in *Utopian Studies* 21, no. 2 (2010): 318.

²⁴ Viktor Shklovsky, *Theory of Prose* (Champaign, IL: Dalkey Archive Press, 1990), 5. ²⁵ Nicola Dibben, "Music and Environmentalism in Iceland" in *The Oxford Handbook of Popular Music in the Nordic Countries*, edited by Fabian Holt and Antti-Ville Kärjä, Oxford Handbooks Online (New York: Oxford University Press, 2017), 172.

²⁶ Jane Bennett, *The Enchantment of Modern Life: Attachments, Crossings, and Ethics* (Princeton: Princeton University Press, 2001). See especially the "Swinging Khakis" section of Chapter Six, 111-114.

²⁷ Bennett, 160.

²⁸ Aaron S. Allen, "Ecomusicology from Poetic to Practical," in Hubert Zapf, ed., *Handbook of Ecocriticism and Cultural Ecology* (Berlin: De Gruyter, Inc., 2016), 644.
²⁹ "Utopia is not elsewhere. It is here." Björk, *Utopia* (London: One Little Indian, 2017).
³⁰ Björk, *Björk's Cornucopia*, tour book (Wellhart/One Little Indian, 2019), 37.

³¹ Björk, *Björk's Cornucopia*, 37.

³² Björk, Björk's Cornucopia, 37.

Chapter One

Avant-Gardes and Activism

The release of Björk's seventh full-length album in 2011 marked one of the most ambitious projects of environmental activism by a popular musician to date. Not only were each of *Biophilia's* ten songs inspired by the natural world, but many of the instruments used in their creation were invented specifically for the album to demonstrate or celebrate natural phenomena. Her aim with the Biophilia project was vast in scope: to utilize the transformative potential of sound and music to instill a desire in her listeners to care for the Earth. Such an undertaking hinges on a belief in the efficacy of music to directly inspire action on the part of an audience. Why would Björk believe that a commercial artistic endeavor might have such revolutionary potential? More to the point, what can art hope to do for the environment? In this chapter, I will take a look at a few artists and musicians whose creations were intended to function similarly, and I will introduce Björk's audiovisual work as a continuation of this tradition.

If I am to tackle the question of how Björk's art might be used in the service of the environment, it may help to identify the kinds of work that art has been expected to perform more broadly in recent history. Beginning roughly at the start of the twentieth century, the form and function of art underwent a dramatic transformation as artists began to conceive of themselves as revolutionary leaders bent on a complete overhaul of society. I refer to this period as the moment that art became self-aware, as art took on a new and very active role as an agent of cultural and political change. If the new, subversive possibilities of art began to take shape in Impressionist and Symbolist circles huddled in coffee houses or cabarets, Italian Futurism can be seen as the artistic singularity that launched a thousand movements. My intention is not to trace the lineage of the avant-garde, movement by movement, from Futurism to punk rock, and thus to Björk.¹ Rather, I begin with this period of artistic flourishing because the belief in the artistic capacity for affective communication and human transformation that it spawned, as well as the strategic employment of artistic devices as a means of achieving a desired end, are manifest in the output of artists such as Björk today.

This power of art over its public was most convincingly demonstrated with the advent of the moving picture. Once sound was added to image, art was easily employed as a mechanism of social and political control. The popularity of talking pictures ushered in an era of political propaganda unmatched in human history. Walter Benjamin famously warned that Fascism loomed in the movie houses of Europe, but that Socialists might be wise to utilize the medium to promote their own agendas. The marriage of catchy, succinct musical compositions with intense bursts of imagery have proven tantalizing to eager audiences. Arguably, the work of art in today's culture functions most effectively as a tool of advertising, but the music video – the format that launched Björk's career – may also be studied in these terms. The undeniable appeal of a painting or a piece of music, however, lies not in its spectacular qualities, but in the highly personal emotional response of its audience.

Philosopher Timothy Morton likens the function of art to Einstein's famous characterization of quantum theory, referring to it as "spooky action at a distance." He explains, "It makes things happen without needing to touch things."² Without warning and without a clear explanation, a work of art can stimulate memory, incite violence, inspire awe, or trigger a cascade of further emotional responses in the viewer. Perhaps to an even greater extent than visual art, music enraptures mind and body, transfixing its audience in the mood of its making. For neurologist and naturalist Oliver Sacks, the love of music is an intrinsic quality of the human species. He argues that we are just as much a musical species as we are a linguistic species, pointing out that Darwin believed language to have arisen from music in proto-humans. "Our auditory systems, our nervous systems, are indeed exquisitely tuned for music," he observes.³ Thus, it is imperative that we treat a work of art as a highly charged, vital creation, one capable of acting upon individuals or entire groups of people in a variety of ways. The question at hand is, can a work of art or a piece of music be used to further a specific environmental agenda? Does an artist such as Björk stand any chance of achieving her activist aims?

The belief in the transformative potential of the arts fueled the explosion of artistic alliances at the beginning of the twentieth century known collectively as the avant-gardes. Characterized by a relentless drive to innovate and an often aggressively irreverent approach to traditional art forms, avant-garde movements exploded amidst a flurry of manifestos and isms. The Italian Futurists in particular identified the potential for a transformation in the arts to trigger a corresponding change in the population at large. Their relentless multi-sensory assault was designed to awaken dormant creative impulses in the Italian population, igniting a political and cultural revolution through novel artistic expression. As an aesthetic, Futurism was very often difficult to implement in a consistent or practical way. Rather, the life force that animated the movement proved infectious, seeming to generate nearly as many new manifestos as art objects. Futurism was in the air in a more palpable way than it was in an artist's canvas or a poet's verse, allowing it to assume innumerable forms across the globe. Founder F.T. Marinetti was acutely aware of the latest developments in technology, science, and the arts, and feared that Italy would find itself merely a spectator in the modernization of Europe without futurist intervention. What Marinetti proposed as a solution to the need for a renewed Italian national identity was a radical departure from the typical appeals to history and tradition. Rather, he conceived of a lived aesthetic program in which all Italians would participate.

In keeping with Marinetti's program, Futurist musician Luigi Russolo saw the importance of creating music that would reinforce the post-industrial soundscape and bring about a modernization of Italian culture. For him, reliance on the standard western scales, chords, and melodies could never communicate anything meaningful about the modern world. His "Art of Noises" would express the dissonance and polyphony of city life, celebrating the chaos and commotion of the modern urban experience. Hearing music in the noisy grumblings of urban activity, he delighted in the chorus of the street:

Let us cross a great modern capital with our ears more alert than our eyes, and we will get enjoyment from distinguishing the eddying of water, air and gas in metal pipes... the howl of mechanical saws, the jolting of a tram on its rails...We enjoy creating mental orchestrations of the crashing down of metal shop blinds, slamming doors, the hubbub and shuffling of crowds.⁴

The aim of his project was to retrain the ears of his fellow citizens to appreciate the beauty of these noises, just as one might appreciate the sound of a waterfall or a thunderstorm. This expanded definition of music required new instrumentation, so Russolo built his famous *intonarumori*. Grouped by families of noises such as whistles, hisses, and snorts, Russolo's noise machines were intended to recreate the urban sonic experience in all of its splendid chaos. While his concerts were predictably the objects of controversy and ridicule at the time, Russolo is very often credited today as a true innovator in the area of noise music. His project demonstrates the strategic use of sound to bring about a desired change, in this case a social revolution whereby the Italian citizenry would celebrate the sights and sounds of modern industry and technology. Although Russolo's and Björk's desired ends stand in opposition to one another, their means were thus quite similar.

Projects such as Russolo's Art of Noises hinge on the fundamental belief that music can act upon an audience in a way that will contribute to a certain action or state of mind. Precisely how music might perform this task will be a question I will return to throughout this dissertation. The Italian Futurists often referred to their artistic programs or creations as weapons designed to combat the habitual ambivalence with which novelty and creativity were received by Italian audiences. In his book Sonic Warfare: Sound, Affect, and the Ecology of Fear, Steve Goodman begins with Russolo's musical program as an example of the weaponization of sound.⁵ The Art of Noises was the first instance of sonic warfare, according to Goodman, both in its literal embrace of weaponry as a source of music, but more importantly in its use of sound to bring about "the distribution and hierarchical stratification of the nervous system."⁶ Russolo intended that his audiences would experience psychic and physical transformation as the result of their exposure to futurist noises, but he did not describe the mechanism through which this might happen. Goodman offers an interpretation in which the sonic vibrations of music act as powerful affective agents. "If affect describes the ability of one entity to change another from a distance, then here the mode of affection will be understood as vibrational." He continues, "This ecology will be constructed as a

vectorial field of 'affectiles' (affect + projectile), or what William James refers to as pulsed vectors of feeling."⁷ Goodman thus describes music as having been weaponized in the sense that it might transport affectively charged packets of sound between bodies, stimulating a precise emotional response in the receiver. He further suggests that sound (or "the sonic") has long been contorted into unfamiliar shapes in order to adhere to semiotic analysis as a conveyer of communication. To do so, however, is to lose sight of its true function as a vehicle of vibration and oscillation.⁸ Goodman notes that vibrational analyses are very often crippled by an intense anthropocentrism that fails to account for "nonhuman participants of the nexus of experience."⁹ In his view, as entities encounter one another's vibrations they reinforce the distinction between subject and object while at the same time coloring one another with the affective shimmer of their sonic emissions.

Music critic Alex Ross describes many of the new approaches to music created around the fin de siècle as "war carried on by other means."¹⁰ In his early discussion of Viennese composer Arnold Schoenberg, Ross argues that what set him apart from his contemporaries "was that he not only introduced new chords but eliminated, for the time being, the old ones."¹¹ Russolo attempted to take the additional step of eliminating even the instruments that created the chords in the first place. Like many of the early futurist artists, he believed that there could be no return to previous artistic forms. He went so far as to construct new instruments for his music so as not to rely on traditional media through which to present his novel sounds. While the vastness and brashness of the Futurists' project earned them widespread acclaim (and as much notoriety), it was Russian avant-garde pioneer Wassily Kandinsky who undertook the most focused, theoretical approach toward the creation of art in the name of revolution. Conceiving of art as a weapon in the service of spiritual salvation, Kandinsky developed an aesthetic theory rooted in the communicative power of vibration.

In his book *Reason and Resonance: A History of Modern Aurality*, Veit Erlmann begins with a beautiful quote from Diderot which may be used to vividly illustrate Kandinsky's aesthetic theory:

The sensitive vibrating string oscillates and resonates a long time after one has plucked it. It's this oscillation, this sort of inevitable resonance, that holds the present object, while our understanding is busy with the quality which is appropriate to it. But vibrating strings have yet another property – to make other strings quiver. And thus the first idea recalls a second, and these two a third, and then all three a fourth, and so it goes, without our being able to set a limit to the ideas that are aroused and linked in a philosopher who meditates or who listens to himself in silence and darkness.¹²

Kandinsky believed it was the artist's task to awaken and enliven the souls of his audience through the correct arrangement of color and form on the canvas, an abstract composition determined entirely by what he dubbed "internal necessity." If executed correctly, the viewer would grasp the artist's message intuitively through this sympathetic spiritual response. Believing that pictorial content contained within it specific vibrations that might trigger corresponding vibrations in the souls of his viewers, Kandinsky was especially interested in the power of religious imagery, though he himself did not espouse any particular religious tradition. Kandinsky's fascination with both Orthodox iconography and occult spiritualism influenced his formal and theoretical work as he labored to create artwork capable of awakening the souls of his audience to the beauty of the immaterial world. In his 1910 essay "Content and Form," Kandinsky outlines the means by which his own artwork could bring about the spiritual renewal of his generation:

The inner element, taken in isolation, is the emotion in the soul of the artist that causes a corresponding vibration (in material terms, like the note of one musical instrument that causes the corresponding note on another instrument to vibrate in sympathy) in the soul of another person, the receiver. As long as the soul remains joined to the body, it can as a rule only receive vibrations via the medium of the senses, which form a bridge from the immaterial to the material (in the case of the artist) and from the material to the immaterial (in the case of the spectator.)¹³

Much of Kandinsky's theoretical work was inspired by what he recognized as the musical properties of visual phenomena. Color, for example, was not a static entity, but rather moved toward various states or "sounds" according to its inclination. Kandinsky believed his canvases would function as vehicles of direct spiritual communication with sufficient power and clarity to affect what amounted to an apocalyptic purification and renewal of the western world. The very act of apprehending a work of art would produce a profound revelatory experience in the viewer, one capable of sanctification and spiritual transformation. Thus, a painting might "sound" in a way that imitates music, causing the soul of the receptive viewer to quiver in sympathy.

In his writings, Kandinsky identified a number of kindred spirits in the creation of new art forms driven by what he perceived as inner necessity. Perhaps his greatest contemporary influence was the musical theory of Arnold Schoenberg, who would become an intellectual ally and close friend. Kandinsky first encountered Schoenberg's musical theory in the program notes for a concert he and artist Franz Marc attended in January of 1911. So taken was he with the content of the program, that Kandinsky obtained the article from which the notes had been extracted, translated it into Russian, and published it (along with his own footnotes) in a catalog for an exhibition he had organized.¹⁴ Central to Kandinsky's interest in Schoenberg was the composer's rejection of artistic parameters, and his critically reviled attempt to "emancipate dissonance through atonality."¹⁵ More to the point, Schoenberg's article seemed to express the historical necessity of artistic transformation, not as the result of conformation to traditional notions of beauty, but due to a kind of spiritual determinism that compels art to assume new forms. As Kandinsky explained, "Today's dissonance in painting and music is merely the consonance of tomorrow."¹⁶ Russolo would surely have agreed with this sentiment, but unlike Kandinsky, his aim was to celebrate, rather than to combat, the material culture of industry and warfare. Nevertheless, numerous members of avant-garde circles of many stripes shared the belief that the human senses were in need of retuning. An important means through which to perform this feat was identified at approximately the same time in the Russian formalist movement.

Throughout this dissertation, I will argue that the device of estrangement, sonamed by formalist literary theorist Viktor Schlovsky, remains one of art's most powerful and effective tools, and may prove particularly useful as a means through which to strengthen its capacity to speak to and through the natural world. In the opening paragraphs of her elegant work on Thoreau titled *Bird Relics: Grief and Vitalism in Thoreau*, Branka Arsić writes with measured enthusiasm about the author's capacity to enliven the inanimate, and to truly inhabit the places and materials of the living things he observed and documented.¹⁷ She writes, "How is it that we, so many ordinary people, can't see what Thoreau sees? What have we done to alter the real into what is coherent, explicable, and knowable, expelling the wondrous into an elsewhere that is only imagined.?"¹⁸ For Arsić, much of the answer to her question will be found in Thoreau's use of estrangement, also known as defamiliarization, in his written language.

Thoreau believed that a change in human perception was needed in order to truly experience nature. Arsić cites philosopher Jane Bennett in her belief that Thoreau's techniques would "'enmesh' the self by generating a vision of nature as something so enchanting that it would suspend the perceiver's mind."¹⁹ This enchantment should not be confused with sublimity, which is characterized by feelings of smallness or powerlessness in the face of nature. Rather, Thoreau wished to establish very intimate material connections with the natural world. He writes, "We need pray for no higher heaven than the pure senses can furnish, a purely sensuous life."²⁰ Thoreau hoped to retrain the senses, enabling humans to hear and see in ways never before available to them. The enemy in our current way of experiencing the world, he believed, was ideation. "Ideation is the eye's habit through which the specificity of what is perceived now is sacrificed by being incorporated into an idea of it that the mind has formed on the basis of previous perceptions."²¹ Simply put, humans needed to stop recognizing things. It is in this assertion that Thoreau finds an unexpected ally in Kandinsky.

A prolific writer in his own right, Kandinsky chronicled his long and laborious journey from representational art to what became known as non-objective or purely abstract artwork. In a well-known essay titled "Reminiscences," he describes the moment he realized that the object was getting in the way of his work. He claims to have walked into his studio after a long day painting out of doors, when he was stopped short by a canvas leaning against the far wall. He was struck by "an indescribably beautiful picture, pervaded by an inner glow."²² There were no discernible objects on the canvas, but rather masses of color arranged into an arresting composition. His astonishment faded quickly upon the realization that this was one of his own paintings turned on its side. He tried with limited success to recreate this moment of misrecognition, but the experience transformed his approach to painting. "Now I could see clearly that objects harmed my pictures," he explains.²³

The sensation that both Thoreau and Kandinsky hoped to cultivate through their work is akin to the defamiliarization identified by Schlovsky as a literary device capable of cultivating new ways of experiencing everyday life. This state, it would seem, would require a great deal of re-training, or un-learning, on the part of an audience. Kandinsky believed that all of what we call the sensible world is but a distraction from its truer essence, and he hoped to reveal a spirituality never before visible. Thoreau hoped to work on a more fundamental level, in that he aspired not to a new mode of representation, but toward a new method of seeing in the first place: "I wish to see the earth translated-the green passing in to blue...I must walk more with free senses-...Go not to the object let it come to you...-What I need is not to look at all-but a true sauntering of the eye."²⁴ Freed from the habit of naming and identifying known objects, the senses will awaken to new possibilities of color, texture, and pattern that may have gone unnoticed. A blade of grass might become infinitely fascinating when observed with new eyes, revealing entire worlds of life previously unseen. Thoreau explains, "If you would make acquaintance with the ferns, you must forget your botany... you must approach the object totally unprejudiced... Your greatest success will be simply to perceive that such things are."25 In this way, Kandinsky and Thoreau are similar in their having identified ideation as the enemy. Both advocate a technique of looking that

refuses to recognize, cultivating instead a habit of seeing whereby nothing remains fixed to assigned categories, but is instead perpetually animated.

Thoreau also wished to cultivate a "nicer ear" impervious to harmony, or rather attuned to all harmonies and disharmonies equally. A listener of nature must learn to un-recognize familiar sounds. Thoreau's nicer ear "doesn't dismiss what we ordinarily identify as the musical but instead seeks to expand it by proposing a manner of listening that is attuned to cacophony and discord."²⁶ Thoreau thus advocated a greatly expanded definition of what constituted pleasurable noises, perhaps even expanding the notion of music to include all manner of natural sounds. The practice of listening without recognition would be embraced by twentieth-century experimental musicians such as Pauline Oliveros, whose deep listening technique became a popular method by which to retrain the ear along these lines. If art can cultivate new habits of sensory experience by estranging the ordinary though creative presentation, it stands to reason that it might readily stimulate a renewed interest in the natural world that so frequently goes unnoticed.

While there is no indication that Kandinsky was familiar with Thoreau's writings on the retraining of human senses as a means of rediscovering the natural world, Kandinsky's collection of poetry from 1912, *Sounds*, makes for ready comparison. The editors of *Kandinsky's Complete Writings on Art* Kenneth C. Lindsay and Peter Vergo suggest that the artist had initially conceived of *Sounds* as a musical publication in that the synthesis of word and image (each poem was accompanied by a woodcut print) would create, as the title suggests, new sounds within the reader. In "See," Kandinsky presents color as a living entity: Blue, blue, rose up, rose up, and fell.

Sharp, thin whistled and pressed in, but could not prick through.

There was droning in every corner.

Fat brown hung seemingly for all eternity.

Seemingly. Seemingly...²⁷

Having liberated his artistic creations from the primacy of the object, Kandinsky viewed color and sound as worthy content in and of themselves. Arsić describes Thoreau's sauntering of the eye in similar terms. "Emancipated from the figural, the unprejudiced eye finally becomes capable of perceiving the forces and elements in the very moment of their formation; it finally comes to see 'the earth translated–the green passing in to blue.'''²⁸ Thoreau experienced nature not only as pure, moving impressions, but delighted in its sounds as well. He seemed to treasure the resonance of the universe even above its colors. "The five senses are but so many modified ears," he wrote.²⁹ With senses newly attuned to the musical possibilities of natural soundscapes, Thoreau expresses the potential of sound to inspire a profound affinity with the wilderness:

There came to me in this case a melody which the air had strained, and which had conversed with every leaf and needle of the wood, that portion of sound which the elements had taken up and modulated and echoed from vale to vale. The echo is, to some extent, an original sound, and therein is the magic and charm of it. It is not merely a repetition of what was worth repeating in the bell, but partly the

voice of the wood; the same trivial words and notes sung by a wood-nymph.³⁰ Where many would hear only a church bell, Thoreau also hears pine needles and wood nymphs. With his description of the strange music of the forest as it clings to the tones emanating from a nearby town, he has re-enchanted nature through an illustration of its reverberations.

I have examined Russolo, Kandinsky, and Thoreau's creative work in turn for its potential to awaken and refine affective receptivity, and to defamiliarize the everyday in the hopes of retraining the human senses to experience the world anew. All of this work may rightly be said to have had the effect of "enchantment" on its audience, a word that on its surface seems somewhat fanciful or magical. Morton acknowledges that the notion of enchantment is easily derided in academic circles, but he maintains that this is the quality of art that has the greatest potential to affect real change with regards to the natural world.³¹ Insisting that the human enchantment with whale song, for example, translated into action on behalf of whales, he writes, "Enchanted. What does it mean? In terms of charisma, it means some of us submitted to an energy field emitted by the sounds of whales."³² Taking a cue from Jane Bennett, I argue that this is precisely the property that gives Björk's audiovisual work its appeal as well as its revolutionary character.

According to Bennett, "To be enchanted is to be struck and shaken by the extraordinary that lives amid the familiar and the everyday."³³ Bennett hopes to call into question the common characterization of a disenchanted twenty-first century in which humans live their lives in a state of detached apathy toward the world around them. To make the claim that humans have retreated into "dearth and alienation" is to discourage "affective attachment to the world," Bennett claims.³⁴ She continues, "To be enchanted then, is to participate in a momentarily immobilizing encounter; it is to be transfixed, spellbound."³⁵
Bennet's appeal to this kind of unfettered emotional response recalls the introduction to David Rothenberg's *Always the Mountains*. Rothenberg argues that the experience of enchantment has fallen out of fashion, or may indeed be difficult to achieve in today's more technology-saturated cultures:

It's not something we can turn on and off... We have to learn to see. We cannot talk ourselves out of being impressed, out of loving the sheer, shouting beauty of the world. History should not lead us to belittle it, and we cannot let the ready availability of so much information turn off experience.³⁶

Rothenberg argues for the embrace of an emotional response in the face of nature and a willingness to be overwhelmed by the natural beauty of the Earth. This is supplemental to – not in opposition to – our rational selves, he insists.³⁷ Bennett notes that the verb "to enchant" has its origins in the French "chanter." So to en-chant would be to cast a spell with sounds. "The mood of enchantment may be valuable for ethical life," she insists.³⁸ Counterintuitive though it may seem, Bennett advocates cultivating the habit of enchantment in order to "hone sensory receptivity to the marvelous specificity of things."³⁹ Though she does not use the term, I believe she is speaking about making a habit of estrangement, or learning to see with new eyes, as one moves through one's daily routine.

Bennett also hopes to elevate the status of all matter as vital, broadening the scope of the ideas of self and interest in such a way that to damage one piece of the web of connected matter is to damage oneself.⁴⁰ It is here where Bennett and Björk depart most fundamentally from Kandinsky. Kandinsky was ultimately disinterested in the physical matter of the world, believing material form to disguise and distract from the inner (truer) essence of a thing. Thus his move toward pure abstraction was, for him, a

move toward realism. For Björk and Bennett alike, the sensory qualities of the natural world, including all that is human-made as well, practically vibrate with life. To dismiss their material reality as insignificant and thereby unsuitable for pictorial representation, as Kandinsky did, is to lose sight of the vital properties of matter. Further, and more importantly for this study, Walter Benjamin reminds us, "painting simply is in no position to present an object for simultaneous collective experience."⁴¹ In order to reach the masses, presumably, the masses would have to have access to the work of art. Easel painting in the twentieth century simply could not find large enough an audience to effectively communicate revolutionary ideas. While concerned more with matter than spirit, Björk's project would find a considerably larger and more receptive audience through the relatively new medium of the music video.

Professor and bioacoustic artist David Dunn maintains that the true function of music is not limited to its capacity to entertain. Very specifically, he sees a great deal of potential in the utilization of music's affective qualities in order to create an affinity with the natural world. He agrees with economic theorist Jacques Attali, whose ideas I will address in the next chapter, that the capitalist culture industry has transformed most contemporary music into a vehicle of power and social control, but he seems to believe that this system might also be manipulated to convey messages of an entirely different nature. Like many of the avant-garde artists already discussed, Dunn suggests that new sounds and new ways of listening should be introduced into the broader public in order to create a new human culture sensitive to its own interconnectedness with its environment. From her first solo release in 1993 to her 2017 offering, *Utopia*, Björk likewise challenges the predominant characterization of human beings as existing in a realm somehow removed from the millions of other living beings on the planet, utilizing

lyrical content, musical instrumentation, and imagery to convey a far more complicated and vital relationship between them.

The medium of the music video, while undeniably popularized as a marketing tool for the culture industry, may hold a great deal of potential to broadcast subversive or revolutionary messages. As I will argue throughout this dissertation, and discuss at length in Chapter Three, Björk's entire solo career has been characterized by her embrace of the medium as an art form in and of itself. The video for her first single, "Human Behavior," from her self-titled debut serves as an early example of her use of popular art as a means to advocate for the environment through a playful rejection of anthropocentrism. As charming as it is challenging, "Human Behavior" presents the human species as a delightful conundrum, a story seemingly told from the perspective of a non-human being.

As the first lumbering beats of the song announce the video's opening, a suspenseful scene unfolds. Distant headlights illuminate the clumsy ambling of a hedgehog attempting to cross the road. The video then jumps to an image of a hunter hiding behind a tree and brandishing a shotgun. These human/animal showdowns rarely end well for the animal, but things are not so predictable in Björk's world. The hedgehog safely ducks under the speeding car, and an oversized teddy bear sneaks up behind the hunter, quietly dispatching him. "If you ever get close to a human, and human behavior, be ready be ready to get confused," she sings, seeming to assume the identity of the bear as she trudges through a wooded area, brushing branches out of her way as she goes.

The video has the feel of stop-motion animation, juxtaposing a very real Björk with a variety of plush, stuffed animals and both natural and constructed variations of the flora and fauna surrounding a tiny cabin in the woods. This would be the first of many collaborations with director Michel Gondry, a partnership that so successfully wed sound and image that Björk's music is difficult even today to separate from its visual incarnations. For her first video, Björk needed someone who could realize her vision. "I told him, 'I want a bear and textures like handmade wood and leaves and earth, and I want it to seem like animation.'"⁴² Gondry delivered, creating a highly rhythmic composition out of a variety of strange and appealing creatures in a fairy-tale forest setting. At times jarring, at times playful, the video features, among other things, a dance sequence with a gigantic plush moth, a number of writhing, cocooned figures of Björk, and a brief visit to the moon. Traditional roles are reversed, as both the hunter and Björk find themselves in the belly of the bear, which incidentally also drives the car. She trades places bodily with the other creatures depicted in the video, taking flight at one point and assuming the position of a hedgehog under the car at another. The familiar has most definitely been made strange, inviting the viewer to consider the perspectives of other beings.

This presentation, while charming and humorous, is not without a clear message. "The animals are definitely supposed to win in the end," she says.⁴³ As frenetic keyboard riffs give way to soft, bouncy percussion, the camera zooms out to reveal a model of the Earth, studded with pine trees, illuminated by an enormous moon, and dominated by the victorious figure of the bear, paws raised triumphantly, standing upright on its summit. While the themes Björk presents are complicated —human irrationality, the human relationship to other life on Earth, human exploitation of the planet — their musical and visual presentation make them accessible to all. The victorious teddy bear at the video's end, even with Björk visible in its belly, remains undeniably charming as it towers over the cotton-ball clouds and plush pine trees exploding forth from the impossibly green Earth.

In her topsy-turvy world, Björk tells an enchanting tale in which the boundaries between human and non-human experiences are wonderfully fluid. "There is no map," she screams with her entire body, "and a compass wouldn't help at all."44 Humans are in need of a serious reappraisal of the world and their place in it, she seems to suggest. As Timothy Morton reminds us, one of the most important practices in cultivating an ecological worldview is to remember that the way we as humans experience an object or place is only a tiny fraction of the possible ways of experiencing it. Thus, we can never exhaust our knowledge of an object through our senses alone. We might see an apple, for example, and we know how it looks and feels and tastes. We know how to plant a tree that will one day yield apples. We know the nutritional makeup of the apple. We have multiple literary and mythological references in our written and oral histories concerning the apple. But the apple might also be a comfortable home from the perspective of a worm, or a perch taken from the perspective of a fly. It is also perhaps a nursery for another creature or a lethal object for another unfortunate enough to be crushed by its fall from the branch. To try to get to know the object from all possible perspectives is perhaps an exercise in futility, but it is also an important step in living ecologically. The tools of art and music at the very least open up new possibilities of experiencing all the stuff of life, defamiliarizing the everyday and, possibly, escaping the anthropocentrism through which we relate even to the most basic of materials. Björk's "Human Behavior" video provides an excellent means through which to perform this imaginative investigation of the material world.

Writing decades after Kandinsky developed non-objective art as a counter to materialism, Max Horkheimer maintained that, due to the humanity from which it is formed, art naturally contains an element of resistance within it. He saw this humanity as a quality that persists in spite of the coldness of "the deadly competition in business culture."⁴⁵ Thus, "art, since it became autonomous, has preserved the utopia that evaporated from religion." Horkheimer examines human society in Marxist terms, noting that leisure time is no longer one's own, cultivated and shaped as it is by capitalist industry. The result is what he identifies as "the disappearance of inner life."⁴⁶ Thus, human beings are no longer able to visualize a world different from that in which they live. Such a world, he maintains, exists only in art, and only in that art which best expresses the gulf "between the monadic individual and his barbarous surroundings."⁴⁷ The function of art that may offer the most promise as a means of transformation is, therefore, its capacity for creative envisioning. In the following chapter, I will examine the possibility for music to do such work.

Notes to Chapter One

¹ Greil Marcus wrote the definitive study linking the avant-garde and punk rock by way of the Situationist International in his Lipstick Traces: A Secret History of the Twentieth Century (Cambridge: Harvard University Press, 1989). ² Timothy Morton, *Being Ecological* (Cambridge: MIT Press, 2018), 81. ³ Oliver Sacks, *Musicophilia* (New York: Knopf, 2007), xi. 4 Luigi Russolo, "The Art of Noises" in The Art of Noise: Destruction of Music by Futurist Machines (Sun Vision Press, 2012), 59. ⁵ Steve Goodman, Sonic Warfare: Sound, Affect, and the Ecology of Fear (Cambridge: MIT Press, 2010). ⁶ Goodman. 6. 7 Goodman, 83. ⁸ Goodman, 82. 9 Goodman, 82. ¹⁰ Alex Ross, *The Rest is Noise: Listening to the Twentieth Century* (New York: Farrar, Straus, and Giroux, 2007), 84. ¹¹ Ross, 63. ¹² Viet Erlmann, *Reason and Resonance: A History of Modern Aurality* (New York: Zone Books, 2010), 9. Quoted from Diderot's Entretien entre d'Alembert et Diderot. ¹³ Wassily Kandinsky, "Content and Form," in Complete Writings on Art, ed. Kenneth C. Lindsay and Peter Vergo (Boston: G.K. Hall, 1982), 87. ¹⁴ Wassily Kandinsky, "Footnotes to Schoenberg's 'On Parallel Octaves and Fifths," in Complete Writings on Art, ed. Kenneth C. Lindsay and Peter Vergo (Boston: G.K. Hall, 1982), 92. ¹⁵ Stephen Eric Bronner, *Modernism at the Barricades* (New York: Columbia University Press, 2012), 53. ¹⁶ Quoted in Bronner, 58. ¹⁷ Branka Arsić, Bird Relics: Grief and Vitalism in Thoreau (Cambridge: Harvard University Press, 2016). ¹⁸ Arsić, 4. ¹⁹ Arsić, 41. ²⁰ Arsić , 42. ²¹ Arsić , 43. ²² Wassily Kandinsky, "Reminiscences/Three Pictures," in Complete Writings on Art, ed. Kenneth C. Lindsay and Peter Vergo (Boston: G.K. Hall, 1982), 369. ²³ Kandinsky, "Reminiscences," 369. ²⁴ Quoted in Arsić, 44. ²⁵ Quoted in Arsić, 44. ²⁶ Arsić, 47. ²⁷ Wassily Kandinsky, "See," in Complete Writings on Art, ed. Kenneth C. Lindsay and Peter Vergo (Boston: G.K. Hall, 1982), 298. ²⁸ Arsić, 44. ²⁹ Arsić, 45.

³⁰ Henry David Thoreau, *Walden* in *Walden and Civil Disobedience* (New York: Barnes and Noble Classics, 2003), 99.

³¹ Morton, 105. He writes, "The fact that in my line of work (the academy) this is a wholly unacceptable, beyond the pale way of describing what happened is a painful and delicious irony. You can't say things happen because of vibes. That's what hippies say." ³² Morton, 105-106.

³³ Jane Bennett, *The Enchantment of Modern Life* (Princeton: Princeton University Press, 2001), 4.

³⁴ Bennett, Enchantment, 5.

35 Bennett, Enchantment, 5.

³⁶ David Rothenberg, *Always the Mountains* (Athens, GA: University of Georgia Press, 2002), 18.

³⁷ Rothenberg, 29.

³⁸ Bennet, Enchantment, 3.

³⁹ Bennett, Enchantment, 4.

⁴⁰ Jane Bennett, *Vibrant Matter* (Durham: Duke University Press, 2010), 13.

⁴¹ Walter Benjamin "The Work of Art in the Age of Mechanical Reproduction," in *Illuminations*, ed. Hannah Arendt (New York: Schocken Books, 1973), 234.

⁴² Elysa Gardner, "In a Björk State of Mind," in *Rolling Stone* no. 665 (September 16, 1993), 17.

⁴³ Gardner, 17.

44 Björk, lyrics to "Human Behavior," Debut (New York: Elektra, 1993).

⁴⁵ Max Horkheimer, "Art and Mass Culture," in *Critical Theory; Selected Essays* (New York: Herder and Herder, 1972), 274.

⁴⁶ Horkheimer, 277.

⁴⁷ Horkheimer, 278.

Chapter Two

The Ubiquity of Music: Practices of Listening in the Absence of Silence

The moment of enlightenment is a sound. Evan Conrad¹

A note from my morning commute: This morning I was reminded of R. Murray Schafer's descriptions of early prohibitions on unwelcome noises. In his pathbreaking work on the sonic environment in human civilizations, The Tuning of the World, he noted that most urban noise ordinances were historically brought up in response to loud singing, outdoor musicians, or town criers. Rarely have citizens collectively demanded that the sounds of heavy industry be legislated against. I recall reading Schafer's account with some curiosity, as it would seem that the sound of a jackhammer (or to my ear, a leaf blower) is far more intrusive than that of a musical performance. And yet, it is somehow easier to accept, or ignore, the nearly constant barrage of sounds resulting from traffic, construction, or climate control than it is to tune out a solitary conversation spoken at too high a volume. Such was the case this morning. I was looking forward to a relaxing wait at the train station for my bus to work. I enjoy reading there some mornings, but that was out of the question today. A man sitting against the far wall of the little courtyard at the base of the stairs was blaring music from a portable device of some kind. I'm not sure if I was more annoyed by the rudeness of his actions or by the music itself. I tried to tune it out, but I felt my blood begin to boil as he skipped through tracks and raised the volume again and again. I wondered why I was so angry. Had he been playing *Moonlight Sonata* at full volume, would I have been so annoved? Probably not. So, maybe it was the music itself that got under my skin. I suspect it had something

to do with the fact that the source of my irritation was visible to me, and that he had chosen to force his musical taste upon anyone within earshot. He wasn't a landscaper whose tools of the trade left him no choice but to interrupt my morning quietude. He was a fellow commuter intent on transforming the environment into one that suited his mood, with no regard for anyone else. Had he not heard of headphones? A great many people perform such magic every day – drowning out the monotony of their daily routines with music piped directly into their heads, creating an intimate cinema out of an otherwise unremarkable journey. This man's choice of music did not have this effect on me. I was greatly relieved, and also perplexed, that when the bus arrived, he did not board it. Instead, he rode off on his bicycle.

I open with this rather mundane anecdote because our relationship with music in our daily lives is probably more complicated than we realize, and is quite often beyond our ability to control. In this chapter, I will examine the evolution of the urban soundscape, focusing on the sounds that have characterized and shaped human society in the twentieth and twenty-first centuries. Chapter One situated Björk within a tradition of artistic and musical activism beginning with the European avant-garde movements. Her belief in the efficacy of an artistic project to transform society has guided her audiovisual output throughout much of her career. In this chapter, I will explore the ways in which new recording technologies have transformed the listening experience, creating a public that seems simultaneously to subsist on and to ignore a nearly constant stream of auditory stimuli. What role has the commodification of music played in shaping behaviors and identities? Might our listening habits alter the affective potential of music? I present a few diverse perspectives on the commercialization of popular music, and its uncertain potential as a medium of avant-garde-style resistance or revolution. If an artist such as Björk hopes to create an audience eager to transform the existing system, can she do so while working from within that same system?

I will begin with a brief overview of two of the most important texts pertaining to the study of recorded sound and commercial musical production: R. Murray Schafer's *The Tuning of the World*² and Jacques Attali's *Noise: The Political Economy of Music.*³ Schafer's rather bleak assessment of the post-industrial sonic environment as noise pollution is reinforced by Attali's characterization of popular music as a mechanism of capitalist control. Unable or unwilling to allow for the possibility of music that might resist the hegemony of the recording industry, Attali offers little recourse for musicians seeking to challenge the status quo. This assessment presents a problem for Björk and other artist-musicians who approach their work in the avant-garde spirit of revolutionary action through art.

Next, I will turn to Simon Frith and Howard Horne's revealing study of the relationship between British art schools and the avant-garde artistic practices adopted by musicians throughout the 1970s and '80s, *Art into Pop.*⁴ Their analysis is helpful to this study in that they examine the various ways in which musicians have attempted to disrupt popular music from within, applying theories and practices adopted from the artistic avant-garde rather than adhering to strictly musical traditions. Björk is an excellent example of an artist who has achieved widespread popularity through such means, and who is widely considered to have redefined the boundaries of both popular music and music videos. And yet, since she rose to prominence via the highly commercial vehicles of popular radio programming, major recording labels, and MTV, her efficacy as a subversive artist may be called into question. For Frith and Horne, such uneasy compromises between artistic innovation and recording industry constraints

amount to largely superficial challenges, ultimately generating little more than new marketing categories.

The remainder of the chapter will offer alternative approaches to the possibilities of commercial music as an instrument of resistance or disruption, even within the most seemingly unimaginative of formats such as Muzak. I will look at the work of a few musicians and theorists such as Brian Eno, LaMonte Young, and Anihid Kassabian, all of whom see rich possibilities for creating meaning and transforming the spaces of commerce through musical means. Because the mechanisms through which we experience music continuously change with the advent of new technologies, I will also comment on the differences inherent in listening technologies and practices. The most interesting contrast might be found between the so-called background music found in most public spaces, and the popularity of personal listening devices. Kassabian, for example, sees the common sonic experience of music within a given space as contributing to potentially fruitful connections between people and places. I will end with a look at Michael Bull's study of the phenomenon of iPod use as another possible means of spatial creation via music. Unlike Attali, he sees creative power in the act of listening. Since this dissertation hopes to examine how sound arrangements might support the cause of environmental activism, it is important to understand how different ways of listening affect the communicative potential of musical composition. Whether through the subtle, nearly subconscious sonic cues of Muzak, or through our nearly ecstatic emotional states aroused by a favorite song, the affective power of music is undeniable.

R. Murray Schafer's *The Tuning of the World* not only popularized the term "soundscape," but also served as a foundational text for the emerging fields of sound

studies and ecomusicology. In it he asks, "What is the relationship between man and the sounds of his environment and what happens when those sounds change?"⁵ He theorizes that "noise pollution" reached an apex by the latter third of the 20th century, but rather than attempt to eliminate the troublesome (human-made) noises, we might be better advised to devise positive sounds, thereby bringing negative sounds more clearly to our attention. In his chapter concerning the soundscape created by the Industrial Revolution, he points to the increasing presence of ambient noise taking over human living spaces, ushering in an "overpopulation of sounds" and a congestion of noises that "introduced a multitude of sounds with unhappy consequences for many of the natural and human sounds which they tended to obscure."6 The sensory overload associated with the incessant and unidentifiable noises generated by machinery has resulted in a numbing of perception. While initially frightening or irritating, the sounds of the Industrial Revolution became a source of pleasure for many. We saw in Chapter One that the Italian Futurists delighted in many of the very noises of industry that so deeply distress Schafer. Luigi Russolo designed instruments to emulate the sounds of city life, while Russian composer Arseny Avraamov utilized the actual instruments of industry in his famous "Symphony of Factory Sirens" in 1922. While such avant-garde compositions are rather extreme examples of public enthusiasm for industrial noise, Schafer notes that rarely was there the kind of public opposition to these sounds that accompanied noisy human activities in earlier times such as town criers or street musicians.7

Modern industry is characterized above all by the drone. Whether curled up on the couch at home or strolling through a neighborhood park, we are rarely out of range of the persistent hum of industry. "Electrical equipment will often produce resonant harmonics and in a quiet city at night a whole series of steady pitches may be heard from streetlighting, signs or generators," Schafer observes.⁸ He identifies this era as an "Electric Revolution" that followed the Industrial Revolution, beginning a period characterized by the development of revolutionary new sound mechanisms such as the telephone, the phonograph, and the radio. The Electric Revolution ushered in two major new techniques: the packaging and storing of sound, and the splitting of sound from its original environment – a process that results in what Schafer dubs "schizophonia."⁹ According to his definition, schizophonia is possible once sounds cease to be originals. Further, Schafer associates the relatively new phenomena of recorded sound, particularly in its volume, with mechanisms of power.¹⁰ "We know that the territorial expansion of post-industrial sounds complemented the imperialistic ambitions of the Western nations," he writes.¹¹

The development of the phonograph increased the demand for repetition. It was not long before listening at home became preferable to seeking out a public performance. "The advent of recording thoroughly shattered representation," writes economic theorist Jacques Attali.¹² In his oft-cited treatise on the commercialization of music, *Noise: The Political Economy of Music*, Attali examines the function of recorded music in capitalist society. Songs were once associated with the streets, then later with cabarets, and finally with the open market. Once they became reproducible, much of music's original quality was lost. Calling to mind Benjamin's famous discourse on the loss of the aura in visual art, Attali believes that mechanical reproduction marks the death of the original.¹³ In his view, the original musical recording is akin to the sculptural mold, and has nearly as little value. "If our societies seem unpredictable, if the future is difficult to discern, it is perhaps quite simply because *nothing happens*, *except for the artificially created pseudoevents and chance violence that accompany the emplacement of repetitive society.*"¹⁴ This was, of course, unintended by the inventors of the phonograph. Rather than attending a live public event, people began to buy and stockpile records that they hoped to find the time to listen to.

Music did not truly become a commodity until a market was created for it. In this way, supply and demand were created at the same time.¹⁵ During the rock-and-roll era, the popularity of the juke box standardized the market for 45s centered on high school styles. Popular music fills the voids of meaning in the world for a teenager, but more fundamentally, it preps the child for his or her role as consumer:

Music thus fashions a consumer fascinated by his identification with others, by the image of success and happiness... The youth see it as the expression of their revolts, the mouthpiece of their dreams and needs, when it is in fact a channelization of the imaginary, a pedagogy of the general confinement of social relations in the commodity.¹⁶

According to this assessment, musical consumption leads inevitably to homogeneity. This disingenuous appeal to individuality, visible also in cheap, mass-produced fashion, has resulted in a society of sameness. It is thus that mass-produced music becomes a powerful silencer, "speaking in place of people."¹⁷

Unlike Schafer, who identifies the power of sound in its volume, Attali sees it in its ubiquity. Today, music is very often presented as a thing *not* to be listened to, comprising little more than background sound. Curiously, the less actively music is listened to, the more it seems to be needed. It is pumped into all of our institutions, waiting rooms, elevators, department stores, and the like, as noise. It is an ever-present fact of life in any cosmopolitan setting, as well as an indispensable component of most popular forms of entertainment. Attali characterizes recording as a means of social control that has long been used to maintain and reproduce the legitimacy of a ruling body. "It allows one to impose one's own noise and to silence others," he maintains.¹⁸ Schafer was one of the first among many to identify Muzak (or "Moozak," as he wrote it) as a culprit in the deadening of human emotional response to music. Not only have people grown accustomed to perpetual sound, they seek it as a painkiller – as a relief from the discomfort of silence. Thus, he explains:

The Moozak industry deliberately chooses music that is nobody's favorite and subjects it to unvenomed and innocuous orchestrations in order to produce a wraparound of "pretty," designed to mask unpleasant distractions in a manner that corresponds to the attractive packages of modern merchandising to disguise frequently cheesy contents.¹⁹

Interestingly, this effect seems to have been achieved not so much through musical composition but through its saturation. A society that once craved difference is swiftly moving toward "collective nondifferentiation."²⁰ Attali is worth quoting at length on this point:

One must then no longer look for the political role of music in what it conveys, in its melodies or discourses, but in its very existence. Power, in its invading, deafening presence, can be calm: people no longer talk to one another... They hear the noises of the commodities into which their imaginary is collectively channeled, where their dreams of sociality and need for transcendence dwell... Make no mistake: if all of society agrees to address itself loudly through this music, it is because it has nothing more to say, because it no longer has a meaningful discourse to hold, because even the spectacle is now only one form of repetition among others, and perhaps an obsolete one. In this sense, music is meaningless, liquidating, the prelude to a cold social silence in which man will reach his culmination in repetition.²¹

In short, music has entered into commodity exchange and so participated in the creation of the spectacle. After it has been commodified and accumulated to the point that it has lost all meaning, music heralds "the establishment of a society of repetition in which nothing will happen anymore."²² Following this line of thought, it would seem that the superstructure effectively neutralizes itself once it engages with the base. However, I hope to question Attali's assertion that popular music has exhausted any potential it may have had to challenge the status quo.

Attali does see a flicker of hope in John Cage. Perhaps in the same vein as the pioneering efforts of Russolo, Cage disrupts the repetition. "When Cage opens the door to the concert hall to let the noise of the street in, he is regenerating all of music. He is blaspheming, criticizing the code and the network."²³ Nevertheless, Attali insists, the critique of an existing order does nothing to promote a change in the greater scheme of things. "The Jimi Hendrix Experience inspires dreams, but it does not give one the strength to put its message into practice, to use the musicians' noise to compose one's own order."²⁴ When one participates in the spectacle of a music festival, one is reduced to the role of an extra. Attali insists that simply reorganizing the repetitive economy is not enough. Efforts to break away from the mass-produced musical economy will always be doomed to failure, "unless they are able to transcend themselves."²⁵ I will argue in later chapters, however, that Björk's work is a prime example of the possibility of transcendence within the system and for utilizing the very mechanisms of capitalist

homogenization to imagine an alternative way of being in spite of – or possibly because of – her status as a pop superstar.

Popular musicians have long employed similar strategies in their efforts to innovate while avoiding the censorship that often accompanies bold artistic statements in commercial formats. In their examination of the link between British art schools and the explosion of popular bands that they spawned, Art into Pop, Simon Frith and Howard Horne begin their introduction with a look at the nebulous distinction (assuming we can still make one) between fine art and commercial art. They write, "Consumer choices now rest on... the assignment of qualities like grace and beauty to toilet tissue rather than to paintings."26 They look to Marx's famous quote in On Literature and Art as a kind of prophetic glimpse into what became a basic tenet of pop music merchandising: "Production accordingly produces not only an object for the subject, but a subject for the object."27 Ostensibly, herein lies the distinction between the ambitions of art school pop musicians and music industry reps. The music industry cultivates sounds and images designed to appeal to a specific audience, whereas the art school band gains a following by refusing to pander to such expectations. Either way, the result seems to be the same. This is the basic critique of punk rock – even this seemingly incorruptible form of expression was quickly converted into a uniform and mass produced for eager audiences.²⁸ "Another critical assumption," argues Bernard Gendron, "is that popular music has reached such a critical mass in its own cultural empowerment that it no longer needs alliances with high culture to further its interests."29

Frith and Horne make a compelling case for teaching traditional art and philosophy so that students will have something to rebel against. What they do not seem to rebel against is the Romantic notion of living life *as* an artist. The avant-garde notion of injecting art into life arose from this same tradition. Frith and Horne claim that art school education instilled a desire in young musicians to shape culture just as artists had long claimed to do. Thus, British art school students began to model themselves on artists as much as they did on musicians. "What both hippie counter-culture and punk Bohemia did, then, was direct the ideological concerns of artistic practice into rock and pop."³⁰ The trouble with this is that "art is no longer central to the way most people make sense of the world."³¹ Herein lies the challenge for someone like Björk, but it is also where commercial pop music might have a good chance of advancing the artist's cause. Advertising and internet culture actually do reflect the way people make sense of their world in the twenty-first century, so if an artist can use this structure to influence an audience, she might stand a chance at changing things. If art can become a part of the solution to the mounting ecological crises, it must take root in everyday practice.

Despite their initial exploration of avant-garde-style tactics at work by British musicians hoping to escape the confines of the recording industry, Frith and Horne ultimately side with Shafer and Attali's position that recorded music — perhaps even by virtue of its having been reproduced — cannot have much potential as a revolutionary medium. Echoing Attali, Frith and Horne cite "Woodstock the Movie" as having "destroyed Woodstock the Festival in an endless replay."³² So, they seem to blame audio/video technology for destroying the aura of the live performance through the commercialization of the scene itself:

By the mid 1960s, cults couldn't avoid becoming a "mass." The avant-garde challenge was to keep art beyond the reach of the philistine, the "collector," but

now the significant consuming group was more youthful, more willing to accept shock as pleasure, provocation as leisure.³³

Frith and Horne make a distinction between musicians with a bohemian *attitude* and those applying art theory to their work (or as they put it, "those who learn[ed] more in the classroom than in the coffee bar.")³⁴ Pop art was hugely influential in these circles, particularly in its refusal to accept the distinction between high art and mass art. The aim of popular music was, then, to defy the mainstream while managing commercial success in spite of itself. However, it seems that this balance may have been quite difficult to achieve. "If Pop art had appeared to offer a way of preserving the artistic impulse in the mass media world, it turned out to signal the end of Romanticism, to be an art without artists."³⁵ This appears to contradict the efforts of the avant-garde and those who followed their example to tear down the distinction between high art and popular art. For Frith and Horne, the reason it is so difficult to remain authentic within the system is because "it depends on maintaining that sense of artistic 'difference' that mass market conditions deny."36 As Attali warned, it leads inevitably to a culture of sameness. In fact, if enchantment is an important function of art, as I illustrated in Chapter One, we may need to insist upon the distinction between art and commercial production, even if artists continue to distribute their products through the same commercial channels. Indeed, art is almost universally trivialized by the popular media through which it is presented, but I disagree that the appropriate response must be to "trivialize everything."37 Even Muzak, that most reviled and tedious of musical presentations, may offer novel creative experiences when approached from a noncommercial perspective.

The backlash against background music has not necessarily been universal even among musicians. In his well-known account of the process by which he came to make ambient music, Brian Eno recalls that people in the 1970s were beginning to wish to create sonic environments in their homes and workplaces in order to stimulate a desired mood. Interestingly, he describes ambient music in the same way Attali describes Muzak - as something lacking in variety, something ever-present and surrounding, or "part of the ambience of our lives."38 Eno's conception of music was abruptly transformed while he was bedridden following a debilitating accident. A friend had brought over a record of seventeenth-century harp music, which she put on before she left. But the volume on the recording was far too low, and much of the music was drowned out by the rain outside. "I could hardly hear the music above the rain – just the loudest notes, like little crystals, sonic icebergs rising out of the storm."39 For Eno, this experience was transformative. He wanted music to be a feeling, an immersive environment rather than a series of individual compositions. He describes his ambient music as "a tint," something capable of creating a subtle mood or feeling in a given space. This is not music that is intended to be studied or actively listened to. It should form a harmonious relationship with the space in which it is experienced, contributing to the overall atmosphere without drawing attention to itself. Interestingly, he describes this work and other ambient music like it – as a "rich forest of music."⁴⁰ He also describes playing with sound itself – a phenomenon made possible with the advent of electronic music. For Eno, entirely new sonic spaces and environments could now be constructed. Making music in this way has much in common with abstract painting, as layers build upon layers to create harmonious tones upon the canvas. "We were making music to swim in, to float in, to get lost inside."41 These intimate sonic constructions may hold the

potential for a kind of spiritual retuning, inspiring feelings of peace or harmony. It would seem, however, that much would depend upon the intentions of the architect.

Like Eno, composer and sound ecologist Hildegard Westerkamp describes what she does as a kind of "live Muzak."⁴² The major difference from her point of view is that Muzak is a product, whereas a soundscape composition cannot be consumed in this way. Echoing Attali, she derides the commodified music-as-environment ever-present in capitalist spaces of consumption:

Through its very "tone" it tries to conceal its relationship to money and power, its function as mediator of human relations and its function as "moodsetter." Without it – so its producers might like us to think – we may not be able to interact, may not feel safe... But it is a false womb, of course. It can only exist inside the world of money.⁴³

Steve Goodman believes it may be too late to counter the effects of the corporate soundscape: "In the history of ubiquitous music, in fact, Muzak preempted our submersion into a generalized surround sound culture, the insidious purr of control and the digital modulation of affective tonality that soothes the experience of the ecology of fear."⁴⁴ Schafer too sees the saturation of deliberate sound to have a problematic effect on human experience. He explains:

Presently the amount of sound and music in the environment have clearly exceeded man's capacity to assimilate them, and the audio ecosystem is beginning to fall apart. Background music, which is supposed to create atmosphere, is far too excessive. In our present condition we find that within certain areas and spaces aspects of visual design are well attended to, but sound design is completely ignored.⁴⁵ Of course, grocery store music is its own form of sound design, just not the kind that Schafer would like to experience.

While hesitant to embrace the culture of disinterested listening that Muzak seems to have inspired, ambient musician and author David Toop allows for more creative possibilities in constructed sonic environments. In his Ocean of Sound, Toop discusses several artists such as Brian Eno and La Monte Young who hoped to create spaces in which to trigger specific emotive responses. In his introduction, Toop looks to Brian Eno's early ambient compositions and his belief in their potential to create spaces and influence moods. Eno referred to his Neroli album, for example, as having created "a nice space to think in."⁴⁶ Eno was especially intrigued by Muzak and the sonic environment it created. He wrote, "I predict that the concept of 'muzak,' once it sheds its connotations of aural garbage, might enjoy a new (and very fruitful) lease on life."47 But, as Toop notes, his idea differed from Muzak in that he hoped to highlight "acoustic and atmospheric idiosyncrasies" rather than obscure them.⁴⁸ Both Toop and Young felt the need not only to create a location in which music might be able to evolve, but also strove for music without a clearly defined beginning or an end – hence the name of Young's project, *Theater of Eternal Music*, which sought to achieve a spiritual connection between the members of its audience through the manipulation of sound waves.

The continuous, single-frequency sine wave assumed a crucial role in Young and companion Marian Zazeela's *Dream Houses*. According to the liner notes of their *Dream House 78'17'* Young and Zazeela conceived of their *Dream House* environment as a "living organism with a life and tradition of its own."⁴⁹ The most famous of these is located in the couple's New York City loft that they outfitted for the purpose of studying the effects of continuous sonic waveforms on themselves and select groups of invited

guests. An ever-changing lineup of musicians would occasionally assemble as The Theater of Eternal Music to play in tune to the sine waves in the space.⁵⁰ What distinguishes these Dream Houses from most other sonic experiences is that the music created there can only be truly appreciated in the space in which it occurs. An auditory and bodily sensation is much more pronounced in the presence of a sine wave, according to Young. Sine waves can build upon one another, "allowing the listener to actually experience sonic structures in space."51 Lissajous were put on display so that the listener was able to see the visual counterpart of the wave. Young and Zazeela posit the "real time" of the continuous performance as an alternative to "the artificiality of measured time."52 Dream Houses – in their denial of measured time through sustained sound – would become living beings capable of propelling themselves by their own momentum. Such a space, in which music is treated as an entity capable of independent evolution, is of a different quality than a typical rehearsal space or recording studio. Complete control of all sonic variables is necessary in order to create a space for music. Nevertheless, complete submersion in this environment would quickly result in the sustained, unwavering sound burying itself in the subconscious of all but the most disciplined listener.

Disinterested listening, therefore, appears to have the potential to create a mood or encourage a certain mindset. This format may be used in myriad ways, but music that is created not to be listened to nevertheless influences our interactions and our responses. To answer why this might be the case, Goodman looks to studies in the field of rhythmanalysis, which he describes as the conception of rhythm as method.⁵³ He refers to an ontology of vibration made possible by this methodology which seems to hover at the intersection of philosophy and science. Alfred North Whitehead was another philosopher concerned with rhythmanalysis who wrote of the tension between the static appearance of a thing and its inner molecular vibrations. For Whitehead, this constituted an aesthetics. Goodman explains, "In Whitehead's philosophy, the throb of feeling is not perceived by a subject as such but rather constitutes the actual occasion out of which the distinction between subject and object emerges."⁵⁴

This notion of the vibrations of specific moments resonating in seemingly static objects recalls Kathleen Stewart's *Ordinary Affects* in which she attempts to isolate a trajectory of affect in order to visualize what she refers to as the "reeling present."⁵⁵ In one of a series of vignettes, Stewart recalls overhearing the story of a motorcycle accident in order to demonstrate the ways in which the event continues to resonate in bodies and in stories long into the future. She describes the resonance of the crash in the tattered clothing of a couple who collided with a deer on their motorcycle, the excited conversations of strangers as they learned of the event, and in the debris that likely littered the road somewhere. The subtle *afteraffects* of this event will live on in the dreams and habits of those who were involved, regardless of how remote their connections to the initial event may have been.

It is compelling to conceive of Stewart's resonant residue as rhythmic, prompting a ready comparison with Anihid Kassabian's work on bodily and emotive responses to music in her 2016 book, *Ubiquitous Listening: Affect, Attention, and Distributed Subjectivity*.⁵⁶ Beginning with the assumption that music does indeed influence the emotional states of those who come into contact with it, Kassabian describes the mechanism of affect as "the circuit of bodily responses to stimuli that take place before conscious apprehension. Once apprehended, the responses pass into thoughts and feelings, though they always leave a residue."⁵⁷ For Kassabian, to hear a sound and to feel a vibration are one and the same, so the vibratory quality of music is likely the mechanism that initiates the bodily response that precedes the corresponding emotion. While most scholars of music would maintain that music demands a certain level of attention in order to be appreciated, this is not how we tend to consume music today. Eno and Young responded by creating music deliberately as a kind of environmental component – a sonic blanket or pool in which a listener might be submerged without necessarily actively engaging with the sound. Kassabian hopes to close what she refers to as "the gaps that plague us between ourselves and our objects," ("objects" in this case being the music that we hear).⁵⁸ In this respect, Kassabian's approach to music recalls Timothy Morton's characterization of "hyperobjects."

Including broad concepts such as global warming as well as specific objects such as plastic bags, hyperobjects are, for Morton, "things that are massively distributed in time and space relative to humans."⁵⁹ He describes such objects as sticking to anything that becomes involved with them. To illustrate the strange viscosity of hyperobjects, Morton reflects on his own very physical reaction to the music of My Bloody Valentine, which he imagines might possibly be beautiful enough to kill him. "In this sense, My Bloody Valentine's music is more truly ecological than representational 'nature' music, and more uncompromising than quiet ambient music," he explains.⁶⁰ Such music may be deemed "ecological" because the sound surrounds and penetrates his mind and body in a way that constitutes a new way of being in the world, if only for a moment. He continues, "The walls of feedback that the Velvet Underground inaugurated in 'Heroin' are sound as hyperobject, a sound from which I can't escape, a viscous sonic latex."⁶¹ Due to their size, and since hyperobjects penetrate our physical bodies at every opportunity, they must influence our minds to some extent, suggests Morton. Music, even in its most mundane or popular commercial presentation, has the power to act upon individuals.

Picking up where Haraway left off with cyborgs and Deluze and Guattari left off with rhizomes, Kassabian offers "distributed subjectivities." She writes, "Distributed subjectivity is constructed in and through our responses to acts of culture." Ubiquitous musics "bond and bind the field of distribution together."62 If Kassabian's web of connectivity includes human interactions with their greater environment, "distributed subjectivity is, then, a nonindividual subjectivity... The channels of distribution are held open by ubiquitous musics. Humans, institutions, machines, and molecules are all nodes in the network, nodes of different densities."63 She takes her terms from the ideas of distributed computing, which she argues was only possible due to the existence of distributed subjectivity. Her notion of identity is, then, alive and fluid – a residue of affect, but one subject to currents and impulses, one often dictated by other "nodes" as well. Her definition is thus reminiscent of Stewart's discussion of affect in that Kassabian's ubiquitous musics may act as the pool in which her individual nodes exist. Just as Stewart's motorcycle crash resonates in the bodies and memories of many people not directly involved with it, thereby creating a network of relationships between otherwise unrelated individuals, so too might music (particularly music not consciously consumed) bind together disparate individuals, if only for a moment.⁶⁴

Since Kassabian believes that "we know ourselves in and through musical engagement," questions of how we listen, how much we listen, and what we listen to are very important.⁶⁵ Music follows us from room to room, but we are often unaware of its presence. In fact, we are more likely to notice its absence. Background music – once largely instrumental fare – now often is composed of the latest pop hits. So, music that is created ostensibly for active listening isn't necessarily consumed in this manner. If so much contemporary popular music is destined to be consumed (at least sometimes) as a thing taking place in the background while we do some other activity, must we look at artists like Björk, who imbue their work with very specific meaning, as working fruitlessly? If we are to combat this culture of consumption and begin to shape spaces that might encourage humans to remember their natural relationships with their environment, Westerkamp argues that we must create music that allows us to "speak back to that which we find unacceptable."⁶⁶ She explains that much of the background music pumped into stores and shopping malls is:

the type of music that no one really listens to, not only because stress blocks us from really listening, but because it is designed not to be listened to. It is deliberately designed to place us inside the soundscape without our noticing that we are inside it, that we have been sucked into its profit-seeking agenda... It is high time that we, as soundscape composers, acoustic ecologists and soundscape designers, implement our own listening skills and sound-design knowledge and speak back to the forces that have assumed the authority to silence us.⁶⁷ Thus, the creation of music, as well as its consumption, might become a praxis of resistance.

Just as the style or genre of music is believed to influence the mood or the actions of customers in spaces of commerce, the methods and materials through which music is consumed may significantly affect its potential to act on the listener. The overabundance of audiovisual stimuli in daily human activities has caused many people to attempt to reclaim control of their sensory environments through the use of personal listening devices. While still acting as persistent sound taking place in the background, music pumped directly into the ears of individual listeners affords some measure of personal agency. The popularity of digitally streamed music in the late twentieth and twenty-first centuries, however, has led to a culture in which music is often enjoyed in virtual isolation.

For Shuhei Hosokawa, the result of individual mobile music is the elimination of shared time. Hosokawa authored one of the earliest studies of what I will refer to broadly as headphone culture in his 1984 essay, "The Walkman Effect." For the first time in human history, the Walkman enabled individuals to remove themselves from the shared soundscape and create a personalized, portable replacement. Hosokawa sees this as nothing short of a paradigm shift. He looks to Deleuze to counter claims of individuality as a result of the Walkman, what Hosokawa refers to as a singularity. Rather than an assertion of individuality, he argues, "it is rather anonymous, impersonal, pre-individual, and nomadic."⁶⁸ For how can an individual identity be sustained in isolation?

Writing decades later about essentially the same phenomenon in his *Sound Moves: iPod Culture and Urban Experience*, Michael Bull takes a somewhat dimmer view of the practice than Hosokawa, observing a disconnect not only with one's fellow humans, but also with virtually all aspects of the immediate environment.⁶⁹ If a sense of connectedness is essential for a desire to live harmoniously with the greater living system of nature, this level of isolation may prove problematic to the aims of the environmental movement. Bull writes, "Technologies such as iPods, mobile phones, and automobiles act as tools enabling the urban citizen to move through the chilly spaces of urban culture wrapped in a cocoon of communicative warmth whilst further contributing to the chill which surrounds them."⁷⁰ Bull suggests that personal creative expression – particularly, I believe, in the imagining of space made possible through the intervention of music – negates the physicality of the city. Again, such a negation, or a dematerialization, might contribute to a disinterested attitude toward real spaces and real matter, and the larger system in which one moves about.

The ability of music to create place in this way is potentially empowering for Bull, but empowering on an exclusively individual level. Ultimately, such creative license may prove destructive to the personalized spaces of our own making. "As we increasingly inhabit 'media-saturated' spaces of intimacy," Bull explains, "so we increasingly desire to make the public spaces passed through mimic our desires, thus, ironically, furthering the absence of meaning attributed to those spaces."⁷¹ David Toop describes headphone culture as resulting in an eerie disembodied existence for the listener. "External spatial characteristics of hearing are reduced by the construction of a predominantly imaginative space for sound to inhabit... Air and depth are no longer important; instead, the music builds a room of its own, of many dimensions and occupied by a single listener."⁷² Designed to be experienced in relative isolation, the final track on Björk's 1995 album *Post*, appropriately titled "Headphones," vividly conjures the architecture of such internal spaces.

One of two tracks on the album co-authored by collaborator and romantic partner Tricky, "Headphones" is a testament to the ability of music to free the listener from the burdens of one's daily life. Björk pieced together the lyrics from extracts of her personal diary, narrating a journey of discovery through sound as she drifts to sleep.⁷³ The experience is as much bodily as auditory for Björk: "Sounds go through muscles. These abstract wordless movements, they start off cells that haven't been touched before."⁷⁴ The intermittent, airy vocals float dreamily over whispered words in the distant background, suggesting spatial relationships between the musical components of the song. Björk plays with the sound of her own voice in the sonic space, interjecting a series of vowel sounds as though calling into a cave in order to summon an echo. "I don't recognize myself. This is very interesting," she muses.⁷⁵ The song is organized around a dull percussive thumping in the foreground, adding to the physicality of the experience for the listener as sporadic, sparkling chimes encourage a state of relaxation. Björk's cascading vocals alternate in volume, suggesting movement within the listener's private head space. Clearly designed to be experienced through headphones, the song invites the listener to enter into the landscape of the lullaby as it unfolds in stereo. The layers of sound dance around and through one another, demonstrating the capabilities of musical composition, particularly when aided by personal listening technologies, to craft rich internal spaces.

I wonder about the permeability of bodies, or the boundaries between them, as they move through myriad invisible bits of information. It is an interesting image to work though. We plug ear buds into our heads in order to access packets of organized sound. These songs leave imprints in our memories. We hum them to ourselves, or they sometimes make themselves known quite unexpectedly. As Björk observes in "Headphones," musical resonance may also inhabit our bodies, if only temporarily. Music has shed much of its materiality in the digital era. It remains divorced from any notion of an original performance, and now has abandoned the constraints of its visible existence in favor of life on the airwaves. This "immaterial data" exists everywhere and nowhere, its information summoned by a variety of personal listening devices.⁷⁶ Mathias Korsgaard details the gradual dematerialization of music in his article on the construction of place in Björk's music videos, noting that such "immaterial data" is easier to distribute that ever, but that it has resulted in a negation of time and place. This invisible information requires a material existence, and in our posthuman era we may well consider personal listening devices as extensions of our bodies. But are they additional sensory organs, or are they sensory inhibitors?

Hosokawa's description of a world of distracted individuals recalls 19th-century descriptions of crowds reading newspapers on trains – each in her own world. However, a collective knowledge may still be assumed in such an environment since shared experiences are still possible. Bull discusses this phenomenon in a more advanced technological state than Hosokawa, but both see headphones and personal, continuous feeds of music as contributing to a "texture of relations" that comprises the self.77 Ultimately, Hosokawa characterizes the Walkman as ushering in a new way of experiencing life. "It enables us to move towards an autonomous pluralistically structured awareness of reality, but not towards a self-enclosed refuge or into narcissistic regression."⁷⁸ Herein may lie the potential in the act of listening or in music more broadly to attune the perception of the listener toward the ecological. The extent to which this is true, however, may lie in how we process the sights and sounds that we have become accustomed to tuning out. More importantly, if music can work to bring about a culture of ecologically minded individuals, our listening practices must contribute to a tangible sense of connectedness to one another and the places we inhabit.

I have examined a number of public and private modes of listening in an attempt to tease out some of the material and affective qualities inherent to music. In the following chapter, I will examine the visual culture associated with popular music and with contemporary listening practices. The explosion of the music video as an art form wed sight to sound in a way that would transform our daily lives well beyond the parameters of cable television. It is in this context that Bjork's musical output may be best understood. Possessing an uncanny ability to bring together seemingly contradictory musical styles and formats, Björk elevated the highly commercial music video into an art form in its own right, launching her to unlikely superstardom by the middle of the 1990s. I will present her work as a counter to Attali's claim that commercial recording artists must remain subservient to the industry through which their work is presented.

Notes to Chapter Two

¹ Quoted in Melissa Warak, "Zen and the Art of La Monte Young," in *Music and Modernism, c. 1849-1950*, ed. Charlotte De Mille (Newcastle upon Tyne, UK: Cambridge Scholars Pub), 2011.

² R. Murray Schafer, *The Tuning of the World* (New York: Knopf, 1977).

³ Jacques Attali, *Noise: The Political Economy of Music* (Minneapolis: University of Minnesota Press, 1985).

⁴ Simon Frith and Howard Horne, Art into Pop (New York: Methuen, 1987).

⁵ Schafer, 3-4.

⁶ Schafer, 71.

⁷ Schafer, 75.

⁸ Schafer, 99.

⁹ Schafer, 90.

¹⁰ Schafer sees the importation of noise as a symptom of colonization. "When sound power is sufficient to create a large acoustic profile, we may speak of it... as imperialistic." (Schafer, 77).

¹¹ Schafer, 91.

¹² Attali, 85.

¹³ Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," in *Illuminations*, ed. Hannah Arendt (New York: Schocken Books, 1973), 217-251.
¹⁴ Attali, 89-90. Italics are original.

¹⁵ Nearly just as quickly, race came into play, as white-owned record companies eagerly turned profits off of jazz music. "The economic appropriation of jazz by whites resulted in the imposition of a very Westernized kind of jazz, molded by white music critics and presented as music 'accessible to the Western musical ear.'" Attali, 104.

¹⁶ Attali, 110.

¹⁷ Attali, 111.

¹⁸ Attali, 87.

¹⁹ Schafer, 96.

²⁰ Attali, 121

- ²¹ Attali, 122.
- ²² Attali, 5.
- ²³ Attali, 136.
- ²⁴ Attali, 137.

²⁵ Attali, 137.

²⁶ Frith and Horne, 13.

²⁷ Frith and Horne, 15.

²⁸ Commenting on a fashion review in *Cosmopolitan*, Dick Hebdige notes that as early as 1977 the popular press was already capitalizing on the punk aesthetic. He writes, "Models smouldered beneath mountains of safety pins and plastic... and the

accompanying article ended with the aphorism – 'To shock is chic' – which presaged the subculture's imminent demise." Dick Hebdige, *Subculture: The Meaning of Style* (London: Routledge, 1979), 96.

²⁹ Bernard Gendron, *Between Montmartre and the Mudd Club: Popular Music and the Avant-Garde* (Chicago: University of Chicago Press, 2002).

- ³¹ Frith and Horne, 61.
- ³² Frith and Horne, 63.
- ³³ Frith and Horne, 63.
- ³⁴ Frith and Horne, 100.
- ³⁵ Frith and Horne, 100.
- ³⁶ Frith and Horne, 110.
- ³⁷ Frith and Horne, 110.

³⁸ Brian Eno, "Ambient Music" in *The Book of Music and Nature*, ed. David Rothenberg (Middletown: Wesleyan University Press, 2009), 139.

³⁹ Eno, 140.

⁴⁰ Eno, 142.

⁴¹ Eno, 140.

⁴² Hildegard Westerkamp, "Speaking from Inside the Soundscape," in *The Book of Music and Nature*, ed. David Rothenberg (Middleton: Wesleyan University Press, 2009), 147.

⁴³ Westerkamp, 147.

⁴⁴ Steve Goodman, *Sonic Warfare: Sound, Affect, and the Ecology of Fear* (Cambridge: MIT Press, 2010), 144.

⁴⁵ R. Murray Schafer, "Music and the Soundscape," in *The Book of Music and Nature*, ed. David Rothenberg (Middleton: Wesleyan University Press, 2009), 67.

⁴⁶ David Toop, *Oceans of Sound* (London: Serpent's Tail, 1995), 8.

47 Toop, Oceans, 9.

⁴⁸ Toop, *Oceans*, 9.

⁴⁹ La Monte Young and Mairan Zazeela, *Dream House* 78'17" (Aguirre, 1973), LP. ⁵⁰ Young notes that this was an especially difficult practice, since "the sine waves have no harmonic components with which to synchronize the harmonics of the voices and instruments." (Young and Zazeela, *Dream House* LP).

⁵¹ La Monte Young, *Selected Writings* (München: Heiner Friedrich, 1969).

⁵² Young, Selected Writings.

⁵³ In his *Rhythmanalysis: Space, Time, and Everyday Life,* a posthumously published work considered to be the fourth volume in his *Critique of Everyday Life* series, Henri Lefebvre offers rhythm as an alternative to the emphasis on the visual that so often dominates cultural studies. In his chapter titled "Media Day," Lefebvre makes an interesting distinction between *present* and *presence*. He speaks of the ubiquitous flood of images, sounds, and various bits of information designed to occupy our every waking moment as "the present without presence." (Lefebvre, *Rhythmanalysis*, 47).

⁵⁴ Goodman, 97. The Italian Futurists, and Umberto Boccioni in particular, developed many of their artistic theories and practices out of this idea. For them, no object was truly inanimate. All material beings existed in a relationship bound together by the vibrations and energies emitting from one another. Thus, objects were never fully static, but rather existed in relative states of motion.

 ⁵⁵ Kathleen Stewart, Ordinary Affects (Durham: Duke University Press, 2007), 4.
 ⁵⁶ Anihid Kassabian, Ubiquitous Listening: Affect, Attention, and Distributed Subjectivity (Berkeley: University of California Press, 2016).

⁵⁷ Kassabian, xiii. It seems that Kassabian's definition of music is limited to deliberately manipulated and structured sounds - what we commonly think of as music as opposed

to noise - songs and the like. She refers to the ubiquity of this kind of music, but doesn't address ambient noises associated with traffic or industry, for example.

⁵⁸ Kassabian, xxviii.

⁵⁹ Timothy Morton, *Hyperbojects* (Minneapolis: University of Minnesota Press), 1.

⁶⁰ Morton, *Hyperobjects*, 30.

⁶¹ Morton, *Hyperobjects*, 30

⁶² Kassabian, xxiv.

⁶³ Kassabian, xxv.

⁶⁴ The start of Chapter Five of Toop's *Sinister Resonance* ("The Jagged Dog") is reminiscent of Kathleen Stewart's *Ordinary Affects* in its description of the traces of past conversations visible in the monuments and relics of human civilization. He writes of the "buildings, hedgerows, landfill sites, illuminated signs, motorways unspooling into the night or plastic bags floating in the ocean." All of these are the visible reminders of human activities, and they contain within them echoes of a sound world that once enveloped them. "What goes unnoticed in the general run of life still exists," he maintains, "in the colouration, its echoes, its affects, its atmospheres and definitions of place." (David Toop, *Sinister Resonance: The Mediumship of the Listener* (New York: Continuum, 2010), 58.

⁶⁵ Kassabian, 18.

⁶⁶ Westerkamp, 147.

⁶⁷ Westerkamp, 147.

⁶⁸ Shuhei Hosokawa, "The Walkman Effect," in *The Sound Studies Reader*, ed. Jonathan Sterne (New York: Routledge, 2012), 169.

⁶⁹ Michael Bull, *Sound Moves: iPod Culture and Urban Experience* (New York: Routledge, 2007).

⁷⁰ Bull, 18.

⁷¹ Bull, 10.

⁷² Toop, *Sinister Resonance*, 44-45.

⁷³ See Pytlik, 179 for a description of the lyrical composition.

⁷⁴ Björk. "Headphones," *Post.* New York: Elektra Entertainment, 1995.

75 Björk. "Headphones," Post.

⁷⁶ Mathias Bonde Korsgaard, "Emotional Landscapes: The Construction of Place in Björk's Music and Music Videos," ed. Bodil Marie Thomsen (Âarhus: Âarhus University Press, 2011), 216.

77 Hosokawa, 105.

⁷⁸ Hosokawa, 175.
Chapter Three: Sonic Culture and the Function of Music in a Visual Age

In his introduction to Björk's 2015 retrospective exhibit at MoMA, curator Klaus Biesenbach notes correctly that one of the many things that sets her apart as an artist has been her enthusiasm for collaboration and an intuition for unexpected partnerships, the result of which has been a highly original audiovisual body of work. He explains, "Working with photographers, film - and video-makers, designers, architects, craftsmen, and inventors, she crosses over into all categories of high and low culture, digital and analog, in most creative fields."¹ While known for her unmistakable voice and often infectiously melodic musical arrangements, Björk's work has also always been inseparable from its visual aspects, including music videos, stage scenery, costumes, and album artwork. She achieved widespread critical and public adulation with the release of her first single, "Human Behavior," the video for which I discussed in Chapter One. In a way almost singular to Björk, her musical output would henceforth be appreciated in strongly visual terms, due in large part to her creation of such startlingly original music videos. In this chapter, I will examine the complex entanglement between sight and sound in popular music of the twentieth and twenty-first centuries, the role of style in the formation of music communities, and the ways in which the new format of music video might strengthen the communicability and reception of an artist's desired message.

Long before MTV created the demand (and thereby also the supply) for video accompaniments for pop songs with its launch in 1981, a visual culture of music existed almost everywhere it was created. This was especially evident in the jazz and rock & roll eras, with fashion in particular coming to represent the cultural or political values of a given musical scene. Perhaps no visual expression of musical identity was more distinctive or has had a greater cultural impact than the style and fashion associated with punk rock. Since much of Björk's earliest musical output took place amid Iceland's burgeoning punk scene in the 1980s, it will serve as an apt starting place for my examination of the importance of a visual presence in modern musical creation.

Simon Reynolds is puzzled by the fact that punk rock, indebted as it was to a history of fifties rock & roll and sixties garage rock, "snowballed into a genuinely transformative, world-historical force."² The origins of what came to be known as punk rock vary wildly depending upon the historical and geographic parameters of one's study. Musically, punk is often identified as a return to the rock & roll days of the early 1960s, but with an emphasis on attitude over musicianship. Some point to bands such as Question Mark & the Mysterians or the Stooges as examples of early punk rock. Others look to avant-garde performers such as David Bowie as an ideological predecessor to the movement. New York spawned an entire scene loosely organized around legendary Manhattan music venue CBGB's that is often credited for having created the first true punk rock music, but it wasn't the Ramones, or Blondie, or even the New York Dolls who catapulted punk into the broader popular mythology. Famous for having emerged from Malcolm McLaren's King's Road boutique Sex in London, the Sex Pistols literally wore the collective rage of the disenfranchised British working class on their sleeves.

For better or worse, it is difficult to argue with MoMA Costume Institute Curator Andrew Bolton who wrote of punk rock, "No other countercultural movement has had a greater or more enduring influence on high fashion."³ Characterized by confrontational or offensive imagery, bondage gear worn as accessories, combat boots, unconventional hair and make-up, and unusual combinations of second-hand clothing altered to shock or unnerve passersby, punk attire projected the anger and contempt of working-class British youth. The connection between attire and philosophy, whether artistic or political, contributed greatly to punk rock's widespread appeal. Likeminded individuals were able to see themselves in the tattered attire of the early punk scene and, more importantly, were free to create the look for themselves.

Dick Hebdige was one of the first scholars to take the question of style seriously as it pertained to subcultural groups the likes of which coalesced around punk rock. As he points out, it is not simply the adoption and display of certain objects or styles but also the reception of these things that creates meaning. He explains, "The tensions between dominant and subordinate groups can be found reflected in the surfaces of subculture."⁴ In the case of punk rock in both the U.S. and the U.K., the visual markers associated with external appearance were rich with meaning. New York band Television co-founder and singer Richard Hell is often cited as one of the earliest individuals to have adopted what became the trademark punk rock look, complete with safety pins and spiked hair. He explains that while he was thrilled to be playing gigs with his new band in New York City, he realized that there was more to his artistic output than music:

I wanted all evidence of the group to be consistent, and to mean things. I wanted to reconceive everything that we did and were as what the band had to say. The idea was to take everything we were on the inside, including our perceptions of

the world, and put it on the outside, project it, using all means.⁵ These external pieces of "evidence" would include facial expressions, fashion, posters, and the like — all of the additional related attributes of the central project; or what Jonathan Gray refers to as "paratexts."⁶ Taken as a whole, the punk scene was certainly rooted in musical performance and recordings, but fanzines, album art, fashion, and myriad forms of associated visual art contributed greatly to its appeal and to its meaning.

In the U.K., the aims of punk rock were more political than many of their American counterparts, but the material expression of punk was just as central to its full realization as it was in the United States. Sex Pistols founder and owner of the Sex boutique on London's famous King's Road, Malcolm McLaren, explains how style played a pivotal role in promoting a punk rock aesthetic:

We messed around with imagery that basically was provocative, and more often than not, to do with sex, and if it wasn't to do with sex it was to do with politics... It was just imagery that hopefully wouldn't appear polite, because the last thing you wanted to do in my shop was to look polite!⁷

McLaren and designer Vivienne Westwood initially sold biker duds to so-called Teddy Boys, calling their shop "Let It Rock" and then "Too Fast to Live Too Young to Die" before settling on the more provocative "Sex" moniker. Thus, in the U.K., the association between punk rock and fashion was explicit from its onset.

To return to Reynolds' question, the reason that punk rock was able to rupture the very foundations of popular culture in the twentieth century may have had as much to do with its look as its sound. The true power of any spectacular subculture is its ability to create semantic disorder, what Hebdige describes as "a kind of temporary blockage in the system of representation."⁸ What happens is that the system is exposed as a construct, even if only briefly, and the effects can be troubling, disorienting, or liberating, depending on which cultural strata one calls home. Greil Marcus takes this idea as a given in his *Lipstick Traces: A Secret History of the Twentieth Century,* in which he characterizes the punk movement as of no less historical import than warfare or political revolution. He asserts that by calling into question the most basic assumptions about social hierarchies or economic systems, punk rock turned the modern world on its head. He explains, "A Sex Pistols record had to change the way a given person performed his or her commute — which is to say that the record had to connect that act to every other, and then call the enterprise as a whole into question. Thus would the record change the world."⁹ This faith in the power of art to transform society owes much to the avant-garde legacy discussed in Chapter One. It was this spirit of revolutionary artistic creation coupled with punk rock's D.I.Y. empowerment that appealed to a young Björk as she began her first adult forays into her musical career.¹⁰

Before finding success on the indie scene with her band The Sugarcubes, Björk spent much of the 1980s creating punk-inspired musical performances on stages across Iceland and Europe, first with Tappi Tíkarrass and later with KUKL.¹¹ Given Iceland's remoteness, both geographically and culturally, it is surprising and at the same time perfectly natural that a punk scene would have blossomed there. Performing new music of any kind was difficult due to the limitations of Icelandic media (Iceland only had a single state-operated TV station and radio channel until the mid-1980s) and to a shortage of appropriate venues. But such isolation can also result in highly original artwork. The DIY principles intrinsic to punk rock were embraced by a generation of Icelandic youth eager to assert their place among the American and European scenes already in full swing. "Until punk completely upset the apple cart, the prevailing wisdom among Icelandic musicians was that to succeed abroad, you had to sound as if you were born abroad."¹² Emerging as the most distinctive member of a fiercely creative Icelandic cohort, Björk would come to define the sound of a nation. As legend has it, a young Einar Örn realized that if he parked his car in just the right spot, he could pick up John Peel's radio show from London. Örn, who would go on to sing with Björk in KUKL and the Sugarcubes, was instrumental in introducing Icelandic music to the rest of the world. He invited the Stranglers and the Clash to play Reykjavik's arts festivals in 1978 and 1980 respectively, but most importantly for this story, he brought Crass to Iceland for the first time. In his memoir, Crass singer Steve Ignorant tells the story of the peace festival they headlined in Reykjavik in 1983 at Örn's invitation:

From start to finish, he looked after us, showed us the sights, and made sure we were ok [sic]. Nothing was too much trouble. The only time he took a break was when his band, Kukl, who were huge in Iceland, took the stage. Their lead singer looked like she was about nine years old, but her voice and her stage presence knocked me sideways. I'd never heard anyone quite like Björk.¹³

Crass was duly impressed with the entire experience, and would go on to release KUKL's two LPs on their own Crass Records, supporting their European tours with fellow labelmates Flux of Pink Indians. Not only did this Crass connection afford Björk the opportunity to perform abroad, it would certainly also have introduced her to the anarcho-punk philosophy of music as a means of political activism.¹⁴

Unlike the early British punk bands, the look and sound of which were easily adopted by mainstream commercial ventures, anarcho-punk musicians and thinkers still believed that the format was by no means bankrupt. Punk historian Rich Cross explains, "Anarcho-punk identified itself as a 'restorative,' dissident movement within punk: one which aimed to reassert the primacy of punk as an agency of political subversion... through its insistence that punk rock itself might yet be refashioned into a revolutionary weapon."¹⁵ Cross essentially argues that when punk seemed doomed to life as a fashion statement, real punks turned to anarchism. Echoing Marcus, Cross explains that "punk could still be remade into a force that recognized the movement's inherently subversive logic and which set out to change the world and redefine the lives of the movement's participants."¹⁶ Typically heralded as the most influential members of the anarcho-punk movement, Crass displayed a creative fervor in their artistic work reminiscent of the Italian Futurists. Just as Marinetti and company encouraged others to start their own movements, Crass hoped to inspire independent thought in their audience, which they hoped would ultimately lead to a social and political revolution in the U.K..¹⁷

Cross points out that the visual output of anarcho-punk differed greatly from that of more mainstream punk. Anarcho-punks such as Crass were very reluctant to create much in the way of merchandise or branding. They shied away from group photos or anything that might appear to give them an appearance of selling out. Nevertheless, they and their fans did develop a stark visual presence characterized predominantly by black attire. When asked about Crass's contribution to the punk movement in the U.K., cofounder Penny Rimbaud sees the lived experience of the group as more important than the performative aspects. Part of Crass' agenda was the promotion of vegetarianism, for example:

With the information we handed out, we were able to change the vegetarian movement from being essentially a middle-class, rather denialist group of intellectuals into a massive street movement where you could almost assume that anyone wearing black and a mohawk was also a vegetarian. Then out of that, you now can buy vegetarian food in just about any supermarket; it created a market, and that market has also expanded as those kids have grown up from being

black-clad and mohawked into working in the media or social services.¹⁸ It was thus that the visual iconography of a music scene would perform revolutionary work.

In their insightful essay titled "Utopian Punk," Peter Webb and John Lynch examine how Björk's creative practice might become actualized as a "lifeworld practice."¹⁹ Collective experience can lead to transformative activity, and music is often a catalyst in the formation of certain subcultures or activist groups. Webb and Lynch look to Hakim Bey's writing on the "Temporary Autonomous Zone" (or TAZ) as a means to describe these transitory moments of action brought about through a mutual appreciation of music:²⁰

Punk and its zones of operation acted as autonomous zones in its gig experiences, club spaces, cultural centers, squats and politics, and fanzines and communiques, where individual "uprisings" articulated a utopianism that potentially changed quite radically those individuals involved.²¹

They cite KUKL's stated aims as an example of the artistic intent to create such TAZs: "We only want to wake up in people dormant powers which even they did not know existed."²² The desire to awaken a sleeping public and empower them through a creative outpouring is at the core of many early avant-garde projects, and it resurged in the punk era. While Björk would largely abandon the punk rock instrumentalization and song structures of her early years, her solo work retained the defiantly creative spirit that propelled her music and her artwork ever forward. Just as with the many futurist offshoots early in the twentieth century, Björk would communicate her message via numerous media and formats, with the visual aspects of her musical output attracting immediate critical and public attention.

Björk has long served as an outspoken environmental activist in her native Iceland, but her recorded music and music videos broaden the potential scope of her work. The performers and musical groups I have examined thus far utilized their visual presence as a means of promoting a certain lifestyle or political agenda, and they attracted a devoted following as a result. But the highly concentrated visual explosion of the music video seems to function differently. With the soaring popularity of MTV in the 1980s and 1990s, artists such as Björk could instantly reach a vast audience. This type of engagement — experienced individually via a recording rather than collectively in a live setting — is less likely to inspire a subculture than something like the much less intentionally commercial punk movement. But it is also likely to accelerate the creation of new musical and visual art forms in a way that calls to mind the explosion of avantgardes at the turn of the century.

The advent of the music video has contributed to a culture in which much of the popular music presented to the public is appreciated visually. But what exactly is a music video? How is it distinguished from video art, for example? Is it more akin to a television advertisement? We once knew what it was – a promotional visual accompaniment for a pop song designed to advertise the product on behalf of a record company. It was highly censored and available only on a few select platforms such as MTV. Music video scholar Carol Vernallis struggles to come up with an adequate definition, or indeed the most basic parameters, of what constitutes a music video today. Even something as seemingly requisite as the statement "the images seem engaged with showing off the soundtrack to some extent," cannot be limited to the music video

format.²³ Film clips and other YouTube content often so completely wed audio to video that they may be formally indistinguishable from the music video. In short, she writes, "We can thus define music video, simply, as a relation of sound and image that we recognize as such."24 She seems, therefore, to acknowledge that the music video has become its own distinct art form, though it is unclear what properties might distinguish it from a short film, for example. Just as the music video has always repurposed elements of other media, its influence can be felt in all types of new media today. It feels like the ultimate site of confluence – a place where references ricochet off of one another. We understand music video because we understand cinema or pop music, and in turn we understand cinema or pop music because we understand music video. As Mathias Korsgaard explains, "Any music video operates by visually remediating music, but also by musically remediating the image... and vision itself thereby becomes musical."²⁵ Ultimately, Vernallis presents a convincing argument that music and video exist in a relationship of co-presence today, as opposed to the secondary nature of video as a form of advertising for a particular song. Further, a video may more accurately be thought to function as a visual point of meditation for a piece of music, serving to keep the music close to the audience and guiding their focus.²⁶

Gina Arnold et. al. use the term "audiovision" to describe the "synaesthetic combination of music and moving images" characteristic of the music video.²⁷ They make a strong case for a reassessment of the function and analysis of music videos in the twenty-first century. It is no longer accurate to look at them in terms of advertisements for major record labels. Now, most videos are watched on YouTube rather than television and are as likely to be posted by individuals as record companies. "Unyoked from distribution on cable television, unyoked from the financial necessity of major label sponsorship, and unyoked from the bulky, expensive filming processes, the genre is in need of new theoretical frameworks."²⁸ Of course, many of Björk's early videos predate these new viewing practices, but it is still informative to examine the format in the process of evolution. Regardless of their era, Arnold et.al. see the use of music videos as marketing tools as an illustration of the ways in which capitalism can force art to do its bidding. However, the music video (perhaps more so than music on its own) affords artists the opportunity to present their messages to the public at large. Thus, the music video might at the same time constitute a novel artistic creation while harnessing the familiar format and expansive viewership potential of its commercial origins.

Björk biographer Nicola Dibben wonders if popular music might help individuals see themselves as part of a global biosphere, a perception that arguably might have positive ramifications for environmental action. She advocates for a more cosmopolitan approach to the environment than what existed in much of the twentieth century. People, information, ideas, and technologies move about in ways that refuse grounding in a single location. She explains, "Cosmopolitanism is helpful to environmental thinking in that it recognizes that transnational cultural flows and social formations provide a different route for environmental awareness."²⁹ The fact that many people become aware of environmental destruction via social media or other online news sources rather than through personal experience lends support to her argument. Since most music videos today are encountered online, they may be useful in cultivating the cosmopolitan outlook Dibben describes.

Throughout her solo career, Björk has commanded the attention of audiences worldwide through innovative, visually astonishing music videos accompanying the release of each new single. While the aesthetics associated with her albums differ greatly from one to the next, many recurring themes may be identified, especially those involving the subtleties of human/nature or human/machine dynamics. True to her punk rock origins, Björk uses all the tools available to her (and invents them if need be) to create art as a method of activism, hoping to present her vision of a world in which humanity can no longer conceive of itself apart from nature, and in which nature and technology are no longer experienced as isolated entities. In fact, Björk insists that there is nothing to reconcile between being "born with raw nature everywhere" and growing up with computers and digital music.³⁰ She comments, as have others, that Iceland's unusual history makes it an ideal site from which to have launched an eco-positive multi-media campaign. Iceland gained its independence from Denmark in 1944 without having gone through the industrialization and warfare that most European countries went through. "We have a chance to enjoy our still almost untouched nature and combine it and headbutt our way into green techno internet age," she explains.³¹ Videos for "Human Behavior" and "Isobel" are both early examples of her tendency to play with distinctions between natural and unnatural environments or between human and non-human beings, but it was probably the "Hunter" video that first merged these disparate spheres most explicitly.³²

The video begins with a stark white screen. As the first wash of strings collides with staccato bursts of electronic percussion, Björk's blurry facial features emerge dreamlike from a brilliant ether. As though gradually awakening, she bats her eyes and stretches her neck, revealing the perfect smoothness of her hairless head. Naked from the shoulders up, she appears to reveal the undisguised materiality of her human body, but as she gyrates gently into focus through the milky background, she projects a vaguely menacing aura. Throughout the duration of the song, the sole image will be that of Björk's face, her dark eyes and pink mouth anchoring the flickering fuzziness of her skin. As the subdued, pulsating rhythm gives way to the resonant deliberation of her vocals, she fixes her gaze through the screen to meet that of the viewer. "If travel is searching," she sings, "and home what's been found. I'm not stopping. I'm going hunting."³³

A plodding "Bolero ostinato" continues throughout the song, lending a subtle but determined sense of forward momentum to the music and providing the scaffolding upon which Björk's layered vocalizations climb and intertwine.³⁴ She raises her eyes mischievously to one side and then the other, hinting at a smile as she proclaims, "I'm the hunter." At this moment in the video, any suspicions that things may be askew are confirmed by the sudden appearance of shiny, metallic protrusions along the sides of Björk's face. These pale blue mechanical protuberances appear to grow from beneath her skin, as if they were a part of her body she was not quite ready to reveal. She shakes her head vigorously, like an animal ridding itself of an insect, but the digital prosthetics return with greater success with each successive transformation. Her expressions during this process range from playful to pained to nearly euphoric, as her facial features are gradually engulfed by the sculptural shell of a bear's head just in time to repeat the lyric, "I'm going hunting." The video ends as it began, with Björk's skin glowing softly as it dematerializes back into the whiteness of the screen. As she angles her bald head downward, raising her eyes again to meet the viewer's, her gaze is alluringly alien.

The inspiration for the song, Björk explains, came from a tale told by her grandmother when she was a child. She recalls that the story involved two pairs of birds. "One bird always had the same nest and partner all their lives. The other was always travelling and taking on different partners. At some point there was a conscious decision to remain a hunter."³⁵ Thus, even in its earliest conception, the song intermingled human and animal narratives. Björk plays with several possible interpretations of the notion of the hunter: the human hunter who will "bring back the goods,"³⁶ the predatory animal as suggested by her partial transformation into a bear, and the perpetual traveler seeking new experiences. It should be noted that all three of these aspects — the predator, the hunter, and the explorer — have been historically gendered as male attributes. Just as Crass used its music and its associated image to expose the necessity of a meat-based diet as a capitalist fallacy, Björk presents herself, and by extension humanity more generally, as transcending the binary categories of male/female or human/animal. The assumed privileged position of the human being over all things is collapsed within the three minute, forty-five seconds of video, revealing the "human" to be just another construct.

Listening to the song on its own, it is unlikely that the ambiguity of the hunter concept would be so clear. This is an excellent example of a music video acting as a point of focus to guide the audience in its contemplation of the audio track. In her study of the music video, Giulia Gabrielli posits that "facilitating the comprehension of the verbal text" is one of the duties of the image in relation to the music.³⁷ In this quality it shares something with the tradition of icon painting that served as inspiration for a generation of Russian avant-garde artists, Wassily Kandinsky most notable among them. Though sparing in his use of recognizable images, he incorporated fragments of Orthodox iconography or pagan religious imagery into his paintings so that the viewer would have a point of entry into his artwork. His interest in this area was neither entirely aesthetic nor particularly religious. Rather, Kandinsky was participating in a long and sacred tradition by utilizing the medium of paint to function as a portal or gateway. By providing a single engrossing visual upon which to meditate, Björk's lyrics might likewise come into sharper focus through the new medium of the music video. With the "Hunter" video, she draws her audience in with the highly recognizable image of her own unadorned face. As the music progresses and the lyrics unfold, she challenges her audience to see her humanity (and therefore their own) as far more nuanced than they had perhaps imagined. Whereas Kandinsky led his viewers from the material to the immaterial (abstract) world of the spirit, Björk adds layers of materiality to her physical body, eventually achieving a fluid union of human, animal, and machine.

It is easy to read much of Björk's work in posthumanist terms. She blithely rejects binary categorization, collapses boundaries, turns hierarchies upside down, and challenges even the most fundamental distinctions between that which may or may not constitute life itself. At home equally in the wilderness, the city, the bottom of the ocean, or a computer simulation, she shape-shifts her way through an extraordinary catalog of audiovisual work, presenting her audience with imaginative ways of being in the world. This is how her art might inspire action. By demonstrating the endless connections between all that exists, human beings will find themselves enmeshed in a rich network of vital material, from viruses to lava to jellyfish, and on and on ad infinitum, suggesting that no individual part may be destroyed without consequences for every other part. Timothy Morton argues that such art is necessary in order to impart an understanding of the human relationship to non-humans. "Ecologically explicit art is simply art that brings this solidarity with the nonhuman to the foreground," he writes.³⁸ These networks of beings must also include, naturally, that which we have long viewed as profoundly un-natural. Enter the cyborg.

No discussion of Björk would be complete without a nod to the cyborg, the ultimate posthuman chimera summoned into being at the behest of Donna Haraway. "If you have any doubt as to whether you are posthuman or merely human," Andrei Codrescu suggests, "take a look at the following parts of your body: the city, the house, the car, the iPhone, the laptop... the nonflesh surround."39 His suggestion that bodies neither start nor stop at the skin is one of the founding principles of Haraway's "Cyborg Manifesto."40 These cyborg conjunctions are not limited to "posthumans," but must also include non-human animals, the technologies and implements of memory, mechanisms of transportation, and all that comprises and sustains bodily functioning. All objects are thus conjoined with one another, forming the monstrous bodies to which Haraway pins some of her hopes for the future. By the late twentieth century we are all such chimeras, she maintains. "The cyborg is a condensed image of both imagination and material reality, the two joined centres structuring any possibility of historical transformation."41 Haraway's cyborgs are thus the foundation for a world without gender, a utopian future in which patriarchal binaries have collapsed and hierarchies of domination have been overturned. Whereas the "Hunter" video begins to tease out some of these notions of hybrid bodies, Björk's celebrated video for "All Is Full of Love" directed by Chris Cunningham may rightly be seen as a posthumanist manifesto in its own right.42

The video opens with a slow pan up from darkness into the sterile light of an automated assembly line, coming to rest at a horizontal platform suggestive of a conveyor belt. On it lies the motionless figure of a robot collapsed on its side, its head flat against the surface of the platform. What appears to be a serial number is visible on a panel behind it, and the name of its manufacturer — the fictitious Yamtaijika company — is emblazoned beneath the work station.⁴³ A steady, narcotic beat accompanies the

first sparkling strings of a harp, softening and enchanting the industrial tableau as the camera turns its attention to the curiously human face of the robot.⁴⁴ Björk's whitened facial features blend seamlessly into the smooth plastic of the incomplete shell covering the robot's head. Smiling faintly, the Björk android opens her eyes and begins to sing while various mechanical appendages continue to assemble her body, moving rhythmically as they surgically manipulate her exposed skeletal frame.

The lyrics are simple, perhaps even a bit saccharine: "You'll be given love. You'll be taken care of... All is full of love. All around you."45 But in the context of the video, they make a surprising claim for what Steven Shaviro identifies as "the erotic life of machines."46 In spite of her rigid steel interior and partial plastic shell, the Björk android is undeniably vulnerable, subject to the control of the numerous rotating and pivoting robotic tools that penetrate her body. Yet, even the sparks generated by this metal-on-metal coupling shower gently into the unexpected pools of liquid gathering on the platform, softening the impact through the bodily infiltration of what appears to be milk. Close-up images of Björk's face as she sings further emphasize the biotic qualities of the being in the process of embodiment. At a crucial moment in the narrative, the assembly tools release the timid android as she shifts her gaze upward, revealing the presence of a second, presumably completed model standing before her. The identical Björk androids sing to one another, "All is full of love. You just ain't receiving. All is full of love. Your phone is off the hook," as if inviting one another to embrace the emotional capabilities of their programming. The pair spend the remainder of the video in a passionate sexual encounter with one another, assisted by the non-humanoid robots that seem to encourage their actions.

This is not the first time that androids have been presented on screen with biological components. The Bishop series from the *Alien* franchise famously bled a milky substance; the Terminator machines were covered in living skin; the Replicants in the *Bladerunner* films were virtually indistinguishable from the humans among whom they lived and worked.⁴⁷ But the androids in Cunningham's video are not plagued by the inauthenticity that characterizes such machines as mere imitators of the superior human being. The hybrid nature of these creatures is undisguised, their mechanical bodily structures exposed through many gaps in the white exoskeletons that suggest human, female bodies. Through the repeated chorus of "All is full of love," the viewer is encouraged to acknowledge not only the emotional depth of the two overtly sensual androids but also the inner life of the non-humanoid machines that manipulate them. If all is indeed full of love, then a serious reappraisal of human exceptionalism is in order.

The "Hunter" and the "All Is Full of Love" videos share not only aesthetic similarities, but also a common vision of an ecology extended to include technology. Through the use of cutting-edge digital video techniques, Cunningham manipulates Björk's body to create a living illustration of what such a world might look like. Most obviously, both videos employ dazzling white backgrounds to direct the viewer's attention to Björk as the music seems to breathe life into her. Both feature delicate instrumentation accompanied by the even pacing of electronic beats which, when coupled with the gradual emergence of Björk's familiar (if uncanny) likeness, establishes a dreamy and inviting quietude upon the curious scenes that unfold. The visual motif established in both is unexpected, perhaps, given her environmentalist aims. There is no "nature" here as we are used to thinking of it. Instead, she has created hybrid creatures capable of the same playfulness or sensuality that humans like to believe belongs to them alone. She bestows life on inanimate matter and exposes the animal/machine within our own permeable skin. As I will discuss in the final chapter, music videos such as these allow Björk to create spaces of her own design, projecting and reifying her vision for the future of life on Earth.

It is interesting to think of the music video format itself as cyborgian in a sense. It partakes of all other media, and all other media partake of it. Laura Frahm argues, however, that music video is more than simply an intermedial creation, having emerged as its own distinct format. For Frahm, "medial movement," that is, "the unique configurations of image, text, and sound in which the video reflects on its own medial conditions," constitute an entirely new art form.48 Most importantly, it demands a certain amount of active participation on the part of the viewer that distinguishes it from a format such as film. The use of the word "viewer" is, in fact, not entirely accurate in the case of the music video, since so much of the experience is aural. The audience is included in a kind of feedback loop, co-creating the audiovisual experience. As Shaviro describes it, "the opposed poles of cinematic perception collapse into a single selfaffecting, self-reflexive circuit."⁴⁹ For Shaviro, audiovision thus becomes a tactile experience, "for the music envelops and caresses the video spectator, all the more so in that its source cannot be located."50 Shaviro's idea recalls Timothy Morton's discussion of acousmatic sensations that occur when the source of a sound is not identifiable, as indeed is the case in most recorded media. "Because we cannot directly perceive the source, those organs of our perception not engaged by the disembodied event become occupied with different phenomena."⁵¹ In the case of music video, carefully designed imagery may guide the viewer's focus, allowing a fuller engagement with the music than might have otherwise been possible. Even in the absence of a screen, however, today's

listener, who is by now attuned to the visuality of music, is still likely to experience her surroundings audiovisually. Thus, the new format of the music video has made possible a new way of being in the world by unlocking the potential of the individual to bestow new meaning upon the spaces through which she passes.

As I discussed in Chapter Two, personal listening devices have transformed the way in which many people experience their daily routines. Michael Bull described the practice as having created a kind of insular bubble, isolating the listener from her fellow humans and blocking unwanted audio stimuli. Shuhei Hosokowa, on the other hand, found the practice potentially empowering by enabling the listener to envision new spaces. Through the use of headphones, the personalized musical experience is one of seamlessness and unity. All objects enter into the user's imaginary realm. Bull asserts that urban spaces are usually unnoticed by citizens on their daily commutes, blinded as they are by habit and routine. He suggests that the individual interior world of sound facilitated by the iPod might be a way of making the environment new every day for the individual, "enabling them to re-spatialize urban experience through a process of solipsistic aestheticisation."52 In this way, the music allows the listener to envision a space entirely of her creation, disrupting the logic of the commute with a welcome dose of mystery and momentarily dissolving the crushing solidity of steel and asphalt. Bull relates numerous quotes from his research subjects in which they very often describe their experience of iPod use as akin to creating or watching a movie. Again and again they refer to a kind of cinematic experience of life made colorful or interesting by immersing themselves entirely in their chosen music. In this way, individuals have become accustomed to creating their own imaginary music videos at will.

The use of music to transform one's daily routine into a production fit for MTV (or MGM) calls to mind Spike Jonze's celebrated video for "It's Oh So Quiet" from Björk's 1995 album *Post*. The video depicts Björk exiting a filthy bathroom and slowly making her way past the checkout counter and across the sales floor of a tire shop. Blasts of horns signal an eruption of choreographed song and dance, as mechanics slide across the room on their knees and Björk kicks over the window display before reclining dreamily into a revolving door. It is the kind of fantasy scenario typical of Hollywood musicals that speaks to a collective longing for a joyful experience in the midst of an otherwise unremarkable day. It is also typical of Björk's proclivity to animate and celebrate all of the material of her immediate environment.

Bull looks at the iPod as a device capable of similarly enlivening the monotony of the city street. He writes, "The aesthetics of the street is largely an audio-visual one in which iPod users are transported from one cognitive and physical space to another through the dominant organizing potential of privatized sound."⁵³ Bull suggests that iPods and the like transform the world's ugliness into beauty – thereby acting as an opiate of sorts, not effecting any change on the external reality, but rather masking the unpleasant sights and sounds through manipulating sensory information. I would argue that the audiovisual experience of one's environment may actually make visible the beauty that was previously overlooked, animating and revitalizing the material of everyday objects.

The visual aspects of music have thus gained increasing prominence as we transition from the twentieth century to the twenty-first. I examined the ways in which fashion (or the rejection thereof) can contribute to the formation of a group identity surrounding a given musical genre, creating a scene capable of social or political action. I looked at the new medium of the music video as a kind of gateway into the text of the music increasing the communicability of the material and greatly expanding the size of a potential audience. Lastly, I returned to contemporary listening practices to explore how personal listening devices may themselves create a highly visual musical experience. Since the primary, recurring message of Björk's audiovisual work involves the promotion of environmental awareness, Chapter Four will explore the emerging field of ecomusicology as a method by which to assess the potential for music to perform this task.

Notes to Chapter Three

¹ Klaus Biesenbach, Introduction to *Björk: Mid-Career Retrospective with New Commissioned Piece for MoMA* (New York: Museum of Modern Art, 2015), 2.

² Simon Reynolds, *Retromania: Pop Culture's Addiction to Its Own Past* (London; New York: Faber & Faber, 2011), 240. Reynolds writes, "The word 'rock'n'roll' itself became a rallying cry for all those discontented with the direction music was heading in at the start of the seventies. Historically, rock'n'roll preceded 'rock'. To affirm the earlier term and all its juvenile associations was a renegade stance, because it meant you were rejecting the self-important artiness and self-conscious adultness of post-*Sgt.Pepper's* music" (241).

³ Andrew Bolton, *Punk: Chaos to Couture,* Metropolitan Museum of Art Series (New York: Metropolitan Museum of Art, 2013, 12.

⁴ Dick Hebdige, Subculture: The Meaning of Style (London: Routledge, 1991), 2.

⁵ Richard Hell, "Punk Couture: Insides Out," in *Punk: Chaos to Couture*. Metropolitan Museum of Art Series (New York: Metropolitan Museum of Art, 2013), 19.

⁶ In his book, *Show Sold Separately: Promos, Spoilers, and Other Media Paratexts* (New York: University Press, 2010), Jonathan Gray applies Gerard Genette's idea of the literary paratext to other contemporary forms of media. Gray explains that paratexts, which include all manner of materials supplementary to a text such as reviews, posters, or merchandise, "are not simply add-ons... they create texts, they manage them, and they fill them with many of the meanings that we associate with them" (6). He later quotes Genette's more vivid description of the function of paratexts, which he suggests act as "an airlock that helps the reader pass without too much difficulty from one world to another" (25).

7 Quoted in Bolton, Punk: Chaos to Couture, 13.

⁸ Hebdige, *Subculture*, 90.

⁹ Greil Marcus, *Lipstick Traces a Secret History of the Twentieth Century* (Cambridge: Harvard University Press, 1990), 3.

¹⁰ Björk attended a music school in Iceland from the time she was five years old, and she recorded her first solo record with the help of her family (*Björk*) at the age of eleven. ¹¹ Translating as "Cork the Bitch's Ass," Tappi Tíkarrass was most notably featured in the *Rock in Reykjavik* documentary released in 1982 (directed by Friðrik Þór Friðriksson), the poster for which featured a baby-doll clad Björk performing with the band. KUKL (translating variously as "witchcraft," "sorcery," "psychism," and "mumbo-jumbo") formed in 1983 in response to the demise of the underground radio show Áfangar. Einar Örn and Björk left KUKL to form the Sugarcubes in 1986. I have chosen the all-capital version of KUKL which the band seems to have preferred.

¹² David Fricke, "The Sugarcubes: The Coolest Band in the World," *Rolling Stone* (blog), July 14, 1988. https://www.rollingstone.com/music/music-news/the-sugarcubes-the-coolest-band-in-the-world-75327/.

¹³ Steve Ignorant, *The Rest is Propaganda* (London: Southern Records, 2010), 212. The performance, KUKL's first in front of a large audience, was at the "We Demand a Future!" festival.

¹⁴ The meeting was even more fortuitous for Björk in terms of her solo career. She met Derek Birkett of Flux of Pink Indians during her time touring with KUKL. Birkett would

go on to found One Little Indian Records, the company through which Björk would release all of her solo albums. The fact that One Little Indian is an independent record label has allowed her unrestricted artistic freedom in her work, a rarity for major label artists.

¹⁵ Rich Cross, "'There Is No Authority But Yourself': The Individual and the Collective in British Anarcho-Punk," in *Music and Politics IV*, no. 2 (Summer 2010), 2. http://dx.doi.org/10.3998/mp.9460447.0004.203.

¹⁶ Cross, 4.

¹⁷ Unlike the Italian Futurists, Crass were pacifist anarchists, advocating for animal welfare, women's rights, and social welfare.

¹⁸ Vale, V. *Penny Rimbaud*. San Francisco, CA: RE/Search Publications, 2014.
¹⁹ Webb, Peter, and John Lynch, "'Utopian Punk': The Concept of the Utopian in the Creative Practice of Björk," in *Utopian Studies* 21, no. 2 (2010), 313–30.

²⁰ Webb and Lynch, 318.

²¹ Webb and Lynch, 318.

²² Webb and Lynch, 319. For more of KUKL's manifestos, visit the "Layperson's Guide to KUKL" page recreated as part of the Art of Crass web project.

http://theartofcrass.uk/static/crass/KUKLL/guide1.html.

²³ Carol Vernallis, *Unruly Media: YouTube, Music Video, and the New Digital Cinema* (New York: Oxford University Press, 2013), 209.

²⁴ Vernallis, 11.

²⁵ Mathias Bonde Korsgaard, "Music Video Transformed," in John Richardson, Claudia Gorbman, and Carol Vernallis, eds., *The Oxford Handbook of New Audiovisual Aesthetics* (New York, NY: Oxford University Press, 2013), 509.

²⁶ My conception of the music video as meditative aid was inspired by a brief mention of La Monte Young's *Composition 1960 #13 to Richard Huelsenbeck*. Its instructions were to "prepare any composition and then perform it as well as he can." Marian Zazeela performed the piece by drawing an abstract design in ink on paper. She referred to her drawing as a "votive object." Zazeela's *Ornamental Lightyears Tracery*, her light projections, might well be thought of as a meditative accompaniment to Young's drone music as well. See Melissa Warak, "Zen and the Art of La Monte Young," in Charlotte de Mille, *Music and Modernism, c. 1849-1950* (Newcastle upon Tyne, UK: Cambridge Scholars Pub, 2011), 256-276.

²⁷ Gina Arnold, et.al., *Music/Video: Histories, Aesthetics, Media* (New York: Bloomsbury Academic, 2017), 1.

²⁸ Arnold, 4. Vernallis also notes that unlike today, early videos first appeared on cable television channels, and as such were subject to intense scrutiny by Standards and Practices boards. Quickly, the form and content of music videos catered to these demands so that they could expect some airplay. It is thus easy to see these products as advertisements rather than artwork.

²⁹ Nicola Dibben, "Music and Environmentalism in Iceland" in *The Oxford Handbook of Popular Music in the Nordic Countries*, ed. Fabian Holt and Antti-Ville Kärjä, Oxford Handbooks Online (New York: Oxford University Press, 2017), 165.

³⁰ Dibben, "Music and Environmentalism in Iceland," 144.

³¹ Björk, "Emails between Björk Gudmunðsdóttir and Timothy Morton, October, 2014," in *Björk: Mid-Career Retrospective with New Commissioned Piece for MoMA* (New York: Museum of Modern Art, 2015). ³² Appearing in the "Human Behavior," "Isobel," and "Bachelorette" videos, the character of Isobel was created in collaboration with Icelandic poet Sjón. Isobel was conceived as a mythical figure who symbolizes the intuition of the natural world, but who journeys to and from the city over the course of the three videos. (See Dibben, *Björk*, 38, 57). Björk laughingly recalls that Isobel "has an urban/rural dilemma she is constantly trying to solve, haha. As if!!! you could" (Björk, "Emails").

³³ Björk, "Hunter," *Homogenic*. New York: Elektra Entertainment, 1997.

³⁴ C. Marsh and M. West, "Nature/Technology Binary Opposition Dismantled in the Music of Madonna and Björk," in Lysloff, René T. A., and Leslie C. Gay, *Music and Technoculture* (Middletown Conn.: Wesleyan University Press, 2003), 194.

³⁵ Quoted in Marsh and West, 194.

³⁶ Björk, "Hunter," *Homogenic*.

³⁷ Giulia Gabrielli, "An Analysis of the Relation between Music and Image: The Contribution of Michel Gondry," in Henry Keazor and Thorsten Wübbena, eds, *Rewind, Play, Fast Forward: The Past, Present and Future of the Music Video*, Cultural and Media Studies (Bielfield: Transcript, 2010), 99.

³⁸ Timothy Morton, *Being Ecological* (Cambridge, Massachusetts: The MIT Press, 2018), 73.

³⁹ Andrei Codrescu, *The Posthuman Dada Guide: Tzara & Lenin Play Chess* (Princeton, NJ: Princeton University Press, 2009), 2-3.

⁴⁰ Donna Haraway, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," in *Simians, Cyborgs, and Women* (New York: Routledge, 1991).

⁴¹ Haraway, "Cyborg Manifesto," 150.

⁴² While Björk has not espoused a particular commitment to posthumanism as a philosophy, she finds it to be as good a fit as any. She told Timothy Morton that she wanted to "wave hi" to theory because if she didn't "define what 'ism'" she was, she feared that others would do it for her. "I ended up reading several books on posthumanism. It is not exactly what I was looking for but closest yet... most interesting is that it is the first 'ism' where the human is not at the centre of the world." Björk, "Emails."

⁴³ Dean Lockwood, "Blackened Puppets: Chris Cunningham's Weird Anatomies" in Gina Arnold, ed. *Music/Video: Histories, Aesthetics, Media* (New York: Bloomsbury Academic, 2017), 198. Lockwood finds something a bit sinister in the unseen forces that have orchestrated this assembly line, noting, "Corporate capitalism sponsors this posthuman bliss."

⁴⁴ The album version of "All Is Full of Love" lacks a drum beat. This video was not made to promote the *Homogenic* album, which had been released two years earlier. According to an interview on the Palm Pictures collection of Chris Cunningham's work, Björk explains that this video was conceived as more of an art film than the usual promotional accompaniment for a new single. Chris Cunningham, Richard Brown, John Payne, Lance Bangs, and Palm Pictures, *The Work of Director Chris Cunningham* (New York, NY: Palm Pictures, 2003).

⁴⁵ Björk, "All Is Full of Love," *Homogenic*.

⁴⁶ Steven Shaviro, "The Erotic Life of Machines" in *Parallax* 8, no. 4 (October 1, 2002): 21–31.

⁴⁷ Ridley Scott's sci-fi/horror masterpiece *Alien* was released in 1979, spawning three sequels and two prequels in addition to a number of spinoff projects. The character of Bishop is an android crewmember in the second and third incarnations of the film. Ridley Scott also directed the film adaptation of Philip K. Dick's sci-fi classic *Do Androids Dream of Electric Sheep?* Released in 1982, *Bladerunner* presents Dick's androids (or "replicants" as they are dubbed in the film) as sympathetic characters barely distinguishable from "real" humans who are determined to confront their creator and demand longer life spans. *The Terminator* franchise also featured a variety of human/machine hybrids as time-traveling soldiers of sorts in a war pitting humans against the robots of their own design. *The Terminator* was released in 1984, with a further five sequels to follow.

⁴⁸ Laura Frahm, "Liquid Cosmos: Movement and Mediality in Music Videos," in Henry Keazor, and Thorsten Wübbena, eds, *Rewind, Play, Fast Forward: The Past, Present and Future of the Music Video*, Cultural and Media Studies (Bielfield: Transcript, 2010), 156.

⁴⁹ Shaviro, "The Erotic Life of Machines," 28.

⁵⁰ Shaviro, "The Erotic Life of Machines," 28.

⁵¹ Timothy Morton, *Ecology without Nature: Rethinking Environmental Aesthetics* (Cambridge, Mass.: Harvard University Press, 2007), 42.

⁵² Michael Bull, *Sound Moves: iPod Culture and Urban Experience* (London; New York: Routledge, 2007), 199.

⁵³ Bull, *Sound Moves*, 198. Bull insists that there is nothing creative about listening to programmed music. "The cultural imperative, fully commoditised, lies in the contents of the iPod itself."

Chapter Four: Ecomusicking

Georgia's only natural burial ground, the Honey Creek Woodlands, is located approximately thirty miles east of Atlanta. A natural burial ground is distinguished from a traditional cemetery in that it will not accept embalmed bodies or any type of sealed casket. In fact, no casket of any kind is required. The fear of decomposition, or the belief that the material of the human body will somehow survive death, is symptomatic of the increasing denial about the greater peril facing so much of the ecosystem today. A distressing number of people seem to see themselves as entirely removed from, and therefore largely impervious to, the web of interconnected life forms and processes comprising the so-called natural world. The groundskeepers at the Honey Creek Woodlands, and those who choose the grounds as a final resting place, have a much different idea. For them, the human body should be allowed (in fact, encouraged) to decay into the earth just as any other biological entity would do upon its end. This practice is founded upon the belief in the relative worth of all living things and that the presumptive superiority of the human species is a fallacy.

The groundskeepers are quick to point out that this is not a cemetery; it is a burial ground. The only grave markers are small, flat stones engraved with a few words. Graves are situated among the trees and the fields in such a way as to disappear within the forest or the tall grasses on the hilltops. The absence of monumental grave architecture speaks to a certain humility before nature, as well as a level of equality between the grave sites rarely seen in contemporary graveyards. The graves are intended to exist harmoniously in relation to one another, as well as within the environment of the preserve. Wild birds, animals, insects, and all manner of flora thrive in this peaceful place. There is far more life in this burial ground than one could hope to find in a traditional cemetery, and as a result, far more serenity.

A small, open-air chapel stands at the top of the highest hill. It is a very simple, elegantly crafted structure with a tall red brick bell tower through which one may enter into the chapel. Visitors are welcome to tug on the heavy rope to sound the bell as they arrive at the base of the tower. The morning was utterly still, punctuated only by the twitter of chipping sparrows and goldfinches in the distance. I brought the rope down hesitantly, fearful of creating too great a commotion. I was stunned by the clarity and resonance of the bell's chime as it reverberated within the narrow tower. R. Murray Schafer believes that the sound of the bell is uniquely suited to complement the natural formations of the land. He writes:

At a suitable distance... church bells could be powerfully evocative, for the strident noises of the clappers are lost and they are given a legato phrasing which wind currents or water will modulate dynamically, so that even a few simple and not very good bells can provide hours of pleasant listening. Perhaps no sound benefits more from distance and atmosphere.¹

I am inclined to agree with him. There is something about the sonorous chime of a bell at a distance that is immediately calming. In an already serene place of natural beauty and quiet memorial, the intermittent tolling of the chapel bell carries its tranquil song to the forest, and to those resting there.

Björk sees it as her responsibility to compose music that might serve as a solution to the environmental devastation that humanity has wrought. Ideally, music so conceived would be able to change the way that human beings hear their surroundings, leading to a change in the way they live with nature. Schafer uses the church bell as an exemplar of a more idyllic soundscape, when the cacophony of human industry had not drowned out the harmonious sounds of nature. His suppositions are rooted in his belief that natural sounds are not only healthier than those of an industrialized urban setting, but that they are also more innately musical. In this chapter I will explore a number of the assumptions inherent in such claims: that music can be found in nature, that music might bring humans closer to nature, that music might serve as a kind of propaganda for nature, or that making music might serve as a kind of environmental praxis.

The relationship between music and nature is situated at the core of the emerging field of ecomusicology. Aaron Allen offers up a succinct definition of the discipline, noting that it has arisen amidst a more general greening of the sciences and humanities, but reminding his readers that music and nature have been studied as a pair since at least as early as ancient Greece. "Ecomusicology considers the relationships of music, culture, and nature; i.e., it is the study of musical and sonic issues, both textual and performative, as they relate to ecology and the environment."² He goes on to articulate several questions of particular interest to this area of study:

How does nature inform music, and what can the study of music tell us about humans, other species, the built environment, the natural world, constructed "nature", and their connections?... Is the environmental crisis relevant to music and more importantly, is musicology relevant to solving it?³

The latter question is especially important to this chapter, as Björk would seem to take many of these ideas as a given. Before asking how music might bring the listener closer to nature, however, it is important to establish what is meant by "nature" in the first place. Musicologist Jeff Todd Titon sees the role of ecomusicology as combatting new challenges to science and ecology, namely critical theory, the recent popular attacks on science as a source of knowledge, and the very economic rationality that resulted in our current ecological crisis. He hopes that ecomusicology might "work meaningfully towards sustaining music within the soundscape of life on planet Earth."⁴ Titon views the relationship between music and nature as an epistemological problem, by which he means that it is important to understand how nature is framed and constructed culturally and scientifically.

The idea of nature varies significantly throughout history and between cultures, but since the time of the Industrial Revolution in particular, it has come to mean that which is outside of human civilization, or that which humans did not make. Media historian John Durham Peters goes so far as to suggest that "'nature,' understood as something untouched by humans, only exists on earth where humans have chosen to set it apart as 'natural.'"⁵ The construction of this human/nature divide is arguably responsible for much of the pollution or destruction of the biosphere, as it implies a relationship of dominance and exploitation.

As a philosopher whose work has served as an inspiration for Björk's own conceptualization of nature, Timothy Morton will inform my approach to this subject. Morton describes "nature" as a word completely overrun with meanings. It has been used historically to justify all manner of abuses, from slavery to genocide. For example, nature can mean "normal," as in, "it is only natural," or "it is in his nature." What, exactly, that might mean is clearly subject to interpretation. Nature in a geological sense is often evoked as the foundation of national boundaries, arguably highly unnatural conceptions. Morton points out that the Romantics saw nature as the foundation of good. Being in a "state of nature" was an ideal situation; the experience of the sublime was a correct response to natural forces.⁶ In short, nature is terribly difficult to pinpoint. In our descriptions of its essential qualities, it becomes supernatural, but in our attempts to quantify it, we are left only with matter.

Morton refutes the accusation of postmodernism in his position. His quarrel with the postmodernist conception of nature is that it – like most everything knowable – is understood as a product of human discourse.⁷ "Nothing could be farther from the truth," he maintains. "The idea of nature is all too real, and it has an all too real effect upon all too real beliefs, practices, and decisions in the all too real world. True, I claim that there is no such 'thing' as nature, if by nature we mean some thing that is single, independent, and lasting."⁸ He insists that ecocritics' dislike of the postmodern view is short-sighted. "The point is to go against the grain of dominant normative ideas about nature, but to do so in the name of sentient beings suffering under catastrophic environmental conditions."⁹

Morton repeatedly refers to nature writing, ecocriticism, and various approaches to the genre as opiates, balms, or anesthetics, for he sympathizes deeply with environmentalists and the very real distress they feel. However, such characterizations suggest methods of merely easing symptoms of environmental catastrophe rather than offering a means to combat it:

Ecological writing wants to undo habitual distinctions between nature and ourselves. It is supposed not just to describe, but also to provide a working model for a dissolving of the difference between subject and object, a dualism seen as the fundamental philosophical reason for human beings' destruction of the environment. If we could not merely figure out but actually experience the fact

that we were embedded in our world, then we would be less likely to destroy it.¹⁰ At the heart of Morton's dilemma lies the deeply entrenched belief that human beings exist in their own sphere, living in relative isolation from the rest of life on the planet. A posthumanist view such as that promoted in Björk's work would not permit this level of alienation.

Ultimately, Titon hopes that ecomusicologists will problematize nature, grappling with the contradictions between nature and "nature" in the way Morton advocates. He writes, "An ecomusicological construction of nature worth having, it seems to me, will be based in this relational epistemology."¹¹ He ends with a hopeful vision for the role of music in creating a sustainable world:

Yet when ecomusicology opens music to nature, and we think not narrowly of music but of the flow of all sound in the environment (music included), it appears advantaged in many ways. Sound turns space into sacred place; it enables communication among animals, including humans; and it puts beings into copresence with one another and their environments. Surely sounding is not just an evolutionary advantage but a necessity for sustaining life on planet earth.¹² Drawing on the ideas of spatial transformation, ecological communication, and copresence discussed here, Björk's music may be examined as a method of environmental activism.

It is unusual to read an article about Björk in which her fondness for the natural world is not mentioned. She attributes her love for nature to her upbringing in Iceland, a nation often praised for housing the last remaining wilderness in Europe. Iceland is young both as a nation and as a land mass, with numerous geysers, active volcanoes, and hot springs making visible the geologic forces perpetually shaping the island. Vast tracts of land have never been developed for human use, a fact that has led many to take pride in the wilderness as a source of national identity. Nicola Dibben has identified a kind of nationalistic fervor as characterizing Björk's professed love for nature, citing a tradition of landscape painting and musical composition that take inspiration from the geographic and geologic features of Iceland as a source of patriotism.¹³ It seems that nature inspires and informs Bjork's work on a visceral rather than intellectual level, however, resembling something approaching a religious experience. She often describes her creative process as almost a part of the land itself:

Iceland probably affected a lot how I sing because I did spend a lot of time as a kid in nature... Just walking outside to school, or maybe in blizzards, it just kind of like happened, and you would walk and there'd be no wind and you could be all quiet and whispery and you could sneak down next to the moss and maybe sing a verse, and then you would stand up and run to a hill and sing a chorus.¹⁴

For Björk, music both arises from natural places and also recalls their material reality. Her video for "Jóga" from her 1997 album *Homogenic* is the most obvious example of a song inspired by and dedicated to celebrating Icelandic nature in all its "untouched" splendor.

Named after her dear friend Jóhanna "Jóga" Johannsdóttir, the video presents Iceland as the spiritual and bodily core of the singer. Director Michel Gondry recorded footage of the island from a helicopter, zooming in on the motionless, white-clad figure of Björk lying on a stunning black sand beach. This is one of only a scant few scenes in which Björk appears. The bulk of the video features only the desolate beaches, silvery rivers, and barren hills of the Icelandic wilderness. As an island almost totally devoid of trees, the architecture of the land is laid bare, particularly when viewed from above. Serpentine patterns in the earth open into fissures, and crystalline waterways split into lacy cobwebs. As the video progresses, the awesome spaciousness and silence of the land would be easy to experience in purely formalist terms, as softly molded hills meet the chilly color palette of the sky. But then the rocks begin to dance. In a way that foreshadows the geologic tango of her "Mutual Core" video which I will discuss in Chapter Five, Gondry creates digital animations of some of the most dramatic of the island's features, allowing the viewer to witness the rupturing of the Islandic landscape, and revealing its gurgling molten center. The video ends with the stoic figure of Björk standing at the top of a hill, opening her chest to expose the same rocky material that comprises the island. Iceland is literally her life blood, her human body indistinguishable from the nature out of which it was formed.

Dibben suggests that the video for "Jóga" expresses a "natural" unity of the Icelandic people and the land, and in so doing, personifies the national symbol of "Fjallkonan" (the Mountain Woman), the female personification of Iceland. The video conflates the idea of Iceland's continued creation through geologic processes with its emergence as a vital political force in the twentieth century.¹⁵ The idea that Iceland should see its abundant natural spaces as its greatest asset as it carves out a place for itself on the world stage is key to Björk's environmental activism. Björk's position, and that of many Icelanders, is that the interests of the market economy as they pertain to nature as resource are at odds with the Icelandic conception of nature as synonymous with national identity. Dibben explains, "The idea that the natural landscape should be protected is based on two main claims: first, that it constitutes an important part of Icelandic identity, which is distinct from that of other nations; and, second, that Iceland's natural landscape can make a unique international contribution."¹⁶ The very idea that "nature" is a thing that can be bought and sold is, in the first part, completely antithetical to a view that situates human beings within (rather than apart from) a greater living system. Even more noxious is the idea that Iceland's unique and precious land should be exploited for the financial gain of international corporations, but this is precisely what has transpired with disturbing speed during the twenty-first century.

It is clear that Björk has long believed that her greatest potential to act on behalf of the natural world was through her art, but as the threat of massive damming projects and aluminum smelting plants threatened to destroy her cherished wilderness, she felt compelled to direct action. She first became involved in environmental protests in Iceland in 2004 when she played a concert in opposition to the Alcoa aluminum smelting plant, an American-owned company. In a revealing interview for online magazine *Drowned in Sound (DiS*), she explains the process by which she came to found the Náttúra Foundation, an organization seeking green solutions to Iceland's struggling economy:

I always felt music was better if it wasn't political, but I live on an island which I guess is about the same size as England... but it's only got 350,000 people. It's the biggest untouched area in Europe. You can imagine how we felt... the majority of Icelanders, when we found out that behind the scenes for 20 years the right-wing rednecks had been planning to harness all of its energy... I just had to do something about it!¹⁷

What became known as the Náttúra campaign began in June of 2008 with a concert to raise environmental awareness that Björk organized with Sigur Rós, for which nearly ten percent of the population of Iceland turned out.¹⁸ The success of the concert proved

frustrating for Björk, who feared that the momentum of the event would die out if she did not come up with something to keep the people engaged. "I'm gonna have to have one more whack at it," she explained, "and try to be functionalist and not just ideological. As much as I don't want to get my hands dirty — I would rather just do music — I have to follow this up, or it was totally pointless."¹⁹ It is interesting that she seems to characterize her music as purely ideological rather than "functionalist," as though suggesting that her music alone could not perform the kind of work she needed to do. The multi-platform *Biophilia* project that would follow the Náttúra campaign may have been her attempt to reconcile this difference.

The "Náttúra" single featured on the *Biophilia* album was initially created as a stand-alone song, the sales of which were donated to Björk's foundation of the same name. Featuring backing vocals from Thom Yorke of Radiohead fame, "Náttúra" showcases some of Björk's most spontaneous and impassioned singing to date. Explosive bursts of wild drumming courtesy of Brian Chippendale create a tumbling, chaotic momentum punctuated by Björk's uninhibited Icelandic refrains. "I just sang it in one take," Björk recalls. "It's just a celebration of nature and how unpredictable it is and you cannot control it and you just have to kind of like let it fall all over you and go with it."²⁰

In a sense, the creation of the song finds Björk returning to familiar ground in which music is indeed her greatest weapon. She describes the process of its creation as a desperate need to do something tangible to help combat environmental destruction in Iceland. While initially pleased with the success of the Náttúra benefit concert, she realized that she needed to keep the momentum going or nothing would come of it:
I am stuck in a hotel room in Singapore! What can I do about this? So I emailed Thom Yorke. He was in another hotel somewhere, I think in Germany or something, and he just sang on top of that into his computer and emailed it back to me. And then I was in London and I called my friend Matthew Herbert. I said, "I am in a hotel room and I need a bassline now! They are going to build the aluminum factories! Come quick!"²¹

Sales from the "Náttúra" single went to help fund seed companies in Iceland's rural areas and to organize community meetings with environmentally sensitive business leaders who might offer alternatives to aluminum smelting as a means to empower the Icelandic people economically. "It's strange, this old system, this industrialized, patriarchal system, is really like an old dinosaur that refuses to die," she muses. "I actually think the only thing that will stop it is when they realize that they will actually make more money by protecting the Highlands and moving to more green, high-tech options and collaborate with nature."²² In this way, Björk created a piece of music that celebrates nature not only through its conception and its melodic structure, but also through the generation of revenue that might make possible the creation of communities centered around the preservation of Iceland's natural spaces.

Andrew Mark offers a surprising take on the potential for music to perform environmentalist work in his 2016 article, "Don't Organize, Mourn: Environmental Loss and Musicking."²³ As is clear from the title, Mark sees a vital role in acknowledging and expressing the process of grief in the face of climate change and mass extinction, a notion that has little historical validation. Even Björk seems determined to present an optimistic view of the future, criticizing Americans in particular for embracing apocalyptic narratives associated with environmental devastation.²⁴ But Mark insists that grief is a perfectly appropriate response to the loss of a species or a body of water, even if we have never personally experienced the missing object in question. The oftenintangible nature of environmental loss finds humans in need of a ritual through which to process its emotional impact, and, Mark would argue, work to prevent further incidents of loss. He sees music making, or "musicking," as the most effective means of accomplishing both aims.

Mark sees the greatest potential of music to affect some kind of positive change in its ability to create communities rather than commodities. He explains, "Essentially, capitalist-growth asks us to replace our lost environmental attachments, lost species, lost skills, lost forests, lost futures, and lost ways of life with new consumable and disposable objects and efficiencies."²⁵ Since musicking is a social activity rather than a consumable product, the actual act of creating music might offer a rebuttal to Attali's insistence that music can never be used to do revolutionary work. Mark explains that musicking is therefore a rejection of the economic system that has resulted in our current environmental crisis:

Making music is a creative response that can escape the creation of a commodity. It can be seen as a refusal to consume, and in this sense, making music can be unproductive... A more complete environmental mourning through musicking, or any creative channel, could be one that both actively recognizes and memorializes losses that have occurred and are occurring but simultaneously and

melancholically resists the allowance and acceptance of further loss.²⁶ Mark differs from many activist strategists in that he sees value in slowing down, or even stopping, the momentum of a movement in order to take stock of what is not working. Musicking is, therefore, a form of "resistant mourning"²⁷ in that it utilizes the ritual function of something like an elegy without conceding defeat.

In his conclusion, Mark proposes that hope may not be a valuable response to environmental loss. "Hope," he argues, "can be a reaction to the cognitive dissonance that occurs when (neutral or positive) imagined ideas of the self and society conflict with the real limits of our ecosystems' abilities to incorporate human exploitation."²⁸ Given this definition, and considering the scope of our current predicament, he wonders if it makes more sense to embrace melancholy and mourning. Perhaps if grief is recognized as an understandable and necessary response to environmental loss it would lend the requisite urgency and gravity to the movement needed for action on an institutional level. Grief is deeply personal, often difficult to articulate and unpleasant to experience. Björk's *Vulnicura* album from 2015 is probably the most compelling and intimate expression of mourning in recent memory, which, in spite of its presentation as a commercial product, may demonstrate the process of musicking as a means of reckoning with mourning.

Vulnicura is an album entirely dedicated to grief. Following the dissolution of her relationship with longtime romantic partner and father of her daughter Isadora, Matthew Barney, Björk took solace in music. "It was the most painful thing I ever experienced in my life," she admits. "The only way I could deal with that was to start writing for strings."²⁹ The album's opening track, "Stonemilker," chronicles the first inklings that things are not as they should be, revealing the cracks in their relationship as she implores her lover to show some sign of emotion.³⁰ The video for the song is particularly noteworthy for this study because it utilizes the by-now familiar black sand beaches of Iceland as the focal point for a visually stunning and simplistic composition created for the newest and most sophisticated technology available. Björk's penchant for utilizing the digital to celebrate nature is nowhere more stunningly realized.

Like most of the videos for Vulnicura, the "Stonemilker" video was originally designed for virtual reality. Björk felt that the most effective way to convey the emotional content of her music was through the intimate experience of a completely immersive technology. She created a touring exhibition titled Björk Digital that would allow her fans to access virtual reality headsets, experiencing her music collectively, yet in simulated isolation. "The close physical experience of Virtual Reality goes directly to the brain. The viewer, watching and listening is right there in the middle. That's why this is so exciting," says Björk.³¹ Director Andrew Huang explains that, like many of Björk's most successful creations, the video happened extemporaneously: "The shoot was spontaneous, decided in a late-night conversation between me and Björk while we had VR gear with us in Iceland – the cyclical format of the 360-degrees was perfect for the circular fugue structure of 'Stonemilker.'"32 The total focus permitted by such a format results in a heightened sensory and emotional experience for the viewer, with many reporting being moved to tears by the encounter. The video for "Stonemilker," whether viewed in virtual reality or via the 360-degree interactive format available through YouTube, engages its audience bodily as they manipulate the view, inserting them into the dulcet Icelandic seascape.

Björk is draped in a flowing greenish-yellow dress adorned with a shimmering oval in the chest area indicating a wound in the process of healing.³³ The cool lavender sky is reflected in the water behind her, gently lapping at the black stones that form an undulating pattern along the shore. The first luxurious strings seem to emanate from the ocean itself as Björk invites the viewer to join her in exploring the breathtaking vista. If, as Laura Frahm suggests, movement is indeed that which distinguishes a music video from all other forms of film, the "Stonemilker" video validates her theory.³⁴ As viewers guide the trajectory of the panoramic view, they follow the very path through which the song was created, arising fully formed from out of the black sand and the jagged rocks. "I was walking on a beach, walking back and forth, and the lyrics kind of came along, without me really editing them," Björk explains.³⁵ Nature has always been a source of musical inspiration for her, but the "Stonemilker" video seems to offer a picture of nature as music, or perhaps music as nature. The technology creates an intimate space into which the viewer can enter into co-presence with nature, guided by Björk as she sings plaintively of the heartbreak to come.

While "Stonemilker" is not a memorial to a devastated natural space per se, its framing of nature as a site of mourning speaks to Andrew Mark's characterization of music as a vehicle for a kind of strategic grieving:

The potential usefulness of music for conflict resolution is hardly news to (ethno) musicologists, but it bears repeating that environmental elegy through song is relevant not merely as a method for calling attention to an issue, or a place, or moments in history through text or context, or nostalgia, but as a processual means for collective sublimation, contextualization, healing, and history-keeping in the present. Musicking does work against the erasure of subaltern stories by creating song, a kind of memorialization-product, but the creative process itself is already a therapeutic response to loss.³⁶

Through her many songs and videos, Björk engages in what might well be referred to as *eco-musicking*, harnessing the evocative quality of music to re-enchant the natural world and to preserve it from future destruction. In so doing, she posits an intricate and

tangible relationship between music and nature, made explicit through the use of technology.

Composer and professor of philosophy David Rothenberg has spent much of his career not only creating music that takes its inspiration from natural spaces, but also entering into collaborative relationships with the music-makers he finds there. Rothenberg takes a Kantian approach to his understanding of what constitutes music (as opposed to sound), suggesting that sound becomes music "only if you can hear it as a beautiful form that can be enjoyed in itself apart from its purpose in the world."³⁷ He has found himself haunted by poet David Ignatow's words: "I wish I could look at a mountain for what it is and not as a comment on my life."38 Such is the dilemma of the so-called Kantian gap. Kant suggested that, while it is possible to perceive raindrops, for example, as they fall on one's head, one may not know the actual raindrop itself. Morton explains, "You only perceive your particular, anthropomorphic translation of the raindrops."³⁹ He continues, "A thing is just a rift between what it is and how it appears."40 For Rothenberg, music must provide a pathway to access the thing in itself, revealing its intrinsic value to the listener. Music might also act as a model for learning about one's immediate surroundings through listening rather than through our habit of seeing and categorizing the objects in our environments.

Sound artist David Dunn does not advocate utilizing the sounds of nature as audio components for abstraction or integration into larger works. He sees animal and bird calls, for example, as evidence of the presence of mind - conscious living systems with which we might learn to interact. Like Rothenberg, his emphasis on connectedness reveals posthumanist philosophical underpinnings in his methodology. He sees the human tendency to live as though apart from nature as profoundly unnatural, and uses environmental performance to re-integrate humans into the ecosystem. He disagrees with John Cage who saw sounds as things in themselves – grist for his compositional palette.⁴¹ For Dunn, the sounds of nature are inseparable from the biosphere at large. Having released albums of music recorded with insects, birds, and whales, Rothenberg too hopes not to mimic the sounds of nature, but to learn to create music *like* nature. Of course, this implies that "music" is universal rather than an art form exclusive to human beings in its creation and comprehension. If we learn to hear music in nature, will we be inspired to preserve it?

Depending on one's viewpoint, all sounds might contain musical possibilities. R. Murray Schafer advocates for soundscape design rooted in the musicality of the natural world, looking to Japanese sound practices for inspiration. Japanese gardeners, for example, traditionally placed rocks and bamboo throughout their gardens for the music they produced when exposed to water. "These are examples of a consciousness that allows the beauty of sound to expand and permeate the whole of life; it would be futile to debate whether such things were music," he writes.⁴² Water in particular seems to compose its own music for those inclined to hear it. Chilean film director Patricio Guzmán uses the sights and sounds of water to connect all of his subjects in his documentary *The Pearl Button*.⁴³ The film investigates the ritual killing and torture of Chilean people at the hands of their countrymen, concluding with a chilling examination of the bodies of Pinochet's disappeared who were bound to railway ties and dumped into the ocean. The native peoples of Patagonia who navigated the frigid waterways of the myriad sea islands at the southernmost tip of Chile suffered near total genocide in the name of cattle ranching interests. As though to allay these scenes of heartbreak, Guzmán turns his attention to water – its movement and its sound in particular – as he narrates

over scenes of the most stunning natural beauty imaginable. He studies water in its many textures and patterns – tranquil azure pools rippling in the wind, the silky slice of an oar through a silent pond, starlight dancing upon the black ocean, great crystalline ice structures of aquamarine and silver, polished reflections of the mountains on still waters – and then he listens. Tiny ice pellets clink and chime in a thousand notes as they dance over the rocks. A roaring wind whips them into a nearly blinding cloud over the water, making the frigid temperatures themselves audible in this remote place. Great shelves of vibrant blue ice crack and groan intoxicatingly as they meet the ocean currents. It is compelling to think of this water music as a memorial for those whose violent deaths the film chronicles. So conceived, water serves as a reminder of the interconnectedness of human beings with nature, and actively mourns their loss.

That music might arise from nature was a given for Thoreau, as is evidenced by this passage from his journal:

I sailed on the north river last night with my flute – and music was a tinkling stream which meandered with the river – and fell from note to note as a brook from rock to rock. I did not hear the strains after they had issued from the flute, but before they were breathed into it – for the original strain precedes the sound – by as much as the echo follows after – and the rest is the prerequisite of the rocks – and trees – and beasts.⁴⁴

Nature, it would seem, breathed the music into his flute – not the other way around. The music of his flute was thus a representation of the music occurring naturally in the environment. Thoreau sought to become the natural world of his writings through lived experiences. By living life in harmony with non-human animals, and even by imitating

their movements and sounds. Thoreau might experience the original thing that precedes its representation.

Titon credits Thoreau with having posited a soundscape ecology long before the term existed. Thoreau describes an ecology of sound in which each species communicates within its own acoustic niche. Industrial "noise pollution," as Schafer describes it, interferes with these niches. Thoreau considered himself to be one body among many when he lived at Walden pond. "It was not so much a surmounting of narcissism as an understanding of the relations between self and environment by means of listening and co-presence."⁴⁵ Titon cites a vivid example of co-presence in Thoreau's writing in which he describes the call of a bird (or any other natural sound) as having an effect on every other thing. A rock by the shore, for example, is affected by a bird's call, and as such, neither can be completely described without the other. "I am that rock by the pond-side," he writes.⁴⁶ Titon emphasizes the literalness of this sentence:

When he writes, "I am that rock," he means that he is like that rock; that his ear is to the bird melody as the rock is to the water that changes its shape. But he also implies that one completes the other and that therefore in a sense they are fused into a larger being.⁴⁷

By consistently relating the sounds of animals, birds, insects, and the like to their *places*, Thoreau grasped the concept of ecosystem while instinctively including himself within this web of life.

Not only did Thoreau essentially propose an ecosystem by another name, he also seems to have intuitively arrived at something of a posthumanist conception of the self more than a century before Björk and Timothy Morton's celebrated email exchange. The idea that a rock might be informed by a bird song or a human being observing a pond would undoubtedly appeal to Björk's musical and philosophical proclivities. Conceived on a much more theatrical scale than that of Thoreau, her "Oceania" makes explicit not only the shared origin of all living things, but also the heritage that persists within their very bodies:

Every boy is a snake is a lily

Every pearl is a lynx is a girl

Sweet like harmony made into flesh48

The song is written from the perspective of the ocean, personified by Björk as she sings. Dibben notes that in songs such as "Oceania" Björk eschews the lone, inspired genius model of artistic creation that has for so long been considered the purview of men. Rather, her creative process can be viewed as "a matriarchal alternative premised on procreation."⁴⁹ She looks to Björk's celebrated performance at the 2004 Olympic Games Opening Ceremony in Athens as an example of matriarchal creativity.

When Björk was asked to perform at the Olympics, she was urged to write a song that promoted a theme of human unity. As the source of all life, Björk could think of no greater unifier than the ocean. She explains, "The song is written from the point of view of the ocean that surrounds all the land and watches over the humans to see how they are doing after millions of years of evolution. It sees no borders, different races or religion."⁵⁰ Beginning as a striking a cappella performance, her "Oceania" spectacle featured costumed gods and goddesses, aquatic graphics courtesy of Lynn Fox, and a billowing blue dress made of over two-hundred meters of fabric which unfurled over the crowd.⁵¹ Her choice to portray herself as the giver of all life places a woman at the center of a new creation mythology, one that lends an animist sensibility to evolutionary biology. As her dress submerges the crowd and jellyfish swim with orchids on the screen behind her, the music indeed acts as a unifying force, binding not only all of humanity together, but all life.

Thoreau too hoped to encourage people to strive to be members of the natural community rather than citizens of this or that society. Paying close attention to the music of nature was, for him, a way to experience this relationship physically. Titon describes Thoreau's preoccupation with echoes, for example, as a way to experience "co-presence" with one's fellow beings.⁵² He uses "co-presence" after Erving Goffman – as the face-to-face relationship between humans which today has been expanded to include the virtual environment. Titon points to a section from *Walden* in which Thoreau describes being overcome with joy at the song of toads in a pond. "It takes complete possession of you, for you vibrate to it, and can hear nothing else."⁵³ It is thus that beings imprint themselves onto other beings.

I introduced the idea that sonic vibrations have the ability to resonate within the listener and stimulate sympathetic responses in Chapter One with my discussion of Kandinsky's principle of internal necessity. His approach to art involved identifying the correct "sounds" embedded in the colors and forms of his compositions so as to spiritually retune the viewer to experience the invisible world of the spirit. Thoreau also hoped to reveal the previously unseen (or more accurately, unnoticed) phenomena of nature through his observations of sound. Titon explains, "Thoreau helps us understand that sound waves vibrate living beings into bodily experience of the presence of others."⁵⁴ Minimalist composer La Monte Young, whose *Dream House* I discussed in Chapter Two, was also convinced of the power of vibration to transform an audience. Musician and scholar David Toop quotes him as equating the study of music to the study of the mechanics of life itself:

God created the body so that the soul could come to earth to study music so that it could have a better understanding of universal structure. Music can be a model for universal structure because we perceive sound as vibration and if you believe, as I do, that vibration is the key to universal structure you can understand why I make this statement.⁵⁵

Young's *Theater of Eternal Music* sought to achieve a spiritual connection between the members of its audience through the manipulation of sound waves. His preoccupation with vibration is likely why he found power stations so soothing as a child.⁵⁶ Like Kandinsky, Young seeks a specific frequency that will bring the whole of the universe into tune.

Björk too has long been aware of a universal response to sonic resonance. "Scientists haven't discovered it yet," she says, "but the human nerve system — which is basically our soul — is very similar to a violin string... It's not a coincidence it has the same effect on everybody."⁵⁷ While her suggestion of a universal response to musical sound is simplistic and perhaps a bit naïve, this description calls to mind Anihid Kassabian's discussion of the residue left by sound vibrations mentioned in Chapter Two. For her, music binds all entities together, suspending them in the viscosity of the moment and clinging to them even as the initial vibrations cease. If the common intuitive response that Thoreau had to toad song and Björk had to volcanoes and moss⁵⁸ can be expressed musically, ecomusicologists posit that some of this eco-residue might cling to the listener. David Dunn explains it thus:

My belief is that there is an important role for the evolution of an art form that can address the phenomenon of sound as a prime integrating factor in the understanding of our place within the biosphere's fabric of mind. As the ecology movement has repeatedly articulated, the traditional epistemological dichotomies between humans and nature are no longer tenable. We must instead develop a participatory relationship between humanity and the greater environmental complexity of the biosphere that is mutually life-enhancing.⁵⁹

The question remains, are we likely to interpret the sounds inspired by nature as such, or are these efforts in danger of falling on distracted ears as Schafer warned? Will our affective responses to the abstract presentation of eco-sounds inspire the action desired by their composers? In the following chapter, I will discuss Björk's *Biophilia* project as an effort to make absolutely explicit the relationship between music and nature, and to perform environmental activism on a scale not previously attempted by a popular musician.

Notes to Chapter Four

¹ R. Murray Schafer, *The Tuning of the World* (New York: Knopf, 1977), 54.

² Aaron S. Allen, "Ecomusicology: Ecocriticism and Musicology," in *Journal of the*

American Musicological Society 64, no. 2 (Summer 2011): 392.

³ Allen, "Ecomusicology," 392.

⁴ Jeff Todd Titon, "The Nature of Ecomusicology," *Musica e Cultura* 8, no. 1 (2013): 8.
⁵ John Durham Peters, *The Marvelous Clouds: Toward a Philosophy of Elemental Media* (Chicago: University of Chicago Press, 2015), 1.

⁶ Timothy Morton, *Ecology without Nature: Rethinking Environmental Aesthetics* (Cambridge, Mass.: Harvard University Press, 2007), 14.

⁷ David Ingram summarizes the problems inherent in this argument: "The confusion of postmodernist relativism, Kate Soper points out, lies 'in supposing that because we can only refer in discourse to an extra-discursive order of reality, discourse itself constructs that reality." David Ingram, *The Jukebox in the Garden: Ecocriticism and American Popular Music since 1960* (Amsterdam; New York: Rodopi, 2010), 34.

⁸ Morton, *Ecology without Nature*, 19-20.

⁹ Morton, *Ecology without Nature*, 12.

¹⁰ Morton, *Ecology without Nature*, 64.

¹¹ Titon, "The Nature of Ecomusicology," 15-16.

¹² Titon, "The Nature of Ecomusicology," 17.

¹³ Nicola Dibben, *Björk* (Bloomington: Indiana University Press, 2009), 24-52.

¹⁴ Dibben, *Björk*, 54.

¹⁵ Nicola Dibben, "Nature and Nation: National Identity and Environmentalism in Icelandic Popular Music Video and Music Documentary" in *Ethnomusicology Forum* 18, no. 1 (June 2009): 145.

¹⁶ Dibben, "Nature and Nation," 143.

¹⁷ Kevin Perry, "DiS Meets Björk - Part 4: Business / In Depth // Drowned In Sound," *Drowned in Sound*, October 6, 2011. http://drownedinsound.com/in_depth/4143722-dis-meets-bj%C3%B6rk-part-4--business.

¹⁸ The population of Iceland was approximately 315,000 in 2008.

¹⁹ Amy Phillips, "Björk [Part One]," *Pitchfork* (October 22, 2008). Accessed July 22, 2019. https://pitchfork.com/features/interview/7405-bjork-part-one/.

²⁰ Amy Phillips, "Björk [Part Two]" Pitchfork, October 23, 2008.

https://pitchfork.com/features/interview/7404-bjork-part-two/.

²¹ Phillips, "Björk [Part Two]."

²² Annie Zaleski, "'This Is Why People Are Panicking Here': Björk Takes on an 'Extreme Right-Wing Redneck Government' to Preserve Iceland's Open Spaces," *Salon*, December 19, 2015.

²³ Mark, Andrew. "Don't Organize, Mourn: Environmental Loss and Musicking." *Ethics* & the Environment 21, no. 2 (Fall 2016): 51–77.

²⁴ In Björk's interview with Timothy Morton, both express boredom with doom-and-

gloom narratives. "Sort your hope out USA," she writes.

²⁵ Mark, "Don't Organize, Mourn," 53.

²⁶ Mark, "Don't Organize, Mourn," 58.

²⁷ Mark, "Don't Organize, Mourn," 63.

²⁸ Mark, "Don't Organize, Mourn," 70.

²⁹ NME News Desk, "Bjork Discusses the Breakdown of Relationship with Artist Matthew Barney Which Inspired 'Vulnicura' - NME," January 21, 2015.

³⁰ Björk sings, "What is it that I have that makes me feel your pain? Like milking a stone to get you to say it." Björk, *Vulnicura*, London: One Little Indian/Wellhart, 2015. ³¹ Kristjana Guðbrandsdóttir, "Exclusive Interview with Björk: 'The Pain Was a Journey," Icelandmag, December 10, 2016.

³² Ryan Reed, "Bjork Releases 'Stonemilker' Video as Virtual Reality App." *Rolling Stone* (blog), December 21, 2015.

³³ "Vulnicura" roughly translates to "cure for wounds" from the Latin "vulnus" and "cura." Much of the artwork for the album, as well as Björk's costumes for stage and video, feature a simulated chest wound in various states of healing.

³⁴ Frahm writes, "The idea of movement - be it rhythmic, animated, or abstract - is deeply inherent to the concept of the music video." Laura Frahm, "Liquid Cosmos: Movement and Mediality in Music Videos," in Henry Keazor, and Thorsten Wübbena, eds, *Rewind, Play, Fast Forward: The Past, Present and Future of the Music Video*, Cultural and Media Studies (Bielfield: Transcript, 2010), 159.

³⁵ Guðbrandsdóttir, "Exclusive Interview with Björk."

³⁶ Mark, "Don't Organize, Mourn," 65.

³⁷ David Rothenberg, "Introduction: Does Nature Understand Music?," in *The Book of Music and Nature: An Anthology of Sounds, Words, Thoughts*, 2nd ed. (Middletown: Wesleyan University Press, 2009), 6.

³⁸ Rothenberg, "Introduction," 6.

³⁹ Timothy Morton, *Hyperobjects: Philosophy and Ecology after the End of the World* (Minneapolis: University of Minnesota Press, 2013), 11.

⁴⁰ Morton, *Hyperobjects*, 18.

⁴¹ Dunn explains, "As distinct from John Cage who wanted to decontextualize sounds so as to 'allow them to be themselves', I have focused on the recontextualization of the sounds of nature as evidence of purposeful-minded systems." David Dunn, "Nature, Sound Art, and the Sacred," in *The Book of Music and Nature: An Anthology of Sounds, Words, Thoughts*, ed. David Rothenberg, 2nd ed. Middletown (Wesleyan University Press, 2009.), 100.

⁴² R. Murray Schafer, "Music and the Soundscape," in *The Book of Music and Nature: An Anthology of Sounds, Words, Thoughts.* 2nd ed., ed. David Rothenberg, (Middletown: Wesleyan University Press, 2009), 66.

⁴³ Patricio Guzmán, et al, *El botón de nácar* (New York, NY: Kino Lorber, 2016).

⁴⁴ Quoted in Branka Arsić, *Bird Relics: Grief and Vitalism in Thoreau* (Cambridge, Massachusetts: Harvard University Press, 2016), 92.

⁴⁵ Jeff Todd Titon, "Thoreau's Ear," in *Sound Studies* 1, no 1 (Feb. 1, 2016), 146.

⁴⁶ Titon, "Thoreau's Ear," 149.

⁴⁷ Titon, "Thoreau's Ear," 149.

⁴⁸ Björk, "Oceania," *Medúlla* (New York: Elektra, 2004).

⁴⁹ Nicola Dibben, "Björk Creating: Myths of Creativity and Creation," in *Björk: Mid-Career Retrospective with New Commissioned Piece for MoMA* (New York, New York: Museum of Modern Art, 2015), 34.

⁵⁰ NME. "Björk Kicks off Olympics," NME, August 16, 2004.

https://www.nme.com/news/music/bjork-150-1358652.

⁵¹ Olympic.org, "Bjork, That Dress and the Extraordinary Athens 2004 Opening Ceremony," International Olympic Committee, June 4, 2018.

https://www.olympic.org/news/bjork-that-dress-and-the-extraordinary-athens-2004-opening-ceremony.

⁵² Jeff Todd Titon, "Why Thoreau?" in *Current Directions in Ecomusicology: Music, Culture, Nature*, ed. Aaron S. Allen and Kevin Dawe, Routledge Research in Music; 13. (New York: Routledge, 2016), 72.

⁵³ Titon, "Why Thoreau?," 71.

⁵⁴ Titon, "Thoreau's Ear," 145.

⁵⁵ David Toop, *Ocean of Sound: Aether Talk, Ambient Sound and Imaginary Worlds* (London; New York: Serpent's Tail, 1995), 177-178.

⁵⁶ Young lists his four most influential sounds as "insects, telephone poles, steam escaping something, and natural geographic resonance." La Monte Young, *Selected Writings* (München: Heiner Friedrich, 1969).

⁵⁷ Mark Pytlik, *Björk: Wow and Flutter* (Toronto, Canada: ECW Press, 2012), 128. ⁵⁸ Sound engineer for *Homogenic* Markus Dravs recalls Bjork's aims with the album. She instructed, "It should sound like the landscape of Iceland looks... Like rough volcanoes with soft moss growing over it." Pytlik, *Björk*, 119.

⁵⁹ Dunn, "Nature, Sound Art, and the Sacred," 99.

Chapter Five: Forward to Nature

Rescue me from level-head-ness, and the unnecessary luxury of being calm. Björk¹

The release of Björk's seventh studio album, *Biophilia*, marked a turning point in her career as both an artist and an activist. Having spent years advocating for the environment through her musical output, and more recently through her Náttúra Foundation as noted in Chapter Four, Björk conceived of *Biophilia* as a creative means to not only promote healthy environmental practices but also to educate the public through an innovative pairing of science and music. Believing that nature is the ultimate source of all music, Björk hoped her endeavors would result in a renewed love for, and more intimate relationship with, the vast spectrum of life on Earth. Released initially as an iPad app, the *Biophilia* project included an album, accompanying videos, a threeyear world tour featuring custom-made instruments, and an educational project that was introduced in a number of Nordic schools. According to Aaron Allen, ecomusicology matters "because it can bridge the arts and sciences and can teach creative critical thinking."² While it is not clear that Björk was aware of ecomusicology as a discipline when she conceived of it, *Biophilia* may have done as much as any musical project to achieve these aims.

In this chapter, I will examine *Biophilia* as a musical and educational endeavor that functioned as a capstone to her career up to that point and introduced new possibilities for an artistic intervention into our current climate crisis. As such, I will revisit some of the themes regarding the functionality of art introduced in Chapter One. In keeping with Björk's earlier work, many of the audiovisual components of *Biophilia* can be seen as practices of estrangement or enchantment, defamiliarizing the ordinary materials of life so as to present them anew to the audience. It follows that we must first be able to conceive of a different way forward if we are to attempt to bring it into being, so the apps and music videos can be viewed as not only instructional, but also procreative in their function. Philosopher Timothy Morton, whose correspondence with Björk is well documented, likens art to Einstein's famous characterization of quantum theory, referring to it as "spooky action at a distance." He explains, "It makes things happen without needing to touch things."³ Thus, for Morton, the future emerges directly from the objects we design.

In his ethnographic study of popular music and environmental activism, Mark Pedelty wants to know how music fits into a global ecosystem. Will it carry us away from our own polluted backyards, leading us to forget about the places we inhabit, or will it alert us to the greater climate crisis and inspire action? He asks, "Does our ability to download Tibetan throat singing make us more concerned about Tibet or simply less aware of what is happening to a local wetland?"⁴ Björk biographer Nicola Dibben argues that nature as a universal concept is evident in music "even when a specific region of wilderness is evoked."⁵ Thus, even when Björk sings about the black beaches of Iceland, her audience will understand her to speak on behalf the natural world more broadly. A predisposition to consider environmental issues in global terms is characteristic of many environmental activists, accustomed as they are to considering the connectedness of life within ecosystems. This is why the destruction of a distant habitat can be traumatic for people who have never seen it themselves, and why the disappearance of an individual species can come to symbolize the plight of many.

Following this logic, Pedelty insists that "renewing community connections to local place is essential if our lives and societies are to become more sustainable."⁶ His argument recalls Andrew Mark's assertion that music's ritual function allows for collective action:

Although that may not be their manifest rationalization, well-conceived rituals are designed to show us what a better world might actually look, feel, taste, and sound like. Their latent and more important purpose is to encourage us to feel a special connection to each other, to make us feel something, together.⁷

Nevertheless, Pedelty looks at some of the largest benefit shows such as Live Aid or the Free Tibet concerts, and notes that there is little evidence that the prevailing spirit inside the stadium makes its way into anyone's lives once the event is finished. Björk had similar concerns about her Náttúra benefit concert discussed in Chapter Four, fearing that despite impressive attendance numbers, she had not actually accomplished anything tangible. Is there any way to measure an actual correlation between environmentally activist music and public action? Pedelty says we cannot know, referring to the activist function of music making as "largely an act of faith."⁸

While stopping short of condemning activism through musical means as futile, Pedelty seems to succumb to what Melissa Lane describes as the idea of negligibility. Rather than a desire to do wrong, necessarily, negligibility may be viewed as the force behind the collective inertia that has caused and sustained the environmental crisis. Lane defines negligibility as "the assumption that each agent is so small a player that what he or she individually does in such pursuit doesn't materially affect the social outcome."⁹ The problem with negligibility is that it seems to result in individuals acting irresponsibly, or refraining from action entirely, because of a belief that their single action won't matter in the greater scheme of things. Lane makes a strong case for the importance of individual action, however, especially when one considers its indirect effects. If individual efforts may advance a particular cause, inspiring action in others, then they are not as small as we may believe. Given their celebrity status, popular artists such as Björk have the ability to reach, and potentially inspire, many thousands of individuals. This is why Björk entered the messy world of political activism in the first place.

Björk first became involved in Icelandic political protests in 2004 when she played a concert in opposition to an aluminum smelting plant. Concerns over the threat of big polluters destroying her cherished wilderness inspired her to found the Náttúra Foundation, releasing the eponymous single in 2008 as a fundraising effort for smaller, environmentally conscious companies. The departure from music during her forays into politics found Björk in unfamiliar territory. "It was another thing I never thought I'd get into," she told one interviewer. "I'm breaking all my own taboos!"¹⁰ For several years, Björk divided her time between music making and political organizing, but she feared that she would have to commit to one or the other full-time if she wanted to have success at either. Rather than abandoning her environmental activism, however, she found an innovative way to continue her advocacy through music. This was the motivation behind what would become the multimedia spectacle that is *Biophilia*. She explains, "Instead of standing on a chair and criticizing... why didn't I come up with solutions? I ended up being... touch-screens... internet... ok... solutions."¹¹ As may already be evident, *Biophilia* is comprised of many component parts, the completion of which spanned several years, but all are conceived very much as a single body of work. I refer to *Biophilia* as a project rather than simply as an album for this reason.

Biophilia was the first album of its kind to be released initially as an app suite, the introduction for which is narrated by the immediately recognizable voice of Sir David Attenborough:

Welcome to Biophilia. The love for nature in all her manifestations. From the tiniest organism to the greatest red giant floating in the farthest realm of the universe. With Biophilia comes a restless curiosity – an urge to investigate and discover the illusive places where we meet nature... We are on the brink of a revolution that will reunite humans with nature through new technological innovation. Until we get there, prepare, explore, *Biophilia*.¹²

Every song is depicted as its own star within the elegant galaxy that houses the apps, with each pairing the natural concept explored in the song with a specific musical concept such as notation or scales. Unlike some of her work discussed in previous chapters, most of the environmental themes on this album are representative of a greater concept, "conceived as fundamental elements and forces, rather than as topographical features of the Icelandic landscape."¹³ Björk arranged each song on the app as a sonic manifestation of the phenomenon she describes, conveying a tangible sense of the invisible processes that animate the universe. Further, many of the tracks impart a human narrative to natural events, situating the user within the vast network of life Björk depicts. The title of the album originates from Edward O. Wilson's oft-cited work in which he defines biophilia as the tendency of life to be drawn to life.¹⁴ He describes the amazing abundance and diversity of life in a single handful of forest soil,

noting, "It is possible to spend a lifetime in a magellanic voyage around the trunk of a single tree."¹⁵ We might think of Björk's *Biophilia* as doing something quite similar.

Consistent with her entire discography, *Biophilia* prominently showcases Bjork's remarkable vocal abilities. But perhaps to a greater extent than is true of previous offerings, her voice is frequently accompanied by the soaring chorus of an all-female vocal ensemble. At twenty-four members strong, the Graduale Nobili choir, as they are known, add striking clarity and precision to the complicated rhythmic arrangements throughout *Biophilia*. Tracks such as "Cosmogony" and "Moon" benefit from the rich, ethereal qualities of the flood of harmonious vocal layers, soaring or plummeting to suggest the vastness of space. At other moments, the choir adds powerful waves of dissonance, crashing against the jerky electric bassline of the Tesla coil in "Thunderbolt" or penetrating the eerie droning of the organ beneath Bjork's searing vocals in "Dark Matter." The rich and intricate vocal arrangements that recur throughout *Biophilia* serve as auditory filaments of sorts, weaving the highly distinctive individual tracks into a cohesive whole and creating an enchanting space within which users are encouraged to wander.

Each app offers a unique approach to its chosen topic. The song "Cosmogony," for example, is described as a series of creation myths from Native American, Chinese, and Australian Aboriginal traditions, with our modern-day Big Bang Theory introduced as a recent variation. Björk writes, "This song is the 'music of the spheres' song for me."¹⁶ In an essay introducing the song, Dibben explains that in the seventeenth century, the sun, moon, and planets were believed to revolve around the Earth in ratios that corresponded to the ratios of musical intervals. She writes, "Björk updates the notion of music of the spheres for the 21st century, first by connecting with its holistic ideal, and second, by drawing on recent scientific discoveries."¹⁷ For instance, some of the ambient choral music featured in the song, which doubles as the background music for the home page on the app, was inspired by recent discoveries such as the phenomenon of solar winds. In another instance, the mechanics of DNA replication in the app for "Hollow" are not only examined by means of a stunning animated film,¹⁸ but also as a kind of interactive drum machine driven by individual enzymes as they spiral their way along the DNA sequence.¹⁹ In this way, the user is invited to explore the mechanics of music as a function of nature throughout the *Biophilia* app suite.

Wilson notes that Picasso defined art as the lie that helps us to see the truth. He argues that the same can be said of science in that "both are enterprises of discovery."²⁰ Björk sees technological innovation as "not just compatible with nature but also a way we can access the beyond-human world."²¹ The same can be said, of course, about art. When the user selects a song, she is given a number of choices for how to proceed. Each song can be played in its entirety, just as one would might expect on a traditional album. The lyrics and score for each song are available, as is an animated version of the song which illustrates the notes and chord progressions as colorful shapes, creating a visual representation of the music. The interactive component for each song is accessed by selecting "play." The options are distinct for each, but many allow the user to record original music or to create new musical arrangements out of the component parts of the song. The app for the song "Virus" is one such example.

Halfway through the album, "Virus" emerges as an unexpectedly delicate and melodic song, nestled like a lullaby between the schizophrenic plod of "Hollow" and the gyroscopic churning of "Sacrifice." The jangling clarity of the gamaleste is showcased here to mesmerizing effect, calling to mind a chorus of melting icicles or the splash of heavy raindrops on wet cement. And yet, "Virus" is a love song of sorts between a virus and the doomed object of its affection. Björk describes the inspiration for "Virus" as having arisen from a throat infection that she was fighting. "It's kinda hilarious," she writes. "It's like I have this new neighbour that I have to sort of learn to live with."22 Her perspective recalls Ed Yong's recent publication on microbiomes, I Contain Multitudes, in which he describes the human body in terms usually used for continental-scale ecosystems. "Every one of us is... a colony enclosed within a single body. A multi-species collective. An entire world."23 He continues, "Through microbes, we find unity with our fellow creatures, despite our incredibly different lives."24 Taken from the perspective of the candida which infected her throat, Björk's body was a welcoming home for the fungus. In the song, Björk describes the activities of a virus (rather than a fungus), which sometimes needs to kill the host cell that it infects. Set to the sweet melody of the gamaleste and airy cooing of the accompanying choir, users watch viruses attach one by one to a central cell, infecting it with wispy strands of DNA. They have the option of flicking the viruses away, but the song will never finish if they continue to thwart the process. Thus, the virus will survive only at the expense of the completed song, which relies upon the death of the cell for its existence. By illustrating the microbiome as an ecosystem inside of the human body, Björk suggests a larger connectivity with all that lives.

In certain modes, several of the *Biophilia* apps act as musical instruments. If the viewer chooses to use the Virus app in instrument mode, for example, she can play the viruses and cells simply by touching them. Some of the cells feature samples of music from the song, and others function as recording devices, playing back loops of the music the user has created. *New York Times* reviewer Seth Schiesel wrote enthusiastically

about the musical function of the "Dark Matter" app in which the user must tap pools of light in order to explore musical scales from all over the world. "You may start with a chromatic tone," he writes, "but with a few taps the program says you have created noises called 'Balinese pentatonic' and 'mixolydian_augmented'. My favorite was described as (take a breath) 'double harmonic/Gypsy/Byzantine/ chahargah.'"²⁵ The app for the song "Sacrifice" highlights the educational aspect of the project most vividly, as users explore musical notation and composition in a more traditional format. Letters of the alphabet and other symbols correspond to various instruments and bits of vocalization from the song. Playing it very much like a keyboard, the user is free to arrange it in any way she chooses. Compositions may be recorded and saved, but it is also possible to use these modes to drive other MIDI instruments.

While it is immediately clear that the app suite encourages creative engagement with the music, affording the user a remarkable level of artistic license with copyrighted recordings, it is less evident how this activity might double as environmental activism. Dibben looks to Timothy Morton for a possible explanation, who believes that an aesthetic experience of nature might convince an audience to want to preserve the Earth's ecosystems, embedded as we are within them.²⁶ Dibben adds, "Immersion and affect enable the experience of enchantment with nature, a condition she advocates as a necessary precursor for environmental action."²⁷ Art, therefore, functions not only as a means of giving sensible access to the invisible (or simply unnoticed) cohabitants within our environment, but also to coalesce aesthetic and emotional experiences. Thus, activism can be conceived as an immersive medium in its own right. In the case of *Biophilia*, this is achieved most effectively through the tactile manipulation of the audiovisual elements on the screen. The act of creation made possible by the apps through the deliberate, thoughtful engagement with musical and visual interpretations of natural processes situates the user within a virtual world of her own making. Keren Omry views this as a form of posthumanist practice that enables a "cognitively estranged subjectivity."²⁸ Matias Korsgaard argues that new music video types (including Björk's apps)" provoke strong emotional reactions that engage the user in a kinetic experience," suggesting that "this mediated embodiment may be a response to the coldness and dematerialization of digitality."²⁹ Thus, the medium of the touchscreen enables heightened affective engagement with the content through a mechanism of active creation. It is in this way that Björk may have most effectively achieved the use of new technology as a source of beauty rather, as Omry notes, than the potential cause of environmental destruction as it is often presented.³⁰ The apps, therefore, are probably the clearest manifestation in her *Biophilia* project of her forward-looking approach to living a more environmentally sensitive life.

By permitting the user to assume artistic control over the music on the app, Björk hoped to instill a passion in her audience that wedded music and nature through the use of the latest technology. This fearless embrace of audience collaboration is reminiscent of the early avant-garde projects discussed in Chapter One, particularly those of the Italian Futurists who challenged their public to continue in the creative process, even as it was in progress on the stage.³¹ Just as the Futurists encouraged their audiences to embrace a spirit of creativity in their own lives rather than relegating art to the funereal realm of the museum, punk musicians leveled the playing field within musical circles by insisting that anyone and everyone could make music, regardless of training or ability. Embracing this DIY ethos, albeit in the sophisticated technology of an app suite, Björk's punk rock roots are evident even here. More than may be true of any of Björk's previous albums, the music videos for *Biophilia* are aesthetically rooted in a common conceptual source, creating their own spatial and temporal rules. Elaborate, vividly colored wigs are an integral part of her costumes for both the videos and stage show, easily distinguishing them from her previous work and establishing a visual marker characteristic only of *Biophilia*. The wigs are large and unruly, like newly sheared wool or mounds of quilt batting. The video for "Moon," the final single from the album, is also the source of the cover art for *Biophilia* in which Björk appears against a black, starry void wearing an immense mop of orange hair and strumming a tiny golden harp worn around her waist as a belt. As the "Moon" video begins, Björk resembles something of an astral body herself, bound to the Earth only by the crystal she clutches in her hand.

Phases of the moon appear and disappear in an even cycle, revealing and concealing Björk as she sings. Clearly designed to complement the app, the video coordinates the strumming of the harp with the lunar cycle, the clear, sharp notes of which are particularly effective set against the silence of space. The music alternates between pretty, jewel-box tones and Björk's vocal eruptions, at times nearly a cappella, other times with the accompaniment of the all-female choir featured prominently on the album. Again and again, the moon eclipses and exposes Björk as it moves in staccato pulses through its journey from new to full. Near the close of the video, lunar pearls snake through a humanlike skeletal pelvis like a beaded necklace. She appears to suggest a connection between the lunar cycle and the female menstrual cycle, as the repeated refrain, "All birthed and happy," brings the composition to a climax. The song lacks a traditional pop structure or a proper chorus, but instead meanders deliberately, keeping the regular time of the moon as it reveals its phases, yet eschewing a clear starting or ending point. "Moon" is played in 17/8 time, which creates a complicated rhythmic structure that is unpredictable and repetitive at once, holding the listener's rapt attention throughout. Natural rhythms are, of course, often highly irregular, a fact explored to great success in a number of her other videos.

The song "Crystalline" is an excellent example of the use of complex rhythms to illustrate natural processes. "Listen how they grow,"³² the chorus repeats, as her gamaleste - one of several bespoke instruments she commissioned for the album tinkles out its opening notes.³³ But this is no serene contemplation of the cosmos. The music is at times reminiscent of many of Björk's more danceable hits, as the sudden crash of breakcore beats catapults the video into a new direction about halfway through the delicate opening. Crystalline growth is fueled here by laser beams and frenzied animation, resulting in a compelling juxtaposition of adrenaline and enchantment as the shimmering crystals explode from the cave bottom. "Listen how they grow," she sings. Since crystals, like so much of the natural world, operate at a different time scale than humans, we cannot actually hear crystalline growth without the aid of technology, or in this case, art. So Björk's opening of the song with the sweet, appealing chiming of the gamaleste seems to accord with our own ideas about what a crystal might sound like, but she surprises the listener with the explosive finale. Crystal time has accelerated to something beyond even our own speed – the resulting free-for-all of color, rhythm, and sound amounts to an almost violent celebration of geologic processes.

The Earth is very much alive and possibly even sentient in Björk's vision, as her video for "Mutual Core" demonstrates. Like the "Moon" video, Björk is the center of attention, singing and clutching unusual rocks. She does not remain alone for long. The video opens with Björk embedded up to her waist in sand as strange rocky sea creatures emerge and begin what seems to amount to a mating dance. The climax is intense. Lava pours from open mouths, the ocean floor gyrates, rocky masses emerge and grow, and rainbow-colored swirls of sand harden and crumble. "As fast as your fingernail grows, the Atlantic ridge drifts,"³⁴ she sings, playing once again with the different time worlds we inhabit. Arguably the most widely accessible of the singles on the album in terms of lyrical content and musical composition, this song, perhaps more than any other on the album, explicitly leads the audience along a certain narrative. "This eruption undoes stagnation," she sings. She could be referencing a relationship, or she could just as easily be referring to a literal volcanic event. For Björk, "Mutual Core" is a sexually charged depiction of geology set to a strong melody replete with a steadily building series of crescendos and accelerating beats. The Earth is wide awake and continuously generating life. This process is violent, explosive, beautiful.

Jane Bennett wonders why it is important to advocate for the vitality of matter. Her hunch, she explains, is that the image of dead matter:

feeds human hubris and our earth-destroying fantasies of conquest and consumption... The figure of an intrinsically inanimate matter may be one of the impediments to the emergence of more ecological and more materially sustainable modes of production and consumption.³⁵

Björk's *Biophilia* video collection, as is true for many of her earlier videos, works to reenchant the material of daily life, animating and exaggerating it in unexpected ways so as to inspire feelings of kinship in her audience. But art can also work to counter the human habit of recognition by de-familiarizing the sights and sounds of the environment, or as Viktor Shklovsky elegantly describes it, "by making a stone feel stony."³⁶ The technique of estrangement re-asserts the materiality of the world, but bestows upon it novel sensory qualities often lost in the distraction of one's daily routine.

Curator Klaus Biesenbach describes the vibrant materiality of the objects in Björk's videos, noting that even inanimate objects seem to live. "They breathe, pulse, tick, oscillate, hum... And everything leads to music: motors run, clocks tick, lungs breathe, a train provides a rhythm, the tide or a waterfall sets the pace."³⁷ In this way, Björk's treatment of objects (living or otherwise) recalls that of Thoreau, whose literary depictions of nature had the effect of estrangement and enchantment, which I compared to Kandinsky's work in Chapter One. For Bennett, all things benefit from this aesthetic treatment, as "vivid entities [are] not entirely reducible to the contexts in which (human) subjects set them [and are] never entirely exhausted by semiotics."³⁸ Likewise, Branka Arsić characterizes Thoreau's approach to nature writing as a strategy that might be particularly effective today as a means of reawakening the human sensory response to nature. She explains, "This vital, transversal animation of everything is of crucial political importance, as it allows us to understand 'that any thing that lives needs to be thought in the unity of life – ...that no part of it can be destroyed in favor of another'."39 Like Bennett, Arsić sees Thoreau's epistemology as essentially materialistic. This is a departure from a more broadly accepted reading of Thoreau as a spiritualist or idealist. In this way, *Biophilia* can be seen as a contemporary take on Thoreau's brand of the pastoral, in that matter itself – however aestheticized – is presented as a subject not only of intrinsic value, but also of reciprocal importance to all that exists. The rocks that spring to life in the "Mutual Core" video or the famous dancing telephone booth in "It's Oh So Quiet" attest to the vitality that Björk ascribes to the things that occupy the spaces she creates. Animated by music, the objects in her videos summon her audience into a

state of entrainment, synchronizing emotional responses through rhythmic association. According to Bennett, "If a set of moral principles is actually to be lived out, the right mood or landscape of affect has to be in place."⁴⁰ As such, art and music have an important role to play as catalysts of affect. Momentarily enchanted by the audiovisual aesthetics of Björk's vignettes, her audience may feel a sense of empathy for the materials that comprise their own environments.

As is clear in Björk's description of *Biophilia*, her aim was not to return to some kind of prior "natural" state. Rather, she hopes to enable humans to use their newest technological capabilities to go "forward to nature."⁴¹ It is an important distinction to note, and one that should defend her work against charges of sentimentality. This idea is most evident in her decision to release the album as an iPod app, but it is also reflected in the instrumentation designed for the *Biophilia* stage show. Working with engineers and musicians from all over the world, Björk commissioned several bespoke instruments that would theatricalize some of the natural principles explored in her music.⁴² She explains, "Basically the pipe-organ is like wind, and the gamaleste is like bronze and the pendulum is like gravity."⁴³ Released as a DVD and Blu-ray accompaniment to the original album, *Biophilia Live* documents a performance at London's Alexandra Palace in 2013 which permits a view of these instruments in action.⁴⁴

As with the music videos for *Biophilia*, Björk's body is integrated into the set design on stage through the use of elaborate costuming. For this performance, she wears a dress that is difficult to describe. The glossy ivory-colored fabric is gathered into bulbous shapes, emphasizing its opalescent qualities. Vaguely reminiscent of some sort of ocean life, it appears sturdy and fragile at the same time. Making use of the latest in 3-D printing technology, Iris van Herpen designed the bulk of Björk's costuming for Biophilia and Utopia. Fittingly, some of van Herpen's designs for Biophilia were inspired by "bacilli, vermin, mites, lice, and termites." She explains, "I wanted to show the beauty of them, because in my eves they are the most bizarre, unbelievable and most imaginative creatures imaginable."45 Björk is joined on the stage by an all-female choir of twenty-four Icelandic women, many of whom have been training together since childhood.⁴⁶ Together, they move about the stage around a large Tesla coil which functions as a musical instrument. Other instrumentalists operate computers, keyboards, and xylophones positioned at the periphery of the stage, which appears almost too small to accommodate the abundance of performers. The music throughout *Biophilia* is often a pronounced departure from Björk's earlier dance hits, and the album is successful in no small part because of this. However, the complicated meters and rhythms do not always lend themselves to head-bobbing, and the performers' attempts to do so on stage are often awkward. The seeming lack of choreography may be a comment on the randomness of life on Earth, but the result is that the human performers take a back seat to the musical machinery on stage. Perhaps to as great an extent as Björk herself, the remarkable array of instruments are clearly the stars of the show.

The most cumbersome of *Biophilia*'s unique instruments would have to be the sharpsichord. Weighing 2.5 tons, this one-of-a-kind instrument is a piece of artwork in its own right. Sound sculptor Henry Dagg spent five years building this visually stunning, if highly impractical contraption. If Luigi Russolo had asked Dr. Seuss to design his *intonarumori*, he might have come up with something similar. Forged entirely of stainless steel, the sharpsichord is a solar-powered fusion of a harp and a

barrel organ resembling something one might expect to find at a steam punk convention. Enormous amplifying horns resembling trumpet vine flowers flank the instrument, as though awaiting the arrival of a metallic hummingbird. It is operated by placing individual pins into the central cylinder's more than 11,500 holes, an extremely laborious process that requires an entire day to program a single minute of music.⁴⁷ Sonically, it recalls the sonorous clanging of a clock tower, and its deep, rich tones complement the sweeter chiming of the gamaleste. However, the instrument that best represents the spirit of the *Biophilia* project in terms of conception, presentation, and function is the gravity harp.

Andy Cavatorta was working at the M.I.T. media lab in 2010 when he was commissioned to create an instrument for Björk that would "harness a force of nature."⁴⁸ Inspired by her song "Solstice" about planetary orbits, he set out to design what would become known as the gravity harp.⁴⁹ At twenty feet high and eight hundred pounds, the instrument is cartoonishly oversized for its function. Four weighted pendulums swing in time to the music, driving the strings at their bottom ends against stationary "pluckers" below. Just as with the sharpsichord, the sculptural elements are as important for the performance as its musical capabilities. It has an elegance about it, but also a very raw material quality reminiscent of Russian Constructivist sculpture in which the components of its design have been laid bare. The strings are attached to the steel frame by smooth geometric wooden accents, adding a warm, tactile quality to the otherwise imposing instrument. The entire song is programmed into a computer that controls the momentum of the pendulums, while motors ensure that the correct note is sounded at the precise moment, rotating the strings into place as they glide. The effect is gently hypnotic as the massive steel arms swing each according to its own rhythm, reaching the nadir of their graceful arcs in time to pluck a single string before their ascent begins. The same sonic quality could be quite easily achieved through more conventional means, as demonstrated on the album by harpist Zeena Parkins, but that would be missing the point.

In his article in the New Yorker about this remarkable instrument, Andrew Marantz describes the gravity harp as a musical Rube Goldberg machine.⁵⁰ This is not meant as an insult. The act of making something as simple as plucking a string into a tremendous, multisensory spectacle epitomizes artistic estrangement – the audiovisual equivalent of Shklovsky's literary approach. The audience at a performance of Biophilia will find itself mesmerized by the synesthetic treatment of music whereby sounds assume a visual form through their exaggerated mechanisms of production. One could argue that a traditional harp is also a visual manifestation of sound, but it is easily overlooked in the midst of an orchestra due to the simple fact of its ordinariness. This is where *Biophilia* shines as an environmentalist project. The lyrics, music videos, apps, instrumentation, costuming, and stage design not only present natural phenomena in novel ways designed to call attention to their inherent value, but also make a convincing argument for musicking as an effective method of activism. Projects such as *Biophilia* thus have the potential to re-enchant nature through music and to suggest a relationship of co-presence within living systems through collaborative audiovisual spaces. Aaron Allen argues that such demonstrations of relationship between music and natural ecology might be particularly fruitful, "especially because of the ubiquity of music, the importance most people accord to it, and the communicative and emotional powers associated with music."51 Not only must researchers and scholars strive to understand this relationship, he argues, but they also need to implement their knowledge in a

practical way, namely, in the classroom. Remarkably, Björk's *Biophilia* aimed to do just that.

In 2014, the Icelandic presidency of the Nordic Council of Ministers in the field of education and research elected to implement the Biophilia Educational Project in classrooms throughout the region.52 The project was centered on the use of Björk's *Biophilia* apps as proper teaching tools, which were integrated into grade school curricula throughout thirty-three schools in eight participating countries. An interdisciplinary group of experts and educators was assembled to create teaching guidelines and create a pedagogically sound project which was then passed on to participating instructors through a series of workshops.53 According to the official project website, the goals of the pilot project were: 1. to promote innovation in schools, 2. to set up a Nordic collaborative network, 3. to break up traditional teaching methods, and 4. to encourage young people's interest in music, natural science, creativity, and technology.54 The project was launched in 2015 and was followed by a period of assessment overseen by the Ministry of Education, Science and Culture in Iceland. According to exit surveys and interviews of the participating educators, the project succeeded in achieving all of its aims, and the majority of participants planned to continue using the "Biophilia teaching method" in the future.55

The Biophilia teaching method is available free to the public via the project website. Each of the apps are included along with instructions for their use. Further, each app is presented in the context of a number of disciplines with suggestions for class content and activities associated with each. For example, the musical analysis of the "Moon" app reads in part: The symbolism of the Moon as the realm of imagination, melancholy, and regeneration is expressed in the Moon song and app by musical patterns and visual images which wax and wane... The relationship between lunar and tidal cycles and of musical material can be heard in the melodic contours... An analogy between pitch and height and the spatial dimensions of height means that rising and falling contours can be heard as the rise and fall of real-world phenomena such as waves.⁵⁶

The site then goes on to suggest ways of incorporating these ideas into a variety of classroom lessons. A lesson on astronomy might include lunar phases such as those seen in the music video, lunar eclipses, or the effects of gravity on sea levels. Taking these ideas as a jumping-off point, one might include lessons on other cycles in nature such as photosynthesis or the human circulatory system. Or, from a humanities perspective, one might introduce myths or religious practices associated with the moon. The site also suggests a number of potential art projects and activities related to the song. Of course, each app encourages musical composition as well, so the educational possibilities stemming from each song are seemingly endless.

As I have demonstrated, Björk employed multiple media in order to inspire creativity and imagination in the service of environmental activism. Her videos for *Biophilia* defamiliarize the very rocks and minerals that comprise the Earth, transforming them into lively constructions intended to inspire the very wonder and curiosity needed if we are to see the natural world as intrinsically valuable. The computer apps both inside and outside of the classroom demand total sensory engagement with the music. This is not the background music that Attali feared would produce a legion of capitalist automatons. Rather, *Biophilia* exists at a crossroads
between the pastoral and the technological, offering an artistic project in the form of a pedagogical exercise.

In his book about popular music and ecocriticism, Jukebox in the Garden, David Ingram examines the pastoral as a potentially revolutionary genre.⁵⁷ He identifies the pastoral in music as comprising two general areas: elegy and satire. "The ideal tends to be a pastoral landscape in which human beings feel at home in the natural world; elegy is a lyrical mediation on its loss, and satire a denunciation of those deemed responsible for that loss." He continues, "The pastoral can also take on reformist or even revolutionary aspects, particularly when the act of valuing beautiful landscapes implies opposition to industrial development."58 Adorno too saw a very subversive quality in the utopian pastoral. By suggesting a turn away from capitalist civilization toward a natural life, such thinking or imagining posited a new political structure for society, or "the possibility of a sphere beyond bourgeois work and commodity relations."59 Thus, the performance of ecologically activist music such as Björk's may be viewed as a form of utopian praxis. I conclude this dissertation with a discussion of Björk's most recent project, appropriately titled Utopia. Can Björk's music, particularly when coupled with visual technologies, imagine a future that might come into being though this same act of imagining? A comparison between *Biophilia* and *Utopia* will demonstrate two very diverse approaches to the same goal, with the latter acting as a mystical counterpoint to the vital materialism of the former.⁶⁰

Notes to Chapter Five

¹ Björk, "Nature is Ancient," *Family Tree*. One Little Indian, 2002.

² Aaron S. Allen, "Ecomusicology from Poetic to Practical," in Hubert Zapf, ed.,

Handbook of Ecocriticism and Cultural Ecology (Berlin: De Gruyter, Inc., 2016), 644. ³ Timothy Morton, *Being Ecological* (Cambridge, Massachusetts: Cambridge,

Massachusetts: The MIT Press, 2018), 81.

⁴ Mark Pedelty, Ecomusicology: Rock, Folk, and the Environment (Philadelphia, Temple University Press, 2012), 45.

⁵ Nicola Dibben, "Music and Environmentalism in Iceland." In *The Oxford Handbook of* Popular Music in the Nordic Countries, ed. Fabian Holt and Antti-Ville Kärjä (New York: Oxford University Press, 2017), 164.

⁶ Pedelty, 129.

7 Pedelty, 29.

⁸ Pedeltv, 48.

⁹ Melissa Lane, Eco-Republic What the Ancients Can Teach Us about Ethics, Virtue, and Sustainable Living (Princeton, NJ: Princeton University Press, 2012), 51.

¹⁰ Kevin Perry, "DiS Meets Björk - Part 2: Biophilia." *DrownedInSound*, October 4, 2011. http://drownedinsound.com/in_depth/4143692-dis-meets-björk-part-2-biophilia.

¹¹ Perry, "DiS Meets Björk" Ellipses are original.

¹² One Little Indian and Well Hart, *Biophilia*, Apple App Store, version 1.6 (2017), https://apps.apple.com/us/app/bj%C3%B6rk-biophilia/id434122935 (accessed 11/23/19).

¹³ Dibben, "Music and Environmentalism," 163.

¹⁴ Edward O. Wilson, *Biophilia* (Cambridge, MA: Harvard University Press, 1984).

¹⁵ Wilson, *Biophilia*, 22.

¹⁶ Björk, Essay for "Cosmogony" app, *Biophilia*.

¹⁷ Nicola Dibben, Essay for "Cosmogony" app, *Biophilia*. Nicola Dibben is credited as "Nikki Dibben" here.

¹⁸ The "hollow movie" depicts a beautiful internal journey beginning at the skin tissue, leading through mitotic spindles, cytoplasm, nuclear membranes, and eventually entering the realm of DNA. The viewer can follow a major groove protein's trip through the nucleus. "The human body contains billions of these machines," the movie explains. "Bjork: Hollow," YouTube video, https://www.youtube.com/watch?v=Wa1AopPc-ik. ¹⁹ Scott Snibbe, "Björk Biophilia: Hollow App Tutorial," YouTube video, Jan. 12, 2012, https://www.youtube.com/watch?v=aK-M94wOWNE (accessed Nov. 21, 2019).

²⁰ Wilson, *Biophilia*, 63.

²¹ Dibben, "Music and Environmentalism," 174.

²² One Little Indian and Well Hart, *Biophilia*.

²³ Ed Yong, I Contain Multitudes: The Microbes within Us and a Grander View of Life (New York: HarperCollins, 2016), 3.

24 Yong, 4.

²⁵ Seth Schiesel, "Björk's 'Biophilia': An Album as Game," The New York Times, October 24, 2011. https://www.nytimes.com/2011/10/25/arts/video-games/bjorksbiophilia-an-album-as-game.html.

²⁶ Dibben, "Music and Environmentalism," 175.

²⁷ Dibben, "Music and Environmentalism," 175.

²⁸ Keren Omry, "Bodies and Digital Discontinuities: Posthumanism, Fractals, and Popular Music in the Digital Age," in *Science Fiction Studies* 43, no. 1 (March 2016): 114.
²⁹ Matias Korsgaard, "Music Video Transformed" in Richardson, John, Claudia Gorbman, and Carol Vernallis, eds., *The Oxford Handbook of New Audiovisual Aesthetics* (New York: Oxford University Press, 2013), 517.
³⁰ Omry, 106.

³¹ The "Futurist Evening," or *serata*, was characterized by stage shows in which multiple forms of art were combined — music, theater, painting, poetry, dance — the spectacle of which gained them notoriety throughout Europe. Audiences were provoked into

participating, often resulting in violent encounters.

³² Björk, "Crystalline," *Biophilia*. New York: Nonesuch, 2011.

³³ The gamaleste is a hybrid instrument commissioned for *Biophilia* combining a gamelan and a celeste. Björgvin Tómasson and Matt Nolan were the designers.
³⁴ Björk, "Mutual Core," *Biophilia*. New York: Nonesuch, 2011.

³⁵ Bennett, Vibrant Matter, ix.

³⁶ Shklovsky describes the function of art thus: "And so, in order to return sensation to our limbs, in order to make us feel objects, to make a stone feel stony, man has been given the tool of art." Viktor Shklovsky, *Theory of Prose* (Elmwood Park, IL: Dalkey Archive Press, 1990), 6.

³⁷ Klaus Biesenbach, "Introduction," in *Björk: Mid-Career Retrospective*, exhibition catalog (New York: Museum of Modern Art, 2015), 7-8. Biesenbach curated the exhibit.
³⁸ Bennett, "Vibrant Matter," 5.

³⁹ Branka Arsić, *Bird Relics: Grief and Vitaliasm in Thoreau* (Cambridge: Harvard University Press, 2016), 142. Punctuation is original.

⁴⁰ Bennett, "Vibrant Matter," xii.

⁴¹ Dibben, "Music and Environmentalism," 172.

⁴² Andy Cavatorta designed the gravity harp at M.I.T.'s Media Lab, English composer Henry Dagg created the sharpsichord, Björgvin Tómasson made the MIDI-controlled pipe organ, and he teamed with Matt Nolan to create the MIDI-controlled gamelancelesta hybrid.

⁴³ Perry, "DiS Meets Björk."

⁴⁴ Björk, *Biophilia Live*, dir. Peter Strickland and Nick Fenton (Cinema Purgatorio, 2014), Blu-ray.

⁴⁵ Flood, Kathleen, "Dressing Björk: Meet Fashion Designer Iris van Herpen," *Vice*, February 9, 2012. https://www.vice.com/en_us/article/4x48xq/dressing-bj%C3%B6rk-meet-fashion-designer-iris-van-herpen.

⁴⁶ The choir is called Graduale Nobili.

⁴⁷ Björk, *When Björk Met Attenborough*, dir. by Louise Hooper. Pulse Films, Ltd., 2013, Blu-ray.

⁴⁸ Andrew Marantz, "Inventing Björk's Gravity Harp," in *The New Yorker*, March 6,
2012. https://www.newyorker.com/culture/culture-desk/inventing-bjrks-gravity-harp.
⁴⁹ The lyrics that inspired the design were, "The Earth, like the heart, slopes in its seat. And, like that, it travels along an elliptical path. Drawn into the darkness." Björk, "Solstice," *Biophilia*. New York: Nonesuch, 2011.

⁵⁰ Marantz, "Inventing Björk's Gravity Harp." Marantz refers to Bjork's approach as elegantly splitting the difference between "techno-worship and Luddism."

⁵¹ Aaron S. Allen, "Prospects and Problems for Ecomusicology in Confronting a Crisis of Culture," in *Journal of the American Musicological Society* 64, no. 2 (Summer 2011): 414.

⁵² Biophilia Educational Project website. "Introduction,"

https://biophiliaeducational.org/report/content.html#chapter1_slide1. The participating countries were Åland Islands, Faroe Islands, Greenland, Iceland, Sweden, Norway, Denmark, and Finland.

⁵³ The Teaching Guidelines Expert Group consisted of Björk, composer Sunleif Rasmussen, astrophysicist Anja C. Andersen, playwright Pipaluk Jörgensen, music educator Cecilia Björck, professor of astronomy Esko Valtaoja, professor of science education Alex Strömme, and chairman of the board of the University of Iceland's Teaching Centre Guðrún Geirsdóttir. Biophilia Educational Project website.

"Introduction," https://biophiliaeducational.org/report/content.html#chapter3_slide6. ⁵⁴ Biophilia Educational Project website. "Introduction."

⁵⁵ Árný Elíasdóttir, Berglind Björk Hreinsdóttir and Birna Kristrún Halldórsdóttir, "Biophilia Education Project Evaluation," conducted by Attentus Human Resource Consultancy for the Ministry of Education, Science and Culture in Iceland, September 23, 2016.

https://biophiliaeducational.org/report/attachments/Biophilia_Educational_Project_ Evaluation_Attentus_2016.pdf._According to the project overview, "Participants acquired the skills to develop their musical imagination, and to make music in an impulsive and responsive way, inspired by structures and phenomena in the natural world."

56 Biophilia Educational Project website. "Moon,"

https://biophiliaeducational.org/apps/moon.

⁵⁷ David Ingram, *The Jukebox in the Garden Ecocriticism and American Popular Music since 1960* (New York: Rodopi, 2010), 52.

⁵⁸ Ingram, 55.

⁵⁹ Quoted in Ingram, 54.

⁶⁰ I take the term "vital materialism" from Jane Bennett which she conceives as the capacity of things to "act as quasi agents or forces with trajectories, propensities, or tendencies of their own." Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham: Duke University Press, 2010), viii.

Conclusion

A map of the world that does not include Utopia is not worth even glancing at. Oscar Wilde¹

Timothy Morton wonders if we have been going about environmental activism all wrong. Most activists hope to change minds and thereby rescue what remains of the ecosystem through reasoned arguments supported by logic and data. Morton suggests that we need to focus on a kind of re-enchantment instead. "We need to get out of the persuasion business and start getting into the magic business, or the catalysis business, or the magnetizing business, or whatever you want to call it... It is not enough simply to use art as candy coating on top of facts," he explains.² For Morton, art should not supply its audience with even more information to process. We do not need to be convinced; we need a transformative affective encounter. It is difficult to conceive of Björk's *Utopia* as doing anything else.

In his essay "The Politics of Utopia," Fredric Jameson expresses concern that the utopian ideal, which he identifies as a necessary precursor for any kind of lasting political change, has waned in recent times.³ Indeed, he maintains that revolution may be impossible without the "reality paralysis" that permits utopian imagining.⁴ For Jameson, however, utopian thinking is most important in its negative function, making explicit that which is impossible to imagine. Utopia thus demonstrates our failure to imagine another future, and in so doing, "to reveal the ideological closure of the system in which we are somehow trapped and confined."⁵ Adorno too emphasized the negative function of utopia, insisting that "in the determined negation of that which merely is... it

always points at the same time to what should be."⁶ If utopia is indeed a challenge to that which merely is, Björk's pastoral presentation of utopia would function to negate the already destroyed Earth and offer an Earth that might yet be. The practice of utopian envisioning is experiencing a resurgence in scholarship, and Ernst Bloch's work on the subject was of particular interest for me in my exploration of Björk's recent output. For Bloch, music is uniquely capable of what he calls "anticipatory illumination."⁷ This act of imagining is possible because of music's ability to appeal directly to emotion, as well as its tendency to move beyond its historical situation. He writes, "Music is that art of pre-appearance which relates most intensely to the welling core of existence."⁸ For Björk, as for Ernst Bloch, however, the most important quality of the utopian imagination is hope.

The tour book accompanying Björk's Cornucopia performances (the tour in support of *Utopia*) begins with a manifesto. "In order to survive as a species," she begins, "we need to define our utopia... We have to imagine something that doesn't exist, carve intentionally into the future, and demand a space for hope... Let's imagine a world where nature and technology collaborate... and then move into it."⁹ Thus, she hopes to offer a blueprint for something tangible, an idea not necessarily in keeping with the notion of utopia. But Ernst Bloch distinguishes utopian vision from fantasy thus: "The imagination of the utopian function ... differs from mere fantasy in that only the former... anticipates a *real* potentiality."¹⁰ As though foreshadowing Björk's current project, he continues, "What is important is the imaginative gaze of the utopian function, loaded with hope."¹¹ Bloch's conception of hope is key to understanding the necessity of utopian thinking, for it is an educated hope born of experience and knowledge. Through this lens, we can look at both *Biophilia* and *Utopia* as what he describes as a "methodological organ for something new and an objective physical

condition of what is coming."¹² "If there was ever an urgency or necessity to come up with another utopian model... I think it's now," Björk insists. "And this is my proposal," adding, "If we don't have the dream, we're just not going to change... This kind of dream is an emergency."¹³

Utopia was released in November, 2017, following the 2015 release of *Vulnicura*. As of December, 2019, Björk was still in the midst of her live tour in support of the album, a multi-media spectacle titled *Cornucopia*.¹⁴ Following the app suite for *Biophilia* and the virtual reality format available for *Vulnicura*, the album marks a return to a more standard format for a musical release, cryptocurrency rewards for its purchase notwithstanding.¹⁵ The album features the expected synths, choral arrangements, lavish strings, and harps that have come to characterize her later work, but the addition of an all-female flute orchestra marks the most notable shift in her musical direction. Björk's release of a limited-edition *Utopia* boxed set containing fourteen wooden flutes speaks to the importance of the instrument for this project. But perhaps even more fundamental to the coherence of the album is her recurrent use of recorded birdsong.

Björk sampled much of the birdsong used throughout *Utopia* from one of her favorite albums, David Toop's *Hekura* (1980). David Toop is a musician, professor, and author, whose discussion of Brian Eno's ambient music I addressed in Chapter Two. The bird calls that interested Björk were featured prominently on the 2015 re-release of the *Hekura* recordings of Yanomami shamanistic rituals in the Amazon (*Lost Shadows - In Defense of the Soul.*) Toop explains the importance of the bird calls in his ethnographic work: The original release was pretty much devoted to the Yanomami shamanistic stuff and their songs. But my ideas changed in relation to the material: I felt that these nocturnal recordings of bird and insect sounds were like a kind of framing, a context. Between the sounds of bioacoustic and environmental sounds and the Yanomami's belief systems and the shamanistic imagery and so on, it is very important to include more.¹⁶

As David Dunn suggests, "The sounds of living things are not just a resource for manipulation; they are evidence of mind in nature and are patterns of communication with which we share a common bond and meaning."¹⁷ In this way these recorded bird calls may serve to ground the fantastical world of *Utopia*, reminding the listener of the real places Björk is intent on preserving.

In his first chapter of *Sinister Resonance*, Toop chronicles literary and musical uses of birdsong as inspiration for either magical evocation or musical composition. He reminds us that birds and insects do not inhabit the same spatial or temporal realities as humans, which contributes to the otherworldly quality that their songs can embody. "These sounds, a seduction, a siren song, drew the receptive listener toward an experience of bliss: erotic reverie or a mystical union with nature."¹⁸ And yet, such sounds have a very present, grounding quality. They come from our immediate present and remind us of the life that surrounds us, foreign though it may be. Toop refers to such compositions as "sleep music" or music which renders humans powerless in its presence.¹⁹ He goes on to describe music as "ariel," as something carried on the wind from an unknown source. This begs a comparison with Anihid Kassabian's discussion of ubiquitous music which I presented in Chapter Two in which the continuous presence of music in public spaces gently filters into the collective consciousness. It is a much more immediate experience of sound than the distant environmental noises Toop describes, but probably just as mysterious in origin. We rarely question the actual, physical source of the music, or its creators, when we shop for groceries, and it seems to have an equally lulling effect.

How, then, might Björk's use of Toop's recordings of birdsong function in *Utopia*? Might these disembodied sounds evoke a place, or a no-place as it were? She and producer Arca discussed their musical role. "We wanted the synths to sound like flutes and the flutes to sound like birds and the birds to sound like synths," Björk explains. "Nothing holding it down."²⁰ Her description recalls Morton's definition of "ecomimesis," a rhetorical device used to evoke place rather than subject. "Ecomimesis involves a poetics of ambience," he explains.²¹ Coming from the Latin *ambo*, meaning "on both sides," ambience denotes a surrounding space or world. The breathy wooden flutes and avian vocalization provide a textural scaffolding upon which Björk's world may begin to take form, calling to mind another of Morton's descriptions of auditory phenomena. "Phatic statements," he writes, "make us aware of the actual air between us."22 While most of the music throughout Utopia would not be considered ambient, moments of pure sound punctuated by occasional silences call attention to the atmosphere not only within the sonic spaces of the album, but also of the listener's immediate environment. In this way, Björk uses sound as a method of world creation while at the same time referencing the very real environment she hopes to sustain.

In the third volume of his *Principle of Hope*, Ernst Bloch identifies the invention of the panpipe as the origin of music, describing it as "a sounding wishful dream."²³ This description would fit nicely in the liner notes for *Utopia*. Bloch found mystery even in music's silences, in that which had not yet been uttered. The lead single from the album titled "The Gate" begins with sixty seconds of pure phonetic vocalizations. Michel De Certeau describes such glossolalia as a vocal utopia, pointing to the space in which the possibility of speech exists, but where it has not yet occurred. This is strongly reminiscent of the space that the early abstractionists such as Kandinsky believed to exist, out of which emerged color and form. In such instances, utopia is to be understood as pure potentiality. The glossolalia with which Björk begins "The Gate" "is not even a line: it is only an 'air' of beginning."²⁴ It is thus that bird calls, airy flutes, and abstract vocalizations offer the possibility of a new place, even in the digital realm of *Utopia*.

The video for "The Gate" begins with a glimpse of a strange floating island, and then moves into the utter stillness and darkness of a world not-yet created. Pinks and purples color the hazy atmosphere of dim sunlight which bathes a field of swaying grasses. Björk plays a flute with her back to the viewer, seemingly addressing, or possibly summoning, the strange hovering beings that seem to pulsate or rotate acrobatically with the music. They could be described as botanical sea creatures of sorts, with numerous appendages resembling fins or curious limbs. The pastel ensemble fades into the background as Björk slowly turns toward the viewer to reveal her face, gazing mysteriously through a fleshy botanical mask that is highly suggestive of female genitalia.

At this point the video abruptly plunges into silence. Set against a stark black screen, a shimmering digitally animated kaleidoscope of purples and reds transfixes the viewer's attention, the stillness broken only by an occasional reverberating electronic note, suggesting the vastness of the space into which the viewer has been transported. The setting is reminiscent of the blackness of a computer screen upon having been reset, just before the cursor appears. The glassy brilliance of the shape-shifting form in the center of the screen has a hypnotic effect, which, when coupled with the periodic moments of silence, pulls the sound of one's breath into sharp focus. Rippling prismatic mists create an aurora effect against the blackness within which the mysterious object fragments and pulsates.

As the crystalline a cappella of Björk's opening lyrics resonates in the darkness, the camera gradually pulls back to reveal Björk's hands on either side of the glistening object, the core of which now burns white hot. "My healed chest wound transformed into a gate," she sings.²⁵ The radiant ball of light has replaced, it would seem, the gash depicted in Björk's chest throughout the entirety of her previous Vulnicura album.²⁶ "Where I receive love from; where I give love from," she continues. Björk is now revealed to the viewer. She wears a winged dress shimmering as brilliantly as the "gate" at her core, and appearing as sonorous as the air around her. "And I care for you," she repeats throughout much of the remaining four minutes of the song, tossing her glowing orb into the chest cavity of a dazzling humanoid creature next to her. While both creatures have wings, Björk in particular resembles some kind of insect/botanical hybrid, as though a moth were emerging from a flower. The pair commence something like a courtship dance, exchanging the chest orb in increasingly dizzying and erotically tinged exchanges. Throughout, the music seems to fold in on itself and overlap; layers of sound swirl and climax. The video ends with the pair kneeling in front of each other as quiet vocals repeat unrecognizable phonetic phrases, softly coaxing the viewer back to reality.

Kandinsky saw his development of artistic abstraction as a search for the pure expression that exists prior to representation, the slippery region where thoughts have not yet assumed coherent forms, where linguistic conceptions become pictorial, or where a piece of music more clearly articulates a mood than might be possible through literary or visual means. Björk seems to have conjured such a space here. The electric silences that characterize "The Gate" resonate with anticipation in the blackness of a digital no-place, suggesting a site of formless potential prior to creation. Björk's use of muted bird calls and wooden flutes seem to emphasize the air through which the sounds pass, suggesting presence even in the absence of material objects. The utopia Björk presents here through the union of nature and technology is still in the process of becoming.

Laura Frahm's article contemplating the role of image in music videos, "Liquid Cosmos: Movement and Mediality in Music Videos," may as well have been written as a description of Björk's *Utopia* videos. "Music videos generate a liquid cosmos out of light reflections, fluid movements, and transformations of colors: they create visionary worlds that expand and transcend our conceptions of temporality and spatiality," she writes.²⁷ While music is itself capable of inspiring images in the minds of the listener, when an artist supplies the images via a music video, this provides an object of contemplation to guide the audience in its focus. Frahm identifies the transformative quality of music video as something unique to the medium, possibly due to the centrality of music to the image. The "Hunter" video described in Chapter Three, for example, makes good use of the solitary image as a focal point. Likewise, her video for "Blissing Me," the second single from *Utopia*, consists only of Björk dancing in a powder blue tulle garment against the dreamy pastel blankness of the formless space around her. With little else upon which to focus, the musical and lyrical content assume a greater clarity than they might in the context of a department store, for example. For Frahm, movement is the element that distinguishes the music video from other art forms. "The idea of movement – be it rhythmic, animated, or abstract – is deeply inherent to the concept of the music video."²⁸ She sees these movements as actually constituting moving spaces of their own. Music video as a format thus has the potential to transcend time and space, "creating new worlds of colors and abstractions, but most importantly: [visualizing] the very process of its own transformation."²⁹ Within the digitally animated voids of the *Utopia* video collection, Björk engages in world creation, an urgent necessity in this age of mass extinction and ecosystem collapse.

Dubbed "Cornucopia," the live performance of *Utopia* features a recorded plea from Swedish environmental activist Greta Thunberg, an all-female flute septet, stunning 360-degree digital projections, and a custom reverberation chamber which Björk refers to as a matriarchal dome. As with the *Biophilia* tour, Björk sought out or commissioned a number of unique instruments, many of which double as stage scenery or facilitate choreography during the performance. For example, the circle flute requires four musicians playing simultaneously, each positioned at equidistant points from one another. The instrument is, as is implied by its name, comprised of four curved C-flutes conjoined to form a circle. During the live performance, Björk sometimes stands within the circle to sing. Perhaps the most intriguing instrument is a disk-shaped wooden electro-acoustic segulharpa. Created by Icelandic composer and sound artist Úlfur Hansson, the instrument resembles a round wooden shield embellished only with a delicate linear design. This is what the audience sees. Its inner workings are much more remarkable:

Hidden within are 25 steel strings, each one interacting with powerful magnetic fields created by internal analog circuitry. Touch sensors are embedded into the

grain of the wood, and as the player touches the surface, wonderfully complex interactions are created inside... The vibrations are carried through the circular harp, so that the strings have influence over each other, creating a kind of ecosystem where no two chords will share the exact same sound.³⁰

Just as the instruments created for *Biophilia* served to reinforce Björk's message, those employed during the Cornucopia tour demonstrate her vision of a world unified through sound. But is musical performance, even when presented as such, necessarily utopian in function?

In his "The Philosophy of Music," Bloch describes the mechanisms of sound in nature as having a transcendent effect upon the listener. "We hear only ourselves," he begins, "for we gradually become blind to the outside world."³¹ Intriguingly, Bloch entangles sight and sound in this way, as though inattention to one precludes the function of the other. "But we walk in the forest and feel we are or might be what the forest is dreaming," he continues. "We do not possess it... moss, curious flowers, roots, trunks and streaks of light... because we are it itself and are standing too close to it."32 His words recall Thoreau's or Björk's celebration of the minutiae of the material world, redirecting our attention to that which so readily disappears before our eyes. "But the sound burns out of us, the *heard* note, not the sound itself or its forms. This, however, shows us our path without alien means, our historically inward path, as a fire in which not the vibrating air but we ourselves begin to quiver and cast off our cloaks."33 This passage in particular is reminiscent of Thoreau's ecstatic response to the song of frogs in a pond which I discussed in Chapter One. It also suggests nature as a primary source of music, though Bloch was not himself a naturalist. In fact, this passage suggests a phenomenological interpretation of sound in which the human listener assumes control

over external auditory stimuli. Thus, for Bloch, the world as it exists now and as it might become could be most profoundly revealed through artistic means, with music having a uniquely procreative quality in this regard.

In his essay titled "The Conscious and Known Activity within the Not-Yet-Conscious, the Utopian Function," Bloch recounts various attacks pitting truth against beauty that have been leveled against art throughout history. Some criticize art as obscuring the truth of the thing, shrouding its subjects in a golden mist of sorts. Others criticize it as an affront to God.³⁴ Bloch suggests that aesthetic approaches to knowledge reveal the futural qualities of the thing in question without resorting to religious prognostication. For Bloch, only music is capable of this "anticipatory illumination," and only music has the explosive effect he describes.³⁵ Since imagination takes place in an unfinished world, it is this unfinished-ness that allows for - indeed, necessitates utopian longing in the first place. For Bloch, "music's alleged abstraction, its nonconceptual and nonverbal character, and its direct route to human emotion underlie its capacity to express what is not (yet) utterable."36 Bloch suggests, "Ideas of the imagination are not of the kind that merely combine the already existing facts in a random manner... but carry on the existing facts toward their future."37 He continues, "The real realism is at home in those qualities of reality that are utopian themselves; i.e., they contain future."38

While the aestheticization of the material world is an important function of art, permitting imagination to become knowledge, the key to understanding the utopian function of music lies in its moments of anticipation. Cognitive neuroscientist Aniruddh Patel explains that something in the nature of the human brain creates expectations about the progression of sound. "When a musical melody is stopped at a point at which it sounds incomplete," he writes, "listeners typically have expectations for what the next note will be, even if the melody is unfamiliar."³⁹ Bloch additionally points to pauses or silences in a musical arrangement as harkening the future through the anticipation of the next moment. The act of anticipation can have ethical implications, as Vincanne Adams explains. "Anticipation, as a lived condition or orientation, gives speculation the authority to act in the present."⁴⁰ Thus, anticipation creates the moral necessity for action.

"The utopian function," Bloch writes, "as the comprehended activity of expectation, of a hopeful presentiment, keeps the alliance with everything dawning in the world... The utopian function is the unimpaired reason of a militant optimism."⁴¹ Herein lies Bloch's concept of *docta spes* or educated hope. The essence of utopian imagination is not fantastical, but rather is learned through real world experiences. Peter Thompson explains the concept of *docta spes* as "the means by which we reach beyond pessimistic nihilism to give purpose to an existence which is objectively purposeless."⁴² Both *Biophilia* and *Utopia* can be experienced in this way. In *Biophilia*, the aestheticized material of the natural world creates realms of infinite possibility, while the digital spaces of *Utopia* offer the hope of their continued flourishing in the future.⁴³ Thus, both projects embody Bloch's definition of utopia as a means of envisioning, and then summoning into being, that which is yet to come.

According to Bloch, "This world is not that which has already become but that which circulates within it... The relation to this world makes music seismographic, it reflects cracks under the social surface, expresses wishes for change, bids us to hope."⁴⁴ Such ruptures are indeed what Björk has attempted to trigger through her *Biophilia* and *Utopia* projects by creating imaginative spaces in which natural forces are celebrated and made magical, and engaging her audience through a variety of sensory experiences presented in multiple media formats. Thus, her work functions as a method of reigniting the collective imagination of the public, and inspiring her audience to make real the new worlds they imagine. Björk's focus on the material aspects of the natural world recalls Thoreau's celebration of the same. *Biophilia* prompts its audience, be they music critics or grade school students, to marvel at the stuff of which they are made and the vibrant ecosystem within which they exist. The world she offers is nothing more than the world as it currently exists. *Biophilia* simply encourages her audience to experience it with fresh senses. *Utopia* takes a considerably less materialistic approach to its subject matter. Beginning with a tabula rasa of sorts, Björk envisions an entirely new digital world of airy, pastel sound and fantastical creatures. With climate catastrophe immanent, the album hopes to rekindle the collective imagination so that the public might be able to envision, and then to demand, the kind of radical change that needs to happen.

Notes to Conclusion

¹ Quoted in Theodor Adorno and Ernst Bloch, "Something's Missing: A Discussion between Ernst Bloch and Theodor W. Adorno on the Contradictions of Utopian Longing," in *The Utopian Function of Art and Literature: Selected Essays* (Cambridge, Mass.: MIT Press, 1988), 17.

² Timothy Morton, *Hyperobjects: Philosophy and Ecology after the End of the World* (Minneapolis: University of Minnesota Press, 2013), 181-182.

³ Fredric Jameson, "The Politics of Utopia," in *New Left Review* 25 (Jan. – Feb. 2004), 35-54.

⁴ Jameson, 44.

⁵ Jameson, 46.

⁶ Quoted in Theodor Adorno and Ernst Bloch, "Something's Missing: A Discussion between Ernst Bloch and Theodor W. Adorno on the Contradictions of Utopian Longing," in *The Utopian Function of Art and Literature: Selected Essays* (Cambridge, Mass.: MIT Press, 1988),12.

⁷ Ernst Bloch, "The Conscious and Known Activity within the Not-Yet-Conscious, the Utopian Function," in *The Utopian Function of Art and Literature, Selected Essays* (Cambridge: MIT Press, 1988), 146.

⁸ Ruth Levitas, "Singing Summons the Existence of the Fountain," in Peter Thompson and Slavoj Žižek, eds., *The Privatization of Hope: Ernst Bloch and the Future of Utopia*, (Durham: Duke University Press, 2013), 223.

⁹ Björk, Björk's Cornucopia, tour book (Wellhart/One Little Indian, 2019), 5.

¹⁰ Bloch, "The Conscious and Known Activity," 105.

¹¹ Bloch, "The Conscious and Known Activity," 106.

¹² Bloch, "The Conscious and Known Activity," 119.

¹³ Selim Bulut, "Björk: Utopia Now," Dazed, September 5, 2017.

https://www.dazeddigital.com/music/article/37206/1/Björk-new-album-interview. ¹⁴ The extent to which such extensive touring may be at odds with the environmental aims of this project is not clear. Factors such as the carbon footprint associated with tour-related travel and shipping, as well as the packaging of merchandise, are likely to detract from the impact of Björk's pro-environment messages.

¹⁵ Fans were able to purchase *Utopia* with a variety of cryptocurrencies, and the album itself came with 100 Audiocoins which could be deposited into an e-wallet.

¹⁶ Daniel Montesinos-Donaghy, "How David Toop Wrote One of Björk's Favorite Albums," FACT Magazine, November 24, 2017.

http://www.factmag.com/2017/11/24/david-toop-interview-bjork-utopia/.

¹⁷ David Dunn, David, "Nature, Sound Art, and the Sacred," in *The Book of Music and Nature an Anthology of Sounds, Words, Thoughts*, ed. David Rothenberg, 2nd ed. (Middletown: Weslevan University Press, 2009), 98.

¹⁸ David Toop, *Sinister Resonance: The Mediumship of the Listener* (New York: Continuum, 2010), 11. Björk, *Biophilia Live*, dir. Nick Fenton and Peter Strickland. One Little Indian, 2014, Blu-ray.

¹⁹ Toop, Sinister Resonance, 22.

²⁰ Melana Ryzik, "How Björk Brought Her Sci-Fi, Feminist Fairy Tale to Life," *The New York Times*, May 8, 2019. https://www.nytimes.com/2019/05/08/arts/music/bjork-cornucopia.html.

²¹ Timothy Morton, *Ecology without Nature: Rethinking Environmental Aesthetics* (Cambridge: Harvard University Press, 2007), 33.

²² Morton, *Ecology without Nature*, 37.

²³ Levitas, 221.

²⁴ Michel De Certeau, "Vocal Utopias: Glossolalias" in *Representations*, no. 56 (1996), 38.

²⁵ Björk, *Utopia*, London: One Little Indian, 2017.

²⁶ I mentioned this "wound" in my discussion of the "Stonemilker" video in Chapter Four.

²⁷ Laura Frahm, "Liquid Cosmos: Movement and Mediality in Music Videos," in Henry Keazor and Thorsten Wübbena, eds, *Rewind, Play, Fast Forward: The Past, Present and Future of the Music Video*, Cultural and Media Studies (Bielfield: Transcript, 2010), 155.

²⁸ Frahm, 159.

²⁹ Frahm, 161.

³⁰ Björk, *Björk's Cornucopia*, 90.

³¹ Ernst Bloch, "The Philosophy of Music," in *Essays on the Philosophy of Music* (Cambridge: Cambridge University Press, 1985), 1.

³² Bloch, "The Philosophy of Music," 1.

³³ Bloch, "The Philosophy of Music," 1.

³⁴ Bloch, "The Conscious and Known Activity, 141-145.

³⁵ Bloch, "The Conscious and Known Activity, 146. Emphasis is original.

³⁶ Levitas, 220. For Bloch, only nonverbal music could be truly utopian.

³⁷ Bloch, "The Conscious and Known Activity," 105.

³⁸ Bloch, "The Conscious and Known Activity, 106. This passage recalls Timothy Morton's discussion of hyperobjects: "If time is not a neutral container in which objects float, but is instead an emission of objects themselves, it is at least theoretically more plausible that an object could exert a backward causality on other entities, than if objects inhabit a time container that slopes in one particular direction. This wake of causality would appear to flow backward 'into' the present. The strange strangeness of things is futural." Morton, *Hyperobjects*, 67.

³⁹ Aniruddh D. Patel, *Music, Language, and the Brain* (Oxford; New York: Oxford University Press, 2008), 196.

⁴⁰ Vincanne Adams, Michelle Murphy, and Adele E Clarke, "Anticipation:

Technoscience, Life, Affect, Temporality," in *Subjectivity* 28, no. 1 (September 1, 2009): 249.

⁴¹ Bloch, "The Conscious and Known Activity," 107.

⁴² Thompson, 7.

⁴³ Peter Thompson explains that Bloch saw matter as both present reality and its possible future forms. He quotes Bloch from the Tubingen lectures: "Matter can be defined in the following way: According to Aristotle's definition it is at one and the same time that which is possible, in other words that which can appear in history as determined by historical-materialist conditions, as well as that which may become possible, or the correlate of the objectively real possibility of that which is. Matter is the substrata of possibility within the dialectical process." Thompson, "Introduction," 4. ⁴⁴ Levitas, 223.

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