"QUIETLY PRESENT IN THE LAND AND THE WIND": MARIA SCHNEIDER'S MUSICAL LAND ETHIC

by

Joel Oliver-Cormier

Submitted in partial fulfilment of the requirements
for the degree of Master of Arts

at

Dalhousie University
Halifax, Nova Scotia
March 2018

© Copyright by Joel Oliver-Cormier, 2018

Table of Contents

List of Figures iii
Abstract iv
Acknowledgments v
Chapter 1 – Introduction 1
Chapter 2 – "The Thompson Fields" 15
Chapter 3 – "Nimbus" 32
Chapter 4 – "Cerulean Skies" 53
Chapter 5 – Conclusion 79
Bibliography 84

List of Figures

Example 1 – Schneider, "The Thompson Fields" lead sheet (reduction from score), mm. 1–15. 22
Example 2 – Schneider, "The Thompson Fields", Kimbrough's solo excerpt (3:20–3:38), Harmonic reduction, transcription by the author....26
Example 3 – Schneider, "The Thompson Fields", Guitar solo vamp (reduction – 7:01), mm. 72–77. 30
Example 4 – Schneider, "Nimbus", Chorale orchestration (0:57), mm. 17–27....42
Example 5 – Schneider, "Nimbus", score excerpt (1:49), mm. 32–38....45
Example 6 – Schneider, "Nimbus", Solo backgrounds (4:55), mm. 77–84. 47
Example 7 – The Bird Motive....50
Example 8 – Schneider, "Cerulean Skies", Main piano figure (1:45), mm. 1-8. 60
Example 9 – Schneider, "Cerulean Skies", piano figure behind accordion solo (8:51), mm. 146–161. 68
Example 10 – Schneider, "Cerulean Skies", Chorale and bird response (Reduction – 12:20), 184-203. 71
Example 11 – Schneider, "Cerulean Skies", Wilson's bird-like soprano saxophone line (14:55), mm. 227–230. 73

Figure 1 – Cover of *The Thompson Fields* (ArtistShare, 2015)....1

ABSTRACT

Despite the common association of jazz with urban environments, contemporary large-ensemble jazz composer Maria Schneider has written numerous programmatic pieces in which she and her ensemble celebrate and represent wildlife and exurban places/spaces. In this thesis, I analyse three of Schneider's pieces—"The Thompson Fields", "Nimbus", and "Cerulean Skies"—through an ecocritical lens, exploring the compositional and performance techniques used to represent these subjects. I argue, moreover, that these pieces act as a musicalization of early twentieth-century conservationist Aldo Leopold's 'land ethic', which advocates for an expansion of the boundaries of our community-concept to include "soils, waters, plants, and animals, or collectively: the land".

ACKNOWLEDGMENTS

I would like to thank my supervisor Dr. Steven Baur and my second reader Dr. Estelle Joubert for their guidance throughout the course of this continually-changing project, without which I'd likely still be writing the first chapter.

Many thanks to my parents and brother for endless encouragement, to my in-laws for being a second family, and to the students and faculty in the musicology program at the Fountain School of Performing Arts for continually inspiring me to be a better and more thoughtful scholar.

However, no one deserves more thanks than my wife Christina, whose love, support, and patience apparently knows no bounds. No one should ever have to endure as many long, rambling, and digressive explanations of my work and studies as I have subjected her to—though the upshot of this is that she can give a far better 'elevator pitch' for this thesis than I ever could.

Chapter 1 – Introduction

If you were to judge solely by the cover of the Maria Schneider Orchestra's 2015 album *The Thompson Fields* (Figure 1), you could certainly be forgiven for assuming that her music would be full of twangy guitars and lyrics about heartbreak sung with a Southern drawl. It is the very picture of American rurality. Instead, you hear saxophones, trumpets, clarinets, trombones, and no lyrics at all. Based in New York City, Schneider is a prominent and highly influential jazz composer, bandleader, and conductor, and her usual environment of high-rises, dense traffic, and dimly-lit jazz clubs could not be farther removed from the image just described. *The Thompson Fields* is a reflection of the environment of her childhood: the rural "city" (population 4,626 in 2010) of Windom, Minnesota.

While she has yet to achieve the household-mononym status of Bird, Dizzy, Miles, Duke (Charlie Parker, Gillespie, Davis, and Ellington, respectively), and many others,

Figure 1 – Cover of *The Thompson Fields* (ArtistShare, 2015).

Schneider is well-regarded within jazz communities. In 2005, the Jazz Journalists Association awarded her both the Composer and Arranger of the Year awards, and her ensemble received the Large Ensemble of the Year award.[1] She and her ensemble have also won the prestigious *DownBeat Magazine* critics/readers polls numerous times throughout her career.[2] She has received numerous accolades from beyond the jazz world as well. Each of her most recent four recordings has netted her a Grammy award. She also caught the attention of David Bowie, who hired her and her orchestra to arrange and perform his single "Sue (or in a season of crime)", for which she also won a Grammy.

Though originally trained as a pianist, nowadays Schneider abstains from performing on an instrument, instead devoting herself mainly to composition, arranging, and conducting. Her orchestra is now her primary instrument. The ensemble is an 18-piece 'big band' in the standard configuration—5 saxophones, each of which doubles on at least one other reed/woodwind instrument; four trumpets, all doubling on flugelhorn; four trombones; and a rhythm section consisting of piano, bass, electric guitar, and drums, as well as the very non-standard addition of an accordion, which has become a defining characteristic of her sound. Originally, the ensemble was billed as the Maria Schneider Jazz Orchestra, following a convention intended to convey a certain seriousness to the music, distinguishing it from the dance band connotations of the term big band while keeping its instrumentation. But she has since dropped the word "jazz" from the name, a shift that coincided with her music's increased tendency toward more 'symphonic' textures and sonorities. Over time, her music has shed many of its identifiably 'jazzy' qualities—most of

[1] "Jazz Journalists Association Jazz Awards 2005", accessed January 12, 2018, http://www.jazzhouse.org/2005awards.html.
[2] "Biography," on Maria Schneider's official website, accessed February 19, 2018, http://www.mariaschneider.com/about.aspx.

her recent work does not swing in the traditional sense, and her harmonic vocabulary tends to eschew the dense, extended harmonies commonly associated with jazz. Instead, she embraces more linear textures and an approach to harmony that marries tonal and modal idioms. Her music has become, in a word, more "natural". This naturalness, which not coincidentally became prominent in her music alongside the increased prominence of overt ecological themes, is what I want to explore.

In this thesis, I analyse three of Schneider's recent pieces (written or recorded since 2007): "The Thompson Fields" and "Nimbus", both from the Maria Schneider Orchestra's 2015 recording *The Thompson Fields*, and "Cerulean Skies" from the 2007 recording *Sky Blue*. I perform my analysis through an ecomusicological lens. Schneider has long been open about her environmentalism and her views are often expressed in her music. My aim, then, is to examine the ways in which she expresses these views through her work, particularly through her un-texted pieces. My focus here is solely on pieces written for and performed by her primary ensemble, the Maria Schneider Orchestra. Though the music is undoubtedly born of Schneider's own personal artistic vision, the members of her orchestra can in no way be considered as anything less than her collaborators. And while I refer to this music as Schneider's throughout, it must be understood that, even beyond their improvised solos, the performers have considerable influence on the overall direction and sound of the music. My exclusive focus on her work with her own orchestra means that I will not be discussing in depth her collaboration with soprano Dawn Upshaw, *Winter Morning Walks*, which features two song cycles for soprano and chamber orchestra. The titular cycle in particular, based on poems by former US poet laureate Ted Kooser, places heavy emphasis on environmental themes. But in treating only her instrumental music, I aim to shed light upon what exactly Schneider is able to convey through sound alone.

A LAND ETHIC

The history—or, more accurately, the mythology—of jazz is largely urban. As it tends to be written, its events are centred as much around the cities in which they occur as around the individual figures involved in them. The story goes thus: it was born then raised in New Orleans and Chicago, before coming of age in New York City. When its practitioners were born outside these sites, they would have to pack up and move to them in order to make a name for themselves. Even to the present day, New York City is treated as the world headquarters of jazz, and at the very least it acts as a barometer for the state and popular trends of mainstream jazz. Needless to say, while its output is influential well beyond the city's limits, it cannot and does not represent the whole of the music. Each jazz community develops its own particular dialect that, in some way or another, is born of its own particular place. Schneider herself moved from Windom to New York state, completing her Master's degree at the Eastman School of Music in 1985, before finally settling permanently in New York City. But Schneider's music has always kept at least one foot in Windom.

Most interviews with the composer contain at least some mention of her childhood during the 1960s and 70s in Windom, a place and time which she often describes as "surreal".[3] This surreality comes from a combination of often bleak and storm-prone weather, flat and open landscape, and sparse population, all set against a backdrop of Cold War anxiety (the Schneider family's bomb shelter is the subject of one movement of her three-movement suite *Scenes from Childhood*). Other aspects of her surreal early environment come from her often unusual interactions with local animals, particularly with birds. These encounters will be discussed in more detail in Chapter Four, but suffice to say here that the

[3] Ben Ratliff, *The Jazz Ear: Conversations over Music* (New York: Times Books, 2008), 84.; Maria Schneider, Liner notes for *The Thompson Fields* by the Maria Schneider Orchestra, ArtistShare, 2015, digital audio.; Paige Tutt, "Maria Schneider: Music is about Life," *JAZZed* 11, no. 3 (2016): 12.

inclusion of wild birds in the Schneider family's domestic life fostered in the composer a lifelong feeling of kinship with the animals. Growing up in a rural and largely agricultural community (though it seems that her family was not itself involved in agriculture), she also developed a relationship with the natural (or at least exurban) world. This of course is not to suggest that all farmers and other rural dwellers have some inherent connection to nature—quite the contrary; agricultural workers and their practices are frequently quite harmful to the ecosystem. Nevertheless, it was in this environment that she received the first parts of her ecological training, and it had as much to do with the human members of this community as with the environment itself.

Schneider's environmental education began early. In an interview with jazz education magazine *JAZZed*, she tells of an influential nursery school teacher who, on one especially memorable occasion, brought the children outside to the decidedly uninteresting environment of the parking lot and set down circles of string in the dirt in front of each child. The teacher then asked the children to closely observe anything that happened within that circle. "You would see an ant carrying something", Schneider says, "or everybody would find something interesting in that little world of nothing".[4] This anecdote shows a recognition of a fact that will be seen time and time again throughout this thesis: that the natural world does not end where the human world begins. Her education continued via the influence of the Thompson family, which I will be explore in depth in the next chapter. The family's ecological philosophy, and especially that of Tony Thompson, resonates clearly in Schneider's music, and I explore this assertion in depth in Chapter Two.

Schneider has been exploring environmental themes in her music in one way or another since at least her very first record, 1994's *Evanescence*, which featured a piece entitled

[4] Tutt, "Music is about life", 13.

"Green Piece", a pun on the name of the environmentalist organization Greenpeace. Though it can be heard as an attempt to grow a complex musical structure from the seeds of a very simple four-note cell, "Green Piece" reads as quite abstract and lacks the overtly programmatic approach that characterises her more recent work. On her most recent recordings, *The Thompson Fields* (2015) and *Winter Morning Walks* (2013), ecological and environmentalist themes come front and centre. Not content to let odes to the green side of Windom speak for themselves, lest they be taken merely as sentimental, her liner notes to *The Thompson Fields* make several impassioned pleas on behalf of the natural world.

Over much of the course of this project, my intent was simply to explore the ways in which Schneider and her band represented birds and the environment through music. I wanted to investigate what ideas about and attitudes toward these subjects had been and could be expressed through this music. This is still very much the case; but as this project progressed, certain themes began to emerge, and it soon became evident that Schneider's approach to discussing and musicalizing the environment suggests that she has, at some level, internalised what is known as a *land ethic*, a concept that was first proposed by early twentieth-century American conservationist and proto-environmentalist Aldo Leopold. Although I have not yet read an interview in which she mentions the land ethic specifically, there is little doubt that she is quite familiar with the concept—she directs listeners to the Aldo Leopold Foundation's website in the *Thompson Fields* liner notes,[5] and she quotes him directly in another document, discussed in Chapter Four.

As the last of the four essays that close his posthumously published *A Sand County Almanac* (1949), Leopold's "The Land Ethic" serves as both summary and manifesto. He

[5] The Foundation's website (www.aldoleopold.org) features a link asking, "What is a Land Ethic?" prominently on its homepage.

begins his essay with a brief discussion of what he refers to as "the Ethical Sequence", which describes the development of ethics as a gradual expanding of the boundaries of community to include as members those who were previously thought to be outside the community. This presents a somewhat overly optimistic view of ethical progress as always improving and moving forward, but the radical position of his ethic demands an optimistic outlook. The core of Leopold's ethic can best be summarised in his own words as follows:

> The land ethic simply enlarges the boundaries of the community to soils, waters, plants and animals, or collectively: the land . . . [It] changes the role of *Homo sapiens* from conqueror of the land-community to plain member and citizen of it. It implies respect for his fellow-members and also respect for the community as such.[6]

Leopold advocates for nothing less than a complete paradigmatic shift. Numerous environmental critics have commented upon the ways in which a sense of mastery over nature is ingrained in American culture, which, even when it celebrates nature, seeks to subordinate and tame it.[7] Leopold acknowledges this in the essay's opening paragraphs by drawing a parallel between Odysseus' treatment of slave girls in the Homeric epic and treatment of the Land in the Modern age—the slaves, like the land, were property without rights and free to be used as the owner wished with no repercussions. His use of rhetorical language that emphasises community relations, respect, rights, and citizenship demands that we not only behave in more ecologically-conscious ways, but that we treat our environments with as much care and respect as we would any other member of our social circle. He refers to this newly expanded community as the *biotic community*.

---

[6] Leopold, Aldo. A Sand County Almanac, And Sketches Here and There. 204.

[7] See Marx, *The Machine in the Garden: Technology and the Pastoral Ideal in America* (1964) and Buell, *The Environmental Imagination: Thoreau, Nature Writing, and the Formation of American Culture* (1995).

The land ethic, as it is formulated in Leopold's essay, should not be taken as dogma. It is true, as other writers (such as Garrard) argue, that Leopold's conception of a self-sustaining and -balancing ecosystem (*sans* human intervention, of course) is incongruous with our present day understanding of ecology, and that his (on the surface) biocentric ethic maintains an anthropocentric mastery over nature.[8] It is much more fruitful, however, to take it as a shift in attitude, toward one in which humans see the land not as property or as something to be dominated, and in which the value of the land and our treatment of it is not based upon financial benefits or liabilities. And Leopold's formulation of 'the land' is useful here as well because it resists being caught up in debates over what is and is not 'natural'. Whether a farm, for example, is indeed natural is beside the point; its organic and inorganic, human and non-human elements are all constituents of the biotic community.

Though Leopold's writings have been directly influential for Schneider, here I would like to set his own prescriptions for the ethic aside. It is important to note that, throughout his essay, Leopold refers to *a* land ethic, with the indefinite article, in addition to the definite '*the* land ethic'. This suggests that the more prescriptive elements of his ethic—of which he gives few—constitute only one potential formulation of it. The essay does not provide a list of moral dicta, rather it consists of a set of values that the author believed to be necessary for the establishment and upholding of such an ethic. As we shall see, the way that Schneider talks about both the environment and birds shows a belief in the core tenets of the land ethic, which is then reflected in the ways that she represents them in her music.

[8] Greg Garrard, *Ecocriticism*. 2nd ed. (London: New York: Routledge, 2012), 80-81.

PLACE

The community-concept at the heart of the land ethic leads us of course to the concept of 'place', which Lawrence Buell succinctly defines as "space that is bounded and marked as humanly meaningful through personal attachment, social relations, and physiographic distinctiveness".[9] In this brief definition, Buell highlights the complexity of the concept by linking together the individual, the community, and the physical environment. He further explains that placeness "is co-constituted environmentally, socially, and phenomenologically through acts of perception".[10] The land ethic fits well with Buell's definition. The biotic community is itself a kind of place, binding together the personal, social, and physiographic all at once into a single interconnected web. It is clear that, for Schneider, Windom is a place of incredible significance. Her descriptions of it are as concerned with its cast of colourful characters—her cosmopolitan piano teacher, the night watchman at her father's workplace who teaches crows to speak—as with its topographical features. These themes resonate throughout Schneider's environmentally focused work—"The Thompson Fields" reflects upon the connection between physical landscape, human social memory, and the effects that humans and the landscape have had on each other; "Nimbus" musicalizes the experience of being in a place and explores a facet of placeness not generally discussed in the literature, namely, the weather.

But place, placeness, and place-attachment/identification are perhaps among the most hotly-debated topics in ecocritical writing. This controversy stems from the innumerable ways in which these concepts may present themselves in the real world. While on the one hand, deep, personal identification with a place, often one's home, may lead one

---

[9] Lawrence Buell, *The Future of Environmental Criticism: Environmental Crisis and Literary Imagination* (Malden, MA: Blackwell, 2005), 145.
[10] Ibid.

to care deeply about its ecological health and to help foster a sense of community, it is just as likely, on the other hand, to breed exclusionary attitudes and to foster a belief in the 'purity' of one's own group. These, of course, are not at all mutually exclusive, as evidenced by the predominance of landscape in nationalist images and by the idea of the green Nazis, an ideology neatly encapsulated in the slogan "*Blut und Boden*" (blood and soil), a phrase given renewed significance at a well-publicised White Nationalist rally just last year in 2017. But environmental critics have suggested that in the cultural climate of the 21st century it is necessary to rethink the relationship between the local and the global and to expand our conceptions of what constitutes a place to include the entire planet. Buell, for instance, argues that in this still-young century "'place' becomes truly meaningful only when 'place' and 'planet' are understood as interdependent".[11] It is necessary in his view to acknowledge conceptions of place are elastic and that those of others may differ from, even as they intersect with, one's own.[12] Ursula K. Heise, building upon and critiquing ecocritical theories of the link between sense of place and environmentalism, argues that "environmentalism needs to foster an understanding of how a wide variety of both natural and cultural places and processes are connected and shape each other around the world, and how human impact affects and changes this connectedness".[13] Schneider explores these ideas, too, in "Cerulean Skies", which, in its narrative representation of avian migration, imagines a more global community that crosses bounds of not only countries and continents, but of species as well. Moreover, Brazilian music has had a profound influence on Schneider's work, so the

[11] Lawrence Buell, *Writing for an Endangered World: Literature, Culture, and Environment in the U.S. and Beyond* (Cambridge, Mass.: Harvard University Press, 2001), 77.
[12] Ibid, 77-8.
[13] Ursula K. Heise, *Sense of Place and Sense of Planet: The Environmental Imagination of the Global* (Oxford: New York: Oxford University Press, 2008), 21.

migratory birds travelling from South America, in addition to representing the actual animals, also represent a connection with her friends in that continent.

As I alluded to above, place remains central to the history/mythology of jazz. Even as a form whose development took place largely in the age of recording and mass dissemination, making it available to listeners around the globe, even as it was still being codified,[14] its association with a small number of American urban sites remains central to its mainstream image. But, in actuality, jazz has had, and continues to have, life beyond those borders. Schneider is far from the first musician to write a distinctly rural version of jazz. By focusing on the countrified jazz made by Keith Jarrett and Pat Metheny and released on the Munich-based ECM label in the 1970s, David Ake's chapter "Race, Place, and Nostalgia after the Counterculture"[15] discusses a trend in jazz of white musicians adopting an aesthetic that owed as much to folk and country music as it did to more distinctly 'black' styles.[16] This is a trend that continues to this day, and it is one in which Schneider is very much included. But her music cannot simply be called countrified jazz—it draws on a diverse array of generic influences including jazz, American and Brazilian folk styles, pop music, and Western art music to create a distinctive style that is at once both cosmopolitan and rooted in the prairie landscape of rural Minnesota.

OUTLINE OF THE CHAPTERS

In this thesis, I will conduct a musical analysis of three of Schneider's recent pieces—"The Thompson Fields" and "Nimbus", both from her 2015 album *The Thompson Fields*, and

---

[14] See Johnson, *The Jazz Diaspora* for an excellent discussion of this.

[15] David Ake, "Race, Place, and Nostalgia After the Counterculture: Keith Jarrett and Pat Metheny on ECM" in *Jazz Matters Sound, Place, and Time since Bebop* (Berkeley: University of California Press, 2010) 77-101.

[16] The question of whether this constitutes a white-washing of jazz (whether intentional or not) is an open one. The complexities of the question put it outside the scope of this thesis, but I suggest some avenues for further exploration of it in the concluding chapter.

"Cerulean Skies" from *Sky Blue* (2007)—to explore the ways in which Schneider and her orchestra engage with the natural world and with exurban environments. My work takes inspiration from the ecomusicological writings of Denise Von Glahn and Daniel M. Grimley, whose works likewise examine the relationships between landscape, the natural world, identity, and politics, and their influence on musical composition.[17]

Most studies of ecological meaning in instrumental music have taken up music from the Western art tradition, loaded as it is with firmly established ideas of what images or ideas certain sounds are meant to evoke. The hunting horn, for example, a staple of classic musical nature-writing, is not a viable interpretation in jazz, not only because it is an outmoded image, but also because the near ubiquity of horns in large jazz ensembles renders such interpretations impossible. Studying jazz ecocritically, and Schneider's work in particular, affords the opportunity to approach questions of musical representations anew.

Though I use the scores for these pieces as a useful guide, the primary subjects of my analysis are the recordings themselves. Moreover, it would be a mistake to take the scores to be the "definitive" versions of these pieces, as the conventions of jazz composition and performance make it impossible to see them as complete pieces—they are scripts for a performance. Even in jazz compositions as thoroughly scored as Schneider's are, improvising soloists are often given considerable latitude in the shaping of the performance. A notable instance of this occurs in "Nimbus" (discussed in Chapter Three), in which the performers had taken the music in an unanticipated direction during one live performance, which Schneider liked so much that it has since become a permanent part of the piece.

[17] Grimley's *Grieg: Music, Landscape and Norwegian Identity* and Von Glahn's *The Sounds of Place: Music and the American Cultural Landscape* and *Music and the Skillful Listener: American Women Compose the Natural World* have been particularly influential.

Furthermore, rhythm section parts, and drum parts in particular, are often sparsely notated, requiring the musicians to improvise their accompaniments.

In the following three chapters, I will analyse three of Schneider's instrumental pieces—one per chapter—in order to explore the ways in which she expresses her land ethic through her instrumental music. Each of these pieces deal in some way or another with both place and the biotic community. I begin in Chapter Two with "The Thompson Fields", which, through its musical representation of landscape, paints a picture of a reciprocal, mutually-constructive relationship between the land and its human inhabitants. The piece is about a specific place, and Schneider musicalizes the past's embeddedness in the landscape. Chapter Three explores the relationship between a place and its weather through an examination of "Nimbus". Leopold does not consider—whether deliberately or not—the air itself to be a part of the part of the biotic community or the land, but Schneider's recognition of its significance in place-making is worthy of discussion. Here I use the work of social anthropologist Tim Ingold as a framework with which to explore the piece's connection with Ingold's land ethic-esque concept of the 'weather-world'. Schneider has long been particularly open about her enthusiasm for birds, and in Chapter Four I examine her representations of birds in "Cerulean Skies". This piece presents a somewhat more straightforward narrative, in contrast with the atmospheric programmes of the other two pieces. It depicts a flock's migration from South America to their brief stop-over in Central Park, which serves as a meeting ground for Schneider and the birds before they continue their journey northward to their summer breeding-grounds. In the fifth and final chapter, I give a brief summary of the preceding analyses, offer some notes on important—though closely related—topics beyond the scope of this project, and reflect upon the significance of such analyses in the context of the current climate crisis.

With this thesis, I intend to add to the growing literature examining the relationship between music and the environment, and to open new avenues for analysis of a genre that has hitherto received little attention from environmental critics. Though Schneider is not yet well-known outside the often insular world of jazz, she is prominent and influential within it. That said, her profile is indeed growing beyond the bounds of her genre, and recent projects and the publicity surrounding them—*Winter Morning Walks*, her collaboration with Bowie—suggests that her influence will only spread over time.

Chapter 2 – "The Thompson Fields"

Of the eight tracks on the Maria Schneider Orchestra's 2015 album *The Thompson Fields*, five deal with topics directly related to Schneider's rural upbringing in Windom: "Walking by Flashlight",[18] "The Monarch and the Milkweed", "Home", "Nimbus", and the title track, the latter of which I discuss in detail in this chapter. The album comes with a 51-page booklet, which, in addition to Schneider's own notes on each piece, is richly illustrated with photographs from in and around Windom, drawings and paintings of local and exotic birds, and a nineteenth-century map of Southwest Minnesota. The cover photo (Figure 1) shows Schneider in a denim jacket, leaning on the hood of a rusty pickup truck, set against a background of a clear blue sky that, out of focus, smears into a lush green field. The photographs on the inside are roughly balanced between shots representing human-inhabited rural spaces—silos, dirt roads, cultivated fields—and ones representing the natural world—tall, unruly grasses; monarch butterflies, silhouettes of birds in flight. Clearly, we are meant to read an idealistic kind of bucolic 'harmony' between humanity and nature here. In the broadest sense, this is indeed what the record as a whole is about, but a closer inspection of the context reveals a more complex understanding of this relationship than one might expect.

Tony Thompson and His Fields

By giving both the album and one of its tracks the title of "The Thompson Fields",

[18] This is an instrumental rearrangement of a song from Schneider's *Winter Morning Walks*, with texts from former poet-laureate Ted Kooser's book of the same name. It was recorded as a collaboration with soprano Dawn Upshaw and released on an album, also titled *Winter Morning Walks* (2013).

Schneider invites us to consider what special significance that place might hold for her. The fields are, after all, a real place, just as Tony Thompson, their current owner, is a real person. The fields are part of Willow Lake Farms, located just outside of Windom. The farm has been in the Thompson family for five generations now, after current owner, and close friend of Schneider, Tony Thompson's great-great grandfather moved to Minnesota following the Civil War, seeking greater political and economic stability. Thompson is a highly-respected figure in his community—he has received the University of Minnesota's Siehl Prize for Excellence in Agriculture and a *Washington Post* article on Thompson's farming practices notes that "within his community, he is a leader and a sage". [19] Every two years, Thompson and Willow Lake Farms are host to the biennial Willow Lake Farm Agroecology Summit: a semi-formal event, open to the public free of charge, often featuring speakers from the University of Minnesota and other local experts and researchers of agriculture and ecology.

Thompson represents two seemingly contradictory positions: that of a staunch conservationist and that of a large-scale farmer. In their most reductive and simplistic forms, the former seeks the preservation of nature-for-its-own-sake, while the latter exploits the land for its resources to be sold for profit. For Thompson, however, these two positions do not have to be mutually exclusive. His greatest concern is with the minimization of fertilizer-laden runoff which, unless prevented, will make its way toward nearby Fish Lake where it will contaminate the water, leading to harmful effects on local flora and fauna. He has two primary techniques for the prevention of this, however: first, he utilizes a system known as "ridge-tilling", in which crops are planted on narrow, elevated ridges which allows for a more

[19] Jane Black, "Smarter Food: Does Big Farming Mean Bad Farming?" *The Washington Post*, August 27, 2013, https://www.washingtonpost.com/lifestyle/food/smarter-food-does-big-farming-mean-bad-farming/2013/08/26/fb1cbb94-0b7f-11e3-9941-6711ed662e71_story.html?utm_term=.adde4ebd864a. Much of the biographical information on Thompson used here comes from this article.

precise application of fertilizer (and therefore, a reduced amount), and requires less soil to be turned which keeps the greatest possible amount of carbon dioxide in the ground. The space between rows also serves as a trap for runoff. Secondly, he has cultivated a buffer of native prairie between his crops and the lake. This not only prevents runoff from reaching the lake, but also acts as a nature preserve, attracting birds and pollinating insects (Schneider's piece "The Monarch and the Milkweed," also from *The Thompson Fields*, celebrates this preserve and the butterflies that migrate through it yearly).

Through his use of these techniques, Thompson is responding directly to criticisms that Leopold levels at farmers in his "Land Ethic" essay. These criticisms arise in an example that Leopold uses to support his argument that then-current conservation education promoted economic self-interest over any actual ecological concerns and did nothing to substantially benefit the Land. He tells us that when, in the 1930s, Wisconsin faced especially high rates of topsoil loss due to runoff, the state offered farmers certain benefits if they would agree to implement a set of soil-loss preventing practices for five years. When the five years were up, however, most of the practices fell by the wayside. The result was that farmers responded in such a way that only their own soil would be preserved, because that was more economically beneficial to them than it would have been to take measures that would benefit the entire biotic community. He writes: "We asked the farmer to do what he conveniently could to save his soil, and he has done just that, and only that".[20] Thompson's ridge-tilling and cultivation of native prairie is an effort to step beyond self-interest and to preserve the health and quality of his own soil as well as the health and quality of the nearby lake. Moreover, the benefits of his cultivation of native prairie on wildlife show an understanding of the interrelation between soil, water, and animals, and a recognition that the health of one

[20] Leopold, 209.

part of the biotic community affects the health of the community as a whole.

There is a clear link between Thompson, his fields, and Schneider's ecological awareness. From what can be gathered from Schneider's writings, Thompson seems to have played a significant role in the development of her ecological consciousness.[21] In a write-up about the piece that would become "Cerulean Skies" (discussed in chapter 4), and which pre-dates "The Thompson Fields", she credits Thompson with introducing her to Leopold's work.[22] In her notes for her piece "The Monarch and the Milkweed", she describes how Thompson's native prairie plays an important role in the continued survival of many species that depend on such a habitat, including the monarch butterfly.[23] It becomes clear, then, that Thompson's influence permeates the record, and that the fields have a significance that extends beyond their aesthetic beauty and their material existence. They act as a symbol for ecological consciousness, and they demonstrate real-world methods for putting a land ethic into practice.

LAND/SOUNDSCAPE

"The Thompson Fields", in the simplest interpretation it affords, is a musical representation of the physical landscape of Thompson's beanfields. But it is not merely a representation of a relatively small plot of earth; rather, it is a representation of a *place*. Following Buell's definition of place, seen in Chapter One—that it is "space that is bounded and marked as humanly meaningful through personal attachment, social relations, and physiographic

[21] Though Thompson seems to have been a large influence on Schneider, and though he figures prominently in this chapter, I do not mean to suggest that he is responsible for making Schneider who she is. Rather, his life and work give context to the significance of his fields as a symbol in this piece and the album as a whole.
[22] Schneider, Maria. "Inspirations for 'New-Crowned Hope' Commission" (Unpublished, n.d.). Thompson is not named specifically in the document, but reference to his efforts to restore native prairie ecology make it clear that her anonymous friend is indeed Thompson.
[23] Schneider, Liner notes for *The Thompson Fields*.

distinctiveness"—it is apparent that the concepts of landscape and place are inextricably linked, as a place's meaning is to a significant extent tied to its topography. We have already seen how the fields are meaningful personally and socially via Schneider's friendship with Thompson and his influence on her ecological consciousness. Philosopher Edward S. Casey, whose work centres largely around place, provides a comprehensive definition of landscape when he writes that it signifies:

> *(a)* a vista or "cut" (hence the *-scape*) of the perceived world, construed as "country" or "land" or "field" set within a horizon; *(b)* the circumambience provided by a particular place; *(c)* by extension, seascape, cityscape, and so on; *(d)* a genre of painting [and of music] that . . . is concerned with the material essence ["the gist"] of a place or region rather than with its precise topography . . .[24]

These four parts together identify the complex connections between a place, its physical reality, and its representations. A landscape is both physical reality and representation at once. Schneider did not compose this musical landscape simply because she found Thompson's fields to be aesthetically beautiful (after all, other friends and neighbours no doubt own beautiful fields, too), but because they carried meaning beyond their topographic reality.

But what distinguishes musical landscape from any other piece of music? For both Daniel Grimley and Denise Von Glahn, it is largely related to the treatment of time. Von Glahn, in her book *The Sounds of Place,* says that to "fully appreciate a place," an observer must "temporarily forget a goal" and "stand still." "This," she says, "requires a different approach to composition, one that emphasizes being somewhere rather than getting

[24] Casey, *Representing Place: Landscape Painting & Maps*. 348-9. The "*material* essence" he refers to should not be understood as anything physical, but "as the subject matter of an idea or thought"; essentially its "gist" (349).

somewhere, one that insists that a composer reconsider the relationships between harmony, rhythm, and melody."[25] When Von Glahn wrote this, she was introducing a discussion on Ives's methods for composing spatial music, but each musical characteristic she lists—"harmonic stasis, circular melodic and rhythmic structures, a weakened sense of lapsed time, and large-scale musical structures that seem to defy or temporarily negate conventional objectives"[26]—also apply in some way or other to Schneider's writing in this piece, as we shall see below. The specifics of each characteristic differ between each composer, but they are all present. Grimley also notes the importance of the suspension of time in the depiction of landscape in music when he says that it (landscape in music) "appears to play on a powerful contradiction, between its temporal nature (its perception in time), and the way in which it appears to collapse ordered or linear notions of time into a potentially illimitable sense of space."[27] The suspension of time, therefore, not only contributes to the musical depiction of landscape, it is a key component of the landscapes' rendering. This comports with Casey's own theories—the reference to "circumambience" cited above neatly ties together landscape's "spatial unencompassibility" and its "temporal nonsimultaneity": it cannot be fully captured within finite space in a single instance of time.[28] Musical landscape, then, bends music's lack of a visual dimension to its advantage to make up for what landscape painting and photography lack, and vice versa—images give the impression of timelessness in their representations of space, while music gives the impression of unencompassible space by manipulating time.

[25] Denise Von Glahn, *The Sounds of Place: Music and the American Cultural Landscape*, Paperback ed. (Boston: Northeastern University Press, 2009), 77.
[26] Ibid.
[27] Daniel M. Grimley, *Grieg: Music, Landscape and Norwegian Identity* (Woodbridge: Boydell Press, 2006), 58.
[28] Casey, *Representing Place*, 8.

The First and Second Phases of "The Thompson Fields"

"The Thompson Fields" began its existence not in Windom but in the laundry room of Schneider's Manhattan apartment, where the melody first came to her. "Running upstairs to jot it down," she says in her liner notes, "I already recognized it had a taste of home."[29] But it was following a trip home a few weeks later that the tune found its full meaning. Schneider arrived early to assist Thompson in setting up for that year's Summit. As she narrates in the album liner notes:

> On a windy early evening preceding the summit, Tony and I climbed a skinny metal ladder to the top of his silo, overlooking the vast view of this special corner of southwest Minnesota. As the gusty wind made waves of shadowed green scamper across his bean fields, I stood there thinking about our families, our parents, those that had gone, family friends, generations, the grand stories, and the beautiful and difficult times as well. All of it somehow felt quietly present in the land and the wind. I was so taken, feeling the foundation of my life so deeply embedded in the landscape, that the evening atop Tony's silo found its way into this piece.[30]

This brief account is a short story in itself—it traces a three-part journey of discovery from gazing at a landscape, to imagining the landscape as a backdrop for the human history that played out upon it, and finally to an understanding of the correlation of human history and the history of the landscape. In the following analysis, I explore how "The Thompson Fields" can be heard to follow the same journey through three musical phases.

---

[29] Schneider, Liner notes for *The Thompson Fields*.
[30] Ibid.

Example 1 – Schneider, "The Thompson Fields" lead sheet (reduction from score), mm. 1–15.

The first phase is the initial statement of the tune (Example 1). It begins simply with guitar and acoustic bass playing rubato. Gradually, the rest of the rhythm section enters—first, the accordion playing high, ethereal chords, and the drums, with rolling cymbal swells, few and far between evoking gentle breezes—the wind becomes a prominent theme in this piece. As the tune repeats, the piano takes the melody over from the guitar, the ensemble building, yet maintaining a quiet intensity. The melody is simple, conveying a homespun

'folkiness' (having "a taste of home," as Schneider says), moving in a mostly step-wise manner within a limited range and remaining diatonic throughout. The largest exception to the step-wise movement, however, is a downward leap of a perfect fifth which is immediately followed by a return to the previous pitch. This melodic movement by perfect intervals conveys a sense of openness and becomes a primary motive for development in a later phase.

Schneider's harmonies reflect both Von Glahn's and Grimley's theories of suspended harmonic motion as being necessary for musical representations of landscape. As the piece begins, the harmonies rock back and forth between the subdominant and the dominant chords, each phrase coming to rest on the dominant chord. Schneider's voicings for these chords never contain the function-defining third, replacing it instead with a second or the fourth. Owing to the lack of clear functional pull toward some kind of resolution, the effect of these suspended chords is one of timelessness and stasis, the effect of, as Von Glahn says, "being in a place". By virtue of their ambiguity, they seem to demand no resolution. However, when the tonic chord finally does arrive after several measures (measure 7), it appears in second-inversion and with its root only implied by its context. Even at the end of the first melodic statement, as the melody resolves to the tonic (measure 14), the tonic chord itself is still in second-inversion and with its lowest note in the bass's upper-middle register. Rather than providing the listener with a frustrating lack of resolution, the chord seems to float, creating the effect of suspended time.

Also contributing to this feeling of suspension is the cyclicality of the binary song-form, which serves as the piece's basis in its opening sections; not only does the harmony refuse to fully resolve, but it also has the potential to cycle forever. Cyclical progressions are common in jazz, as tunes are generally composed or arranged to allow for the soloist to

improvise for an extended and indeterminate period. However, this does not seem to describe what Schneider is doing here. She is operating neither in the tradition of the AABA song-form of jazz standards, nor the blues, nor of non-functional modal harmony. Rather, her chord progression lies somewhere between tonal and modal, strongly hinting at tonal function and remaining in an established key-centre while, at the same time, constantly denying any true resolution. Thematically, a more accurate analogue might be strophic folk music, which may repeat as many times as is necessary to accommodate any number of verses. But, while a folk song will usually come to rest at the end of each verse, the music here refuses to come to a definitive close, its resolution more implied than stated.

This section can be understood to represent the land itself, in which case the instrumentation in these opening minutes serves an important rhetorical purpose as well. By having the rhythm section perform the opening melodic statements, Schneider associates the foundational nature of the land with the foundational section of the band, the section on top of which the rest of the orchestration is constructed. Additionally, the use of guitar as the primary harmonic instrument (until the entrance of the piano), and the use of accordion both have strong ties to American folk music tradition. Through these elements, Schneider is able to signify both rurality and the timelessness of the landscape simultaneously.

A final reiteration of the melody ensues (2:12, measure 31), this time with much fuller orchestration as a soprano saxophone takes over the lead voice and the brass and woodwinds fill in wide, open voiced chords beneath it. The predominance of chords voiced in stacks of perfect fourths and fifths calls to mind Aaron Copland's work of the 1940s, the openness of the intervals reflecting the openness of the big Midwestern sky. Like Schneider, Copland was a long-time resident of New York, and one whose mature music became strongly associated with American rurality. Though Copland's music largely depicts the

American West, as opposed to its Midwest, these sorts of wide-spread voicings have come to clearly signify the feeling of being in wide-open spaces. Schneider places special emphasis on these harmonies at key points in the piece, particularly at arrivals in a new key or other such points of high drama.

The second phase and the thematic cornerstone of the piece is pianist Frank Kimbrough's improvised solo. If the music up to this point has been the sound of the landscape and the fields themselves, then Kimbrough's solo represents the memories and stories contained within. Prior to the solo, the music is completely diatonic—unusual for a jazz piece, which far more often emphasise chromaticism. Instead of a deceptive cadence to G♯ minor as in both previous iterations of the melody, the band moves to the enharmonic major chord, an A♭ chord with an added fourth. Kimbrough begins his improvisation here. The score instructs him to play in the A♭ Ionian mode, "high, strong," and "regal," and to "let [the] bitonality clash".[31] The arrival of the A♭ chord serves as a disruption, effectively leaping in as a counter-argument to the preceding pastoral folksiness. Up to now, the piece has been a pleasant enough little tune, but this relatively minor bit of chromaticism transforms its substance entirely. Interestingly, it is only after this radical disruption that piece is finally able to fully resolve—as the band returns to diatonicism to close the melody, Kimbrough continues to play in A♭, and as the tune comes to a close, all sense of tempo disappears and the horns gradually melt into a low-voiced, root-position B major chord, the first true resolution to the tonic in the piece (3:37).

[31] Maria Schneider, "The Thompson Fields", (ArtistShare, 2010).

Example 2 – Schneider, "The Thompson Fields", Kimbrough's solo excerpt (3:20–3:38), Harmonic reduction, transcription by the author

"I wanted him [Kimbrough] to create little stories in other keys over the top of this," Schneider says in a video discussing the piece as she plays the low B major chord on her piano. "So, this is our foundation. That's the wind; that's the earth; that's looking at this field—the Thompson fields. And now Frank … he's airborne at this point, and he's going to other keys".[32] Each new key that Kimbrough explores represents another story (Example 2). The effect of the bitonality is striking; it is beautiful and strange rather than jarring, suggesting a layering of histories. Each of the five B major chords that occur under the solo follows an arc of crescendo and decrescendo, conducted by Schneider. "Like long gusts of wind," she writes in the score.[33] Note that she refers to these chords as both the wind *and* the earth; a root-position tonic chord representing that which is most basic and elemental, and that which is moving and always in flux. This conflation of earth and weather is a key component of my reading of Schneider's music and will be explored further in the next chapter.

There is no form *per se* in this section; its length is only determined by the number of times that the tonic chord is played by the ensemble—five times—each of which may take as

---

[32] Maria Schneider, "Maria on 'The Thompson Fields' - Study Score", streaming video, 19:38, 2015, https://www.artistshare.com/v4/Fans/MyExperience. Access to all videos on Schneider's ArtistShare site requires purchase of the corresponding study score. Additionally, all videos share an identical URL.
[33] Maria Schneider, "The Thompson Fields", (ArtistShare, 2010).

little or as much time as the soloist and the conductor deem suitable. Steady tempo is absent, leaving Kimbrough free to explore a variety of different 'stories' and textures. While my discussion here is strictly based on the studio recording of the piece, it should be stressed that this solo is improvised and that Kimbrough's approach here is only one of a potentially limitless number of possibilities, a point that is significant because each performance affords the possibility of an even greater number of possible stories to be told.

THE THIRD PHASE, AND ECOLOGICAL HISTORY

The third phase begins as the solo dissolves and we pull back and look at the landscape itself (4:47, measure 48). Here Schneider begins to develop and elaborate upon the melody. Where previously the lead voice was held by one instrument at a time (first guitar, then piano, then saxophone), now it moves freely between voices. Wind is the crucial element in this section. Although wind has been a constant presence throughout, we can now see its effects on the topography, the way it moves individual leaves on the soybean fields. "In terms of rubato," Schneider says of this section, "it has that same feeling of the up-and-down that those chords had [during the piano solo]. You know, it's got the wind in the tempo."[34] Surely, the wind has been in the free-flowing rubato tempo all along, but what I suspect she means is that now the wind acts upon each instrument, pushing it along unpredictably. The voices move somewhat independently, with instruments pairing up across sections before then breaking off. Melodic content is briefly shared between voices before they depart from one another, passing the melody on, seamlessly, to another voice.

Just as the wind is now in the tempo, at this point, the memories and stories are

[34] Ibid.

embedded in the landscape. Once again, there is a deceptive cadence leading to the major VI chord, but this time the whole ensemble shifts into that key. If the shifting key centres in the piano solo represented past events, now they are fully integrated into the landscape, alive in the soybean fields, lake, and bordering reconstructed native prairie. This is the most pictorial section of the piece; where the previous phases represented abstract concepts, here we are invited to be in the wind, to experience it moving through the crops. The effect of the unstable key centre of the piano solo on the subsequent musical material suggests an acknowledgment of the influence that human activity has had on the earth, and the piano's slow transition back into the ensemble's key suggests a similar influence of the earth over its human inhabitants. The third phase is through-composed, seeming now to suggest something of a return to linear time; themes are developed throughout, but the progression is no longer cyclical, rather, it continues to develop. The final phase moves between three keys, each an interval of a major-third apart: from B major, to A♭ major, to F major, so that the piece ends a tritone away from where it began. Schneider tries to have it both ways with her harmonic writing here, suggesting timelessness through the use of pedal-point once the key of A♭ arrives, but resolutions are now stronger and the harmonies are constantly in motion. This resonates with Von Glahn's notion of "being somewhere". If a characteristic feature of the landscape in question is motion, then there must be motion. Schneider's writing in this piece, then, juxtaposes landscape's impression of stability in the present with its reality of constant flux over the course of time. As the landscape began to appear more dynamic when Schneider contemplated the stories embedded within it, so too does the music.

But the land ethic offers another reading, one based in what Leopold calls "an ecological interpretation of history", which argues for a conception of history that

acknowledges the influence of the natural world upon the humans who live in and interact with it. He writes that,

> Many historical events, hitherto explained solely in terms of human enterprise, were actually biotic interactions between people and the land. The characteristics of the land determined the facts quite as potently as the characteristics of the men who lived on it.[35]

It is important to note that he means this quite literally, noting several instances of historical events that would have proceeded quite differently had the Land been of a different nature. The notion of memories embedded in the landscape reveals how ecological history works the other way as well. Over time, Thompson's predecessors have effectively carved their lives into it as one might carve one's name into a tree. Their efforts have made a lasting impression on the physical reality of the landscape. But the land itself has likewise left its own impact on them. And so, humans and land exist in a perpetual cycle of co-shaping, a process that can be heard to play out in the third phase of this piece. Each phase can be heard to refer in some way to the others: the piano solo grows out of the third iteration of the melody then slowly dissolves back into the ensemble as the third phase arises. The melody of the first phase is developed in the third, while the first phase presages the rich orchestration of the third. The fluidity of key-centre in the second phase is incorporated into the third phase, while the timelessness of the elemental tonic triad grounds the second phase's instability. Schneider recognizes that each of the three phases are not separate, but, rather, are intimately connected, like members of a community, each exerting influence over and being influenced by one another.

[35] Leopold, *Sand County Almanac*, 205.

EXAMPLE 3 – SCHNEIDER, "THE THOMPSON FIELDS", GUITAR SOLO VAMP (REDUCTION – 7:01), MM. 72–77.

A final coda follows these three phases—guitarist Lage Lund's solo, played over a repeating two-measure vamp (Example 3). Schneider writes that this solo "speaks perfectly to the pure essence of home".[36] It is unclear what she means by this, but Lund's playing is simultaneously rootsy and cosmic, interspersing simple melodic lines with sharply angular, occasionally chromatic, lines that soar, thanks to liberal use of an ambient delay effect. This section is interesting, because at first it seems to be a significant musical departure from the preceding music—the rhythm section begins to play time, settling into a relaxed groove. The vamp itself and its instrumentation make for an interesting bookend to the piece, returning to many of the musical devices from the opening section. Once again, the ensemble is reduced to the rhythm section alone, though now, for the first time in the entire piece, it plays with a steady pulse. Schneider's two-bar vamp is tonally ambiguous, following an A♭–B♭–Fsus–F progression, a harmonic pattern that is not diatonic to any key. This harkens back to both the ambiguity of the oscillation between the subdominant and the dominant chords of the opening section, as well as its potential for cycling indefinitely. But while the key is ambiguous, the preceeding musical material, the suggestion of a B♭–F plagal cadence, and the Fsus–F suspension and resoulution point to a tonal centre of F. However, if we look back at the journey taken over the course of the piece, we can see that we have come a long

[36] Maria Schneider. Liner notes for *The Thompson Fields* by the Maria Schneider Orchestra, ArtistShare, 2015, digital audio.

way indeed—the piece begins in the key of B major and ends in F, a tritone away from the starting key. Neither human nor land has ended up the same way they began, and, though the piece eventually ends, the repeating two-bar vamp suggests that this cycle of influence and change could potentially continue on forever.

Landscape is rarely, if ever, ideologically neutral. In a foundational text of American ecocriticism, *The Environmental Imagination*, author Lawrence Buell identifies a "tendency among many writers and critics to want to represent the essential America as exurban, green, pastoral, even wild", a tendency that he refers to as "pastoral ideology".[37] This ideology, however, is flexible, and Buell examines the ways in which the strategic framing of the pastoral may be employed to either "dissent from or consent to the prevailing political system".[38] In its celebration of the fields as an emblem of the biotic community extolled by Leopold and Thompson, "The Thompson Fields" takes the latter approach and can be heard and understood as a rebellion against an ethos that views the earth primarily as a tool for resource extraction and that prioritises production over environmental wellbeing. In a slightly more esoteric way, Schneider's ensemble itself may be understood as a similar kind of expansion of community boundaries, acting simultaneously as a symbol of New York City urbanity and as a vehicle for such rural-centric pieces as this one—an overlapping of urban and rural communities in microcosm.

The following chapter on "Nimbus" examines another ode to place, one which takes up an alternate method of boundary expansion by musicalizing the explicitly non-physical dimension of place.

---

[37] Lawrence Buell, *The Environmental Imagination: Thoreau, Nature Writing, and the Formation of American Culture* (Cambridge, MA: Harvard University Press, 1995), 32-3.

[38] Buell clarifies his use of "ideology" in an endnote, writing that he means "the literary text's implicit dissent from or consent to the prevailing political system" (439).

Chapter 3 – "Nimbus"

While the wind is a core element of "The Thompson Fields", it is *the* core of "Nimbus", from the same album. Schneider reveals in her liner notes a sensitivity to the place-making qualities of weather—of 'bad' weather, in particular—in a way that is seldom acknowledged, even by environmental critics. Upon their arrival in Windom for a concert, one of Schneider's musicians refers to the atmosphere as "bleak", but she takes no offence to such a characterisation of her hometown. In fact, she agrees with his assessment, but she spins his judgement into an unalloyed positive, writing: "But hidden in that subtle landscape is drama. And that *drama*, as powerful as any mountain landscape, can sneak up on you, magnificently revealing itself in the ever-changing light, sky, and extreme swings in weather".[39] From here, she follows her train of thought, as she so often does, to an anecdote from her childhood, implying that it was a source of inspiration for the piece. In this case, she was inspired by her "über-safety-conscious" mother's reaction to a funnel cloud—dangerously close to becoming a tornado—that was approaching their house from only a mile away.[40] Her mother, ignoring the air-raid sirens and Maria's pleading that she get into the family's bomb shelter, insisted on going outside to watch the approaching storm. Schneider writes that she "felt no choice but to follow her—screaming, of course, how completely insane she was". She continues:

> But once outside, we entered another world. The air was the strangest shade of green, and the atmosphere was like nothing I'd ever felt. I was mesmerized and even

[39] Schneider, Liner notes for *The Thompson Fields*. Italics in the original.
[40] Ibid.

> thrilled by the risk. Mom's episode of insanity unveiled one of the most spectacular scenes I'll ever witness—looking right up into a funnel seemingly within reach.
>
> Dad, who sped up to the house in the car minutes later, having seen the whole thing unfold on the horizon, arrived in a panic. Waving our arms up at the sky, we tried to convince an explosively angry man that the experience somehow justified the risk.[41]

It is telling that Schneider does not view the extreme weather, even as it threatens to end lives and destroy homes and livelihoods, as something malevolent or cruel, or even as an amoral destructive entity. Rather, it is a characteristic of a *place*, and one that, despite the fear it may induce, lends that place a sense of "drama". Extreme weather, in other words, is as much a part of Windom's character as anything or anyone else. But this stepping-outside into the world is key to this anecdote, in that it draws our attention to the distinction between the safety of distance required for pure spectacle and the proximity and immersion demanded by place.[42]

This also reveals an important flaw in the land ethic—it does not acknowledge the profound role that the atmosphere plays in the biotic community. The air is as fundamental to sustaining life on Earth as water is, and Leopold's omission of it from the Land is a monumental oversight. Today, knowing what we now know about the damaging effects of air pollution on our health, the health of animals, and on the environment as a whole, to perpetuate such an oversight would be especially egregious. But if the land ethic is ultimately about care for one's biotic community, Schneider's recognition of the place-making potential of extreme weather shows a willingness to not only care for that which is often unloved, but to fully embrace it as a full member of her biotic community. In this chapter, I will examine

---

[41] Ibid.

[42] Which is not to say that one cannot identify with a place one has never been to or that is virtual, but one must imagine oneself *in* that place.

the compositional and performance techniques employed in "Nimbus", by which Schneider and her musicians invite listeners to immerse themselves in a turbulent environment and to appreciate it on its own terms.

THE WEATHER-WORLD

Anthropologist Tim Ingold's concept of the 'Weather-World' does much to fill in this gap in the land ethic, though he does not explicitly acknowledge it as such. He has written extensively of the sort of 'being in the open air' that Schneider narrates in her anecdote, and which, I argue, she captures (along with her band) in "Nimbus". In his article "Earth, Sky, Wind, and Weather", Ingold seeks to address the question of "what it means to live 'in the open'", meaning in the open air. His question arises from what he sees as inconsistencies in "established categories and conventions of thought", in which a "scientifically correct" conception of the world separates it into the inhabited earth and the empty sky, demarcating them as two distinct and opposing hemispheres. "What is open air", he asks, "Does it circulate in the sky or in the atmosphere? Are these the same or different? If the atmosphere surrounds our planet, and the sky arches above our heads, then in what shape or form can the earth exist in relation to the sky?"[43] His intent in raising such questions is not merely to philosophise about the ontological nature of earth and sky, rather, he seeks to examine what our understanding of such words can tell us about our own relationship with the world. He argues that the "scientifically correct" conceptual models of the earth and sky are at odds with our phenomenological experience of them. Science, he broadly argues, sees individual entities as essentially closed systems and segments the world into discrete objects. "But", he

---

[43] Tim Ingold, "Earth, Sky, Wind, and Weather", *Journal of the Royal Anthropological Institute* 13, (2007): S19-S38, http://www.jstor.org/stable/4623118.

writes, "the habit of thought that leads us to suppose that the world is inhabited by entities that are already closed in upon themselves prevents us from seeing that life can be anything other than an interior property of things".[44] Life, however, is shared amongst inhabitants of the weather-world, which, far from being empty, is the *medium* in which and by which living beings are able to live. Ultimately, for Ingold, beings are not exhabitants of the earth as they are in the scientifically correct model, but are *inhabitants* of the weather-world. In a way, by shifting focus away from the object-world, Ingold recalibrates and improves upon the land ethic, highlighting the artificiality of political borders and rendering physical barriers irrelevant.

In another article, "Against Soundscape", Ingold speaks to the aural dimension of landscape specifically, arguing that it is wrong to distinguish between the aural and visual modes of perception of landscape, when in reality "The world we perceive is the *same* world, whatever path we take".[45] Treating sound as an object draws an artificial border around it, separating it from the world in which it is perceived. Instead, Ingold would have us understand sound as the medium through which we perceive the aural dimension of the world in the same way that light is the medium through which we *see* that same world. Soundscape, he argues, is as absurd a concept as calling the visual a "lightscape" would be.[46] Light and sound, then, are linked in the ultimate medium of "weather". It is worth stressing that his preferred term is weather rather than 'air', because weather is more than just a substance; it is a force.

---

[44] Ibid, S31.

[45] Tim Ingold, "Against Soundscape", in *Autumn Leaves: Sound and the Environment in Artistic Practice*, ed. A. Carlyle (Paris: Double Entendre, 2007), 10. Italics in the original.

[46] Ibid, 11.

Schneider shares more with Ingold than an appreciation for weather, however. Her description of the drama of the "ever-changing light, sky, and extreme swings in weather" reflects Ingold's statement that "the open world that people inhabit is not prepared for them in advance. It is continually coming into being around them. It is a world, that is, of formative and transformative *processes*".[47] In this chapter, I argue that Schneider's writing and her band's performance of "Nimbus" speaks to the idea of weather/world-as-process and that it also seeks to place the listener *inside* the stormy world of the piece rather than setting them outside the musical frame.

Daniel M. Grimley deserves credit for applying Ingold's theories to music, and he is to my knowledge the first to do so. Inspired by Ingold's work, he hears a similar immersion of the listener into the environment during the concluding storm of Sibelius's *Tapiola*, an immersion which ultimately ends with the consumption and obliteration of its listening subject.[48] For Grimley, this reflects the consequences of our role in the current environmental crisis: "The concluding storm is not simply transformative; we actively shape the weather around us just as it buffets and ultimately erases us".[49] But while this stance rightfully acknowledges our complicity in the crisis, it nevertheless imagines the storm as a vengeful antagonist doling out our just desserts. Listening to *Tapiola*, it is easy to hear what Grimley means by this, but even among the harsh dissonances of the darkest moments of "Nimbus", I hear nothing resembling obliteration. This sort of apocalyptic mode is no doubt justified, and indeed it represents the orthodox mode amongst contemporary activists and

---

[47] Ingold, "ESWW," S28.
[48] Daniel M. Grimley, "Music, Landscape, Attunement: Listening to Sibelius's *Tapiola*," *Journal of the American Musicology Society* 64, no. 2 (2011): 397, http://www.jstor.org/stable/10.1525/jams.2011.64.2.394.
[49] Ibid, 398.

critics, but it does not resonate well with Schneider's music, which tends heavily toward the celebratory.

And, while its inherent urgency may seem to make eschatological rhetoric the more persuasive option, several writers have pointed out that doom-and-gloom can only take one so far. Greg Garrard, for example, points to several of the drawbacks of this rhetoric, arguing, among other things, that its hopelessness may work against its own cause. He concludes his chapter on apocalypse by noting that "only if we imagine that the planet *has* a future, after all, are we likely to take responsibility for it".[50] Here in the world of music, musicologist Alexander Rehding argues that we should not ignore the powerful links between music and memory, as well as sonic landscape's "significance … in the formation of cultural identities".[51] There is no shortage of apocalyptic criticism of narrative works, so ecomusicology should follow the 'other path'—as if there are ever only two paths—and embrace, or at least not discount, identification with the places we love, though we must be careful not to drift too far into sentimentalism.

In the CD booklet, spread across two facing pages, including the first page of Schneider's notes on "Nimbus", Brienne Lermitte's photo of an encroaching storm (taken southeast of Windom) captures the drama Schneider describes. But it also suggests a further possible environmentalist reading of "Nimbus". The dark and ominous clouds loom behind a field of cornstalks, powerlines, and wind turbines. All in a single image, a connection can be made between the power of the weather, conversion of that power to electric power, and agricultural output. Wind turbines, wind power, and 'green' energy are emblematic of the contemporary environmental mainstream. In a sort of ironic twist, in the bottom left corner

[50] Greg Garrard, *Ecocriticism*, 2nd ed. (London: Routledge, 2012), 116.
[51] Alexander Rehding, "Ecomusicology between Apocalypse and Nostalgia," *Journal of the American Musicological Society* 64, no. 2 (2011): 413, doi:10.1525/jams.2011.64.2.409.

of the left page, there is a meteorological drawing of a tornado with labels for the cumulonimbus cloud, vertical updraft, warm and cool air, but also "violent destruction".[52] The juxtaposition of these images, along with Schneider's text, suggests a somewhat ambivalent attitude toward the storm—it is powerful, violent, dramatic, and awe-inspiring all at the same time.

Crucially, though "Nimbus" is indeed programmatic, it cannot be properly called a narrative piece.[53] It does not strictly follow the lifecycle of a tornado, rather Schneider captures the idea of the weather-world as process. She does not seek to set human characters inside its frame, opting instead to set the listener *inside* the story. In other words, rather than casting herself and her mother as characters within the story of the piece, she casts the listener in those roles, showing, not telling, the listener what she and her mother experienced that day. Moreover, she wants the listener to experience the storm in the same way that she and her mother did—by coming out from our shelter into the open air. This distinction between the listener being *inside* versus *outside* the frame of the piece matters because it represents in part the distinction between viewing the Land as an object, or set of objects, and a recognition of oneself as immersed in it and in the world.

ECOLOGICAL PERCEPTION AND THE LISTENING SUBJECT

But how does Schneider—or any other composer for that matter—put the listener inside of a place, as opposed to setting them outside the musical frame? By adapting psychologist James Gibson's theories of ecological perception, musicologist and cognitive psychologist

---

52 Schneider herself is not credited with the design of the booklet, but the artist-centred model of ArtistShare means that she would get at least final say in the final product, if not significant creative input.

53 See Will, *The Characteristic Symphony in the Age of Haydn and Beethoven* (2004) for an extensive examination of non-narrative program music, particularly in the eighteenth century.

Eric F. Clarke has provided us with a possible answer to this question. Gibson's model questions the traditional cognitive model of information-processing, in which the brain constructs coherent meaning from an otherwise swirling mass of incoherent information, arguing instead that the perceiver interfaces with environmental stimulus directly and that this stimulus *affords* a number of possible interpretations. A tree, for instance, affords use as a provider of shade, for burning, for construction material.

Music, too, affords a variety of interpretations, based on the stimulus it presents. Writing on perceptions of subject-position amongst musical movement, Clarke says,

> If all the separate sources (real or virtual) that are specified in a piece of music are heard to move together in a correlated fashion, this specifies a listener moving in relation to a collection of stationary sound sources (i.e. self-motion). If, however, the various sound sources all move relative to one another, and in relation to the listener, this specifies the movements of external objects in relation to one another.[54]

Here Clarke is contrasting polyphony (the latter) with homophony and monophony (the former). In other words, the self-motion of the listener implied by homophonic or monophonic textures sets the listener at a distance, like a gallery visitor walking past a painting. Polyphonic textures, on the other hand, have the potential to envelop the listener as sounds move around them. The strict dichotomy of homo/monophony on the one hand and polyphony on the other is too general for my own purposes, as these distinctions refer to melodic and rhythmic dimensions that can be transcribed in traditional Western notation. Clarke is aware of these limitations, however, as he goes on to provide an example in which the shifting timbre of a single sound source via a lowpass filter can create the sense that the

[54] Eric F. Clarke, *Ways of Listening: An Ecological Approach to the Perception of Musical Meaning* (Oxford; New York: Oxford University Press, 2005), 75-6.

listener is moving toward said source, but he leaves aside (perhaps in deference to brevity) the unnotatable nuances of performance. Such nuances are important to my analysis of this piece. There is a certain kind of what might be called 'micro-polyphony' that does not exist in notes on the page (or, since we are looking at jazz, elements of music that can be transcribed), but that exists only in performance—nuances of rhythm and pitch that, while they may appear to be synchronous on the page, allow individual instruments to behave as individual entities. This sort of rhythmic disunity is ideal for representing wind swirling around a perceiving subject because the wind of course is not an object. Rather, it is experienced as mercurial forces and currents. Returning to the visual for a moment, we can see for example its effect on a pile of fallen leaves—it may push them all in a generally similar direction, but the leaves swirl around one another, somehow moving together and independently at the same time.

It should be noted that Ingold takes special issue with certain aspects of Gibson's theories of ecological perception, namely his emphasis on the surfaces of discrete objects. "The hill is not an object on the earth's surface but a formation of that surface", he writes, "which can appear as an object only through its artificial excision from the landscape of which it is an integral part".[55] Clarke indeed focuses on how we hear virtual musical *objects* in virtual musical space, but Ingold is calling for what amounts to a massive paradigmatic shift in how we understand the world, and even he finds Gibson's work to be promising overall. Nor can Schneider be said to live up to Ingold's ideals. Nevertheless, Clarke's ideas are useful for understanding the nuance with which Schneider approaches her representation of the weather in "Nimbus".

[55] Ingold, "ESWW", S27.

COMPOSING THE WIND

"Nimbus" opens by setting the listener on the ground with a low, rumbling F pedal-point in the bass, guitar, accordion, and the piano's left hand. Even before the introduction of any other musical material, the atmosphere already feels unsettled as the pianist and bassist trill their notes independently of one another, creating a dark sense of foreboding, rather than a feeling of stability. The piano's chorale-like figure, which serves as the piece's main melodic theme (0:08), is embellished by Kimbrough with rolls and trills to emphasise the disunity of its voices, as if blown about like the aforementioned leaves in the wind. The recurring bass clarinet counter line, first heard at 0:19, extends into a long and rambling phrase that continues to unfurl underneath the primary melody line. Its constantly changing direction within a narrow range gives the impression of something pushed, tumbling aimlessly across the ground. This is further emphasised when the bass clarinet takes on the role of the bottom voice when the chorale is later rearranged for alto saxophone, clarinet, and bass clarinet (0:56, measure 17). Here, the bass clarinet begins as part of the trio but is soon compelled to go in a different direction by the unpredictable currents (Example 4). Both saxophone and bass clarinet approach certain pitches from above with quick descending grace notes which further add to the wind-blown feeling of the piece. This becomes a recurring technique throughout. These three instruments are not asked to perform in lock-step, rather Schneider gives each of them the notation: "expressive". Even as he adheres to the written rhythm, Alto saxophonist Steve Wilson, the lead voice in this section and in the piece overall, pushes and pulls at the time and slurs into and out of notes at will. Though the rhythms themselves are synchronised in this particular instance, this sort of rhythmic

EXAMPLE 4 – SCHNEIDER, "NIMBUS", CHORALE ORCHESTRATION (0:57), MM. 17–27.

disunity is a key element in creating the atmosphere and evoking the wind, both in Schneider's writing and in the ensemble's performance.

In orchestrating the chorale for these three instruments, Schneider places the alto saxophone and trombone in the upper reaches of their ranges, resulting in a harsh and "bleating" timbre,[56] which becomes something of a timbral motive in "Nimbus". Schneider ignores conventional jazz orchestration wisdom in favour of timbres that can be said to more accurately represent the unharmonious sounds of violent winds and of the natural world in general. This is certainly enhanced by the recording's mixing and engineering: bright sounds such as flute and cup-muted trumpets are brought forward and ring with bracing clarity, while darker sounds such as trombones (in bucket mutes throughout much of the piece) are hazy in the background. The flutes especially sound as if they have been close-miked in order to emphasise the sound of breath across the embouchure hole. This also gives the listener a sense of three-dimensional space because, as Clarke notes, brighter

[56] Maria Schneider, "Maria on Nimbus – Study Score", ArtistShare, accessed February 18, 2018, video, 1:41, https://www.artistshare.com/v4/fans/ProjectDashboard.

timbres tend to be perceived as being physically closer,[57] something that can be exemplified in the dual meaning of the word 'presence'.

Throughout much of the piece, Schneider gives the listener a sense of the atmosphere by placing special emphasis on wide-spread chord voicings that avoid going too far down the bass-clef staff. At the dramatic swell at 1:27 (measure 27) for example, Schneider maintains as much distance between the pitches in a given chord as her ensemble will allow, while also keeping all instruments but bass and bass trombone above F3, giving each chord a feeling of 'openness', while at the same time, giving the sense that the ensemble could break apart at any moment. The impression is that these harmonies are moving above the firm surface of the musical earth, and the instability of their voicings and their bracing timbral brightness generates tension without going so far as to become dissonant. Conversely, the voicings between 2:38–4:19 (mm. 45–74) are incredibly dense, packed as they are with dissonant clusters. The pitch content of these chords at times seems to bear only tangential relationships to the chord symbols provided in the score. The chord at 2:38, for instance, which is ostensibly the tonic chord, is labelled 'Fmin(maj7)', while the notated pitches include a prominent B♮—the raised fourth. This does become in effect the new tonic chord of the piece, as once it is introduced, the raised fourth continues to trouble the F minor chord at numerous points, up to the very end of the piece. The tight voicings and unified movement of this section's introductory chords, sounding like a sudden and powerful gust, are in stark contrast with the open yet uneasy tension of the piece thus far. But, after the initial power of these tight voicings and their unified movement, these chords

[57] Eric F. Clarke, *Ways of Listening: An Ecological Approach to the Perception of Musical Meaning* (New York: Oxford University Press, 2005), 81.

also become more open in their voicings, and the movements of their constituent voices become increasingly disjunct and independent.

Schneider's polyphonic approach at 1:49 is quite similar to that of the 'third phase' of "The Thompson Fields". Again, we can hear instruments passing their lines seamlessly from one to the other. And with Clarke's writing in mind, we can also hear how Schneider positions the listener within the frame of that piece as well. But here she adds an interesting rhythmic detail that highlights the wind's lack of rootedness in our typical rhythmic grid (Example 5). At measure 36 (2:00), she interrupts the 3/4 metre with a single measure of 4/4, but one that transforms the previous measures' eighth-note into one unit of an eighth-note triplet. Additionally, the flute plays descending straight eighth-notes over a rising triplet line, while once again anticipating pitches with falling grace notes. After this, the earlier metre returns. What is complicated on paper is subtle in practice, but it is effective in giving the listener the sense that the atmosphere is dynamic and constantly shifting around them.

IMPROVISING THE STORM

True to the spirit of his subject, alto saxophonist Steve Wilson approaches his solo—beginning at 2:15 (measure 39)—with intentionally "sloppy" time and intonation, as well as eschewing any sort of clear structure. There are wide variations between philosophies of jazz regarding the importance of thematic coherence in improvised solos, with some musicians believing it to be essential and others believing it to be antithetical to the spirit of jazz. For example, on his 1960s albums for BlueNote, Wayne Shorter consistently bases his improvisations on references to a given tune's melody, while Sonny Rollins openly derided Gunther Schuller's famous article celebrating Rollins' "thematic development" on his "Blue

Example 5 – Schneider, "Nimbus", score excerpt (1:49), mm. 32–38.

7".[59] Schneider's pieces, however, *demand* that soloists stay true to their central themes and programmatic subjects. In Wilson's case, the lack of melodic and rhythmic thematic development is entirely in keeping with the subject matter. Instead, he bases his solo on timbral effects, chromaticism, and interpretations of movement. The harshness of his sound and the kinetic energy of his streams of notes brings to life the rush of the harsh prairie winds.

But this role does not belong to Wilson alone—once a steady tempo emerges (measure 45, 2:38), the rhythm section must perform with an intensity that evokes the tornado while at the same time maintaining the atmosphere established by the full ensemble. Here the core of the section—pianist Frank Kimbrough, bassist Jay Anderson, and drummer Clarence Penn—fall into an intense groove. All three engage in what in other circumstances might be considered over-playing, but what they create here is the sort of noisy intensity necessary for constructing the electric atmosphere that the piece requires. Penn in particular makes considerable use of "noisy" sounds in his performance. His notated part asks that he play "cross stick [quarter notes]" and "[eighth notes] on ride", but he instead opts to move the ride cymbal pattern to a half-open high hat, and, while he frequently does perform cross stick strokes on the snare, the snare is loose and rattly. And while these rhythms serve as the central pulse around which he structures his performance, Penn plays them inconsistently, dropping strokes seemingly at random. The three 'open' sections in the piece, during which Wilson and the rhythm section play without the backing of the ensemble for an indeterminate length of time, give the quartet space to explore/embody the storm on their

[59] Gunther Schuller, "Sonny Rollins and the Challenge of Thematic Improvisation," in *Keeping Time: Readings in Jazz History*, ed. Robert Walser (New York: Oxford University Press, 1999), 212-222; Benjamin Givan, "Gunther Schuller and the Challenge of Sonny Rollins: Stylist Context, Intentionality, and Jazz Analysis," *Journal of the American Musicological Society* 67, no. 1 (2014): 167–237, DOI: 10.1525/jams.2014.67.167.

Example 6 – Schneider, “Nimbus”, Solo backgrounds (4:55), mm. 77–84.

own. For each of these, Schneider gives the improvisors a chord symbol to play from. While they do not dip fully into free-jazz territory, they tap into a mid-1960s Coltrane-esque ferocity that absorbs the listener.

In contrast to the unrelenting forward drive of the rhythm section, Schneider’s background writing emphasises long lines and slow movement, usually tending toward floating rhythms that work against the underlying pulse. This is especially noticeable in passages like the one between 4:55 and 5:36 (mm. 77–94), in which the primary rhythmic unit of the backgrounds are the quarter-note triplet but with two quarter-notes combined into a half-note (Example 6). This means that during this passage rhythms almost always land slightly before or after the second or fourth beat. Additionally, though they both connect to the same quarter-note triplet grid, the background material in this section is divided into two layers—an altered version of the main theme, played by flugelhorns and flute, on the upper stratum; and down below a long, rambling line akin to the aforementioned bass clarinet counter-line, played by trombones, bass clarinet, and tenor saxophone. Wilson operates between the two extremes of the slow-moving backgrounds and

the driving rhythm section—he plays forcefully and powerfully, but rhythmically he frequently plays 'over' the time, the swirling vortices of his lines ignoring the borders of the bar lines.

Though Schneider's choice—as I hear it—to have the improvising soloist fill the role of the storm itself is certainly the most obvious—one could even say 'natural'—one in the context of a jazz piece, it has the effect of giving the tornado agency separate from the composer, allowing the musical tornado to be literally unpredictable, as neither composer nor soloist knows in advance exactly what it will do and where it will go. This is somewhat undercut, however, by the recording process undergone to create the piece as it appears on the album. Schneider writes in the liner notes that "Steve recorded three great takes, making it nearly impossible to choose the best among them".[60] This reality of the recording process relinquishes some of the tornado's agency back to the composer, allowing her to choose which is the "best" tornado. On the other hand, this single sentence is all Schneider writes on the matter, meaning that her criteria for what constitutes "the best" in this case is unknown to the listener. It is entirely possible that the selected take was the most unrestrained and unpolished version—the most 'wild'. Additionally, she implies that the solo we hear on the recording was performed in a single take, rather than carefully edited together from the best bits of multiple takes. Whether or not this is implied in order to preserve the jazz ideal of an inspired performer crafting a perfect performance on the spot—not an entirely likely story on such a polished large ensemble recording as this one[61]—is left aside, but the intentional rawness and messiness of this particular solo at least gives the impression

---

[60] Schneider, Liner notes.

[61] In fact, construction of "single performances" from multiple takes has been a common practise in the recording of jazz since at least the 1950s. It is not much talked about by musicians because to do so would remove the mystique surrounding jazz improvisation, disrupt its 'anything can happen' ethos, and reveal jazz recordings as product rather than as part of a *process*.

both of a "first take" and of a force of nature. The soloist-centric tendencies of jazz may also work against my argument that the tornado is *in* and *of* the environment, rather than a distinct object or something that happens *to* the world. But Wilson and the rhythm section can be heard to emerge *from within* the virtual sonic environment, and at times, particularly during the open sections, they constitute the entire environment. This can also be heard as an effect of Schneider's multi-layered, three-dimensional approach to rendering the weather—the tornado is simply a layer that sometimes moves into the foreground, while at other times it recedes.

The section beginning 6:12 marks a drastic shift in atmosphere. In the preceding 'open' section (mm. 95-6), the rhythm section and soloist are instructed to "break down time", and by the time Schneider cues this section, the tempo is fully rubato. The breaking down of time during the final open section (beginning at 5:35) leading into the eerie spaciousness of the following rubato section was not written in Schneider's original score.[62] Instead, Wilson and the rhythm section improvised this breakdown at the piece's premier performance, to which Schneider responded by conducting the section at measure 97 very slowly. Originally, this was supposed to be performed in much the same way as earlier sections underscoring Wilson's solo, but Schneider and the band liked this change so much that it has since been written into the score.

The atmosphere here is unsettled and unstable, but this moment of calm in the middle of the storm lets us feel the transformed atmosphere that Schneider writes about in her story—the green-tinged, surreal atmosphere of another world. She even seems to suggest that there are birds in the sky, braving the harsh winds. At several points, she uses what I

[62] "Maria on Nimbus", 8:43–9:08.

Example 7 – The Bird Motive.

a) – Schneider, "Cerulean Skies", trumpet melody, mm. 60–61.

b) – Schneider, "Nimbus", mm. 97–105 (.

refer to as the 'bird motive', a theme that appears in several pieces on her *Sky Blue* and *The Thompson Fields* albums. I discuss this motive further in the chapter on "Cerulean Skies", of which birds are the primary focus, but it will suffice here to note that this device is characterised by its use of a single pitch reiterated several times without interruption, and frequently—though not always—ending in a three-note melodic tag that ascends from the first note to the second and the third pitch usually drops below the first (Examples 7a and 7b). If these are indeed meant to represent birds, however, the atmosphere seems to prove troubling to them. Here, each instance of the motive is harmonised in dissonant parallel intervals. For instance, the initial iteration by piano at 6:15 (measure 97) is harmonised in minor ninths, as are the flute and clarinet at 7:04 (measure 117). Further, though it maintains the harmonic dissonance of earlier sections, here (6:15) the voicings are sparser and more widely spaced than any previous section. The atmosphere is thin and "surreal"—a favourite word of Schneider's for describing many aspects of her hometown—and certainly other-worldly. Schneider once again returns to rhythmic disunity, explicitly in her notation this

time, displacing instruments' entrances and movements by eighth notes or subdivisions of quarter-note triplets.

As the storm dies away in the final measures of the piece, the brass decrescendos into silence over the tense interlude figure. But dissipation is not the same as resolution, and the final resolution to the tonic remains coloured by the storm as it retains the B♮ flatted-fifth/raised-fourth. The delicacy of Wilson's rippling texture and Kimbrough's final chord do not mask the effect that the storm has had on the world. Schneider and her ensemble do not attempt to tame the storm, nor do they attempt to hold it at bay so that the listener can hear it from a position of safety. Instead, they try to capture all at once its multifaceted character—its violence, its uneasy atmosphere, and its awe-inspiring power. The tornado is not swept away by a sunny major key like the storm that torments Beethoven's happy farmers in his sixth symphony. Here, when the tornado dissipates, the atmosphere is left changed by the extreme weather. But neither does the storm "[obliterate] its perceiving subject" as Grimley hears in *Tapiola*. Schneider instead leaves the listener to sit for a moment in the transformed environment and contemplate the process just undergone. It is only in a footnote that Grimley notes Ingold's insistence on the mutual immersion in the "dynamic process of world-formation" of "*both* perceivers *and the phenomena they perceive*",[63] but in my own reading of "Nimbus", taking into account Schneider's statements on it, mutual immersion is at its core. Schneider had to follow her mother out into the open air to experience the tornado-in-formation. Additionally, loving the Land may sometimes mean learning to love, or to at least appreciate, the often inconvenient and occasionally outright dangerous aspects of it.

[63] Ingold, "ESWW", S28. Quoted in Grimley, "Music, Landscape, Attunement", 398.

As mentioned in previously, 'place' is one of the stickier topics in environmental criticism, because, on the one hand, it encourages responsible stewardship of a given space, and care for one's place of identification has great potential for fostering wider ecological awareness and concern. But on the other hand, it may foster insularity, and, when taken to its extreme, place-identification is often the roots of nationalism.[64] But Schneider's acknowledgment of the place-making capabilities of weather points to a more complex understanding of what makes a space into a place. To acknowledge the weather's power to both physically and metaphorically shape a place, one must also recognise the artificiality of that place's borders. Weather occupies a liminal space between the global and the local. Unpredictable weather may constitute a considerable part of Windom's particular character for Schneider, but the wind blows freely across borders, political and social alike. It seems clear that Schneider has thought about this a great deal, as it is a theme that she has explored through other pieces as well. In the next chapter, we shall see how she imagines a borderless society through her love of birds in her piece "Cerulean Skies".

[64] See Schama, *Landscape and Memory* for an extended discussion of the relationship between landscape and national identity by way of a study of landscape painting.

CHAPTER 4 – "CERULEAN SKIES"

It seems only 'natural' for human musicians to personally identify with birds. With the exception of some species of whales, it is difficult to think of any other kind of non-human animal whose vocalisations are thought by us to have musical qualities, particularly melodic qualities. Unlike whales, however, birds can be found nearly anywhere. And despite the longstanding philosophical/theoretical debate over whether birdsong can really be considered music,[65] Western composers have long found musical inspiration in avian song and their representations can be found throughout the canon—Beethoven's aforementioned 6th symphony, Camille Saint-Saëns's *Le carnaval des animaux*, and, most famously, numerous works by Olivier Messiaen, including *Catalogue d'oiseaux* and *Quatuor pour la fin du temps*, to name but a few. Certainly, there are vast quantities from beyond the canon as well, and even more from beyond the West. Steven Feld's landmark ethnomusicological work *Sound and Sentiment*, for example, studies "sound as a cultural system … among the Kaluli people of Papua New Guinea",[66] a central component of which is their engagement with birds and with their music.

But music is not the only means by which we engage with birds in our everyday lives, though they have certainly become absorbed into our cultural system. Our everyday speech is replete with bird-based metaphors, analogies, and aphorisms, just as our culture is shot through with bird symbolism. Consider such phrases as "free as a bird", "crazy as a loon", "a bird in the hand is worth two in the bush". Consider also the symbolism of the American bald eagle, the white dove of peace, and the romantic imagery of swans. Even such

[65] See Leach, *Sung Birds* and Herzog, "Do animals have music?".

[66] Steven Feld, *Sound and Sentiment: Birds, Weeping, Poetics, and Song in Kaluli Expression* (Philadelphia: University of Pennsylvania Press, 1982), 3.

innocuous phrases as "bird's-eye-view" and "as the crow flies" can illustrate the ways in which our understandings of these animals, based in their representations, can shape our understanding of the world. But even more than that, these phrases and images shape how we understand the animals themselves. In the very first lines of his influential book *Picturing the Beast: Animals, Identity, and Representation*, animal studies scholar Steve Baker challenges the reader "to envisage the whole of the culture … of which we are a part, and then call to mind all the ways in which animals figure in its everyday operation".[67] This is an invitation to consider several things at once: the sheer number of ways in which animals figure being the most obvious; but also to consider how little our ideas of animals have to do with the real-world animals in question, and to "consider what such representations might reveal about attitudes to animals and to other humans".[68]

In her Grammy award-winning piece "Cerulean Skies",[69] Schneider seeks to represent a number of themes surrounding migratory birds and their long journeys. Schneider's own personal relationship with and understanding of birds is decidedly complex. Since childhood, she has often shared space with birds. "We had birds", she tells jazz critic Ben Ratliff, "we had a pet goose, we had crows. My mother used to set the wings of birds and stuff. We had a house full of animals".[70] In an interview with the Cornell Laboratory of Ornithology magazine *BirdScope* (now *Living Bird*), she tells of one particular bird, a Canada goose that had been injured as a gosling and never learned to fly, that her mother took in.[71] The goose

---

[67] Steve Baker, *Picturing the Beast: Animals, Identity, and Representation* (Urbana: University of Illinois Press, 2001), 3.
[68] Ibid.
[69] 2008—Best Instrumental Composition.
[70] Ben Ratliff, *The Jazz Ear: Conversations Over Music* (New York: Times Books, 2008), 84.
[71] Pat Leonard, "An Interview with Maria Schneider, Jazz Composer," *BirdScope* (Autumn 2010): n.p., accessed January 16, 2018, http://www.birds.cornell.edu/Page.aspx%3Fpid%3D1955.

became like a member of the family, and Schneider's father would take the bird on flights with him in his small personal aircraft. Not all her bird stories are quite so charming, however. She was also exposed to the harsher realities of animal life, such as an occasion on which her mother tried to introduce a mate for one of her rescue birds, only for the rescue to peck its prospective mate to death.[72] Despite her emphasis on the nicer aspects of avian life, she is not naïve to their realities.

As an adult now living in New York City, birds are less a part of her everyday domestic life, but she maintains contact in other ways. She has a close relationship with above mentioned Cornell Lab, pointing listeners to their website as often as possible in liner notes and interviews, and at one point she sat on their advisory board. (She jokes to journalist Zachary Woolfe that she cares more about the Lab than about music.)[73] She is also an avid birder. Living a short distance from Central Park on Manhattan Island, she often proclaims that she lives next to one of the best birding sites in the world. The Park is also an important stopover site for many birds migrating from South America, and because of this it serves as a key inspiration for "Cerulean Skies".

The piece that would eventually become "Cerulean Skies" was commissioned by prominent opera and theatre director Peter Sellars for his New Crowned Hope festival in Vienna, celebrating the 250th anniversary of Mozart's birth, and it received its world premier at the Wiener Konzerthaus.[74] The festival was a part of the city's much larger Mozart 250 celebration, though almost none of that composer's music was performed. Sellars' idea, rather, was that contemporary artists would compose works in the *spirit* of Mozart, following

[72] Zachary Woolfe, "Prairie Jazz Companion." *New York Times Magazine*, April 14, 2013, 23.
[73] Ibid.
[74] Schneider, "Cerulean Skies" Score, title page.

especially the popular conception of him as socially progressive.[75] Drawing inspiration from Aldo Leopold's descriptions of migrating plovers as "[proving] again the age-old unity of the Americas",[76] Schneider imagines migratory birds as "world citizens" and "examples of community", which she describes as "the most inspiring force of nature I know".[77] The idea of animals as models for human society and moral behaviour is certainly not new,[78] but Schneider's piece is nevertheless conceived as a political statement, very much in line with late eighteenth-century notions of fraternity and, thus, in line with popular conceptions—whether true or not—of the political Mozart. Moreover, it is a celebration of avian life, written by a woman for whom birds are a true and genuine passion.

The above quotation from Leopold and Schneider's assertions about world citizenship and the inspirational force of community once again lend credence to the influence of a land ethic on her music. "Cerulean Skies" imagines humans and birds not only as co-inhabitants of the world, but as fellow citizens. In contrast to the pieces discussed previously, this piece follows a more narrative-driven programme, though it is no less rooted in emotional engagement with its represented subjects. In the following analysis I examine how the piece and the orchestra's performance of it expresses a concern for the birds as beings with their own interior lives separate from humans, and as fellow citizens of the world.

---

[75] The name of the festival is itself tied to the public perception of Mozart. It refers to the name of a Masonic lodge to which he supposedly belonged—*Zur neugekrönten Hoffnung*. Though many current scholars now reject claims of his Freemasonry, it nevertheless remains firmly ingrained in the public imagination of the man.

[76] Leopold, *Sand County Almanac*, 35. Quoted in Schneider, "Inspirations for 'New-Crowned Hope' Commission".

[77] Schneider, "Inspirations for 'New Crowned Hope' Commission".

[78] See Isenberg, "The Moral Ecology of Wildlife".

Musical Analysis

"Cerulean Skies" announces its avian theme almost immediately from the outset. There is only a short piano phrase before the first instance of a bird-like sound can be heard. This is saxophonist Rich Perry imitating a mourning-dove using a wooden bird whistle, the pitch of which he bends using his cupped hand.[80] Piano figures and bird calls alternate several times with each bird call being performed by a different musician. Trumpeter Ingrid Jensen follows Perry, playing another wooden whistle, the origin of which is unknown, as is the particular species that it is meant to imitate. Schneider describes it as having a spring-loaded component that causes the pitch to waver in a very bird-like fashion. Schneider herself performs the next call on a nose whistle given to her by a Brazilian musician. This call is quite intricate with its falling grace notes and rapid cascades, and her deep knowledge of the intricacies of bird calls and songs clearly informs her brief performance. Imitations of calls and songs begin to pile one on top of the others, constructing an imaginary musical forest that is home to species who would never otherwise encounter one another, though Schneider nevertheless imagines it as somewhere in South America.[81] She openly admits to the fantasy of the piece, but as we shall see throughout this chapter, her fantasy should not be confused with lack of concern for the real living beings themselves.

The birdsongs represented here do not seem to aspire to the same level of fidelity as Messiaen's transcriptions, which, despite their compromises, often appear in ornithology textbooks where they are treated seriously as interesting-but-flawed examples of earlier transcription methods, before the development of the sonic spectrogram.[82] Instead, they

[80] Schneider provides access on ArtistShare to audio of the introduction's bird sounds in isolation along with her commentary to purchasers of the *Sky Blue* CD.
[81] Maria Schneider, Liner notes to *Sky Blue* by the Maria Schneider Orchestra, ArtistShare, 2007, CD.
[82] Marler, "The Science of Birdsong: The good old days" is one such example.

tend towards conveying within the context of the jazz orchestra the *idea* of birdsong. However, one should not assume, because of the lack of specificity in these representations, that Schneider is not fully attuned to the particulars of the sounds of individual species. Indeed, she demonstrates such attunement in a video produced by the Cornell Lab, "Birds Got Swing", in which she challenges virtuoso jazz vocalist Theo Bleckmann to imitate as best as he can the sounds of various species.[83] Their discussion is lively as the two excitedly dissect and analyse the calls and songs, taking note of even the subtlest of elements such as a slight "wind sound" in the strange gulp-like sound of the American bittern (a bird native to the American Midwest). By electronically altering the pitch and speed of his imitations, Bleckmann is able to reproduce their sounds with startling accuracy. In a behind-the-scenes/follow-up article, Annalyse Moskeland places the spectrograms of both the original field recordings and Bleckmann's imitations side by side and, except for the greater harmonic density of his voice, the two are remarkably similar.[84] Though much of these discussions were left out of the video's final edit, Moskeland notes that the pair "[approached] each vocalisation much like a piece of music, the professional musicians identified tritones, glottal stops, swing rhythms, and baroque ornaments" (only the discussion of swing rhythms is included in the final video).

Tritones and baroque-style ornaments feature prominently in the representations via musical instruments heard in the introduction, beginning at 0:43. The piccolo figure at 0:51 begins with an ascending tritone from D♭ to G, leaping upward to a flutter-tongued, and

[83] "Birds Got Swing," *All About Birds*, accessed September 6, 2017. https://academy.allaboutbirds.org/features/birdsong/birds-got-swing.
[84] Annalyse Moskeland, "Behind the Scenes of Birds Got Swing," *All About Birds*, last modified 2014. https://academy.allaboutbirds.org/behind-the-scenes-of-birds-got-swing/.

thus very bird-like, E♭.[85] The phrase ends with a baroque-esque trill. Other such baroque ornaments come in the form of grace notes approaching pitches from above or below by wide intervals, such as the clarinet line around 1:20,[86] in which C6 leaps down by a major sixth to E♭5. Similar grace note figures appear throughout the piece as well, such as the dramatic flute-led line 3:56 (measure 60) which has performers sweeping upward by two consecutive perfect fifths to the target pitch at the beginning of each phrase.

The bird-like figures of the introduction are markedly distinct from the underlying harmony. While the piano, bass, and accordion firmly establish an A Mixolydian backdrop, the instruments acting as birds play figures based largely on triads foreign to that tonal centre. The aforementioned piccolo line, which is taken up and altered by other instruments, exemplifies this. Its rising opening ends on E♭ (enharmonically D♯), the raised fourth relative to A, which it then follows with arpeggiated A♭ and G♭ major triads. Like the piano solo in "The Thompson Fields", their non-conformity to their harmonic environment gives them the impression of floating above it. Two ways in which environmentally-attuned listeners might hear this are—firstly, as a statement that animals, though beautiful in their own right, are not mere ornaments for the environment. Though Schneider speaks passionately about the birds' aesthetic beauty, referring to them as "little jewels" on multiple occasions, at no point does she indicate that this is their sole source of value for her. Rather, when heard in the context of her overall feelings towards them, it is clear that aesthetic appreciation is only one dimension of her appreciation for them. Secondly, this might be heard as a sort of musical realism, such that environmental sounds (including bird sounds)

[85] In the score, the measures of the introduction are given letters rather than numbers. Measure 1 marks the entrance of the main theme, 1:45 on the recording. Additionally, the introduction is notated entirely in concert pitch.

[86] This may be difficult to hear on the recording as it is embedded in the dense texture of the musical forest. However, it is clearly present in the score.

Example 8 – Schneider, "Cerulean Skies", Main piano figure (1:45), mm. 1-8.

do not conform to a key. But such dissonance does not have to be heard as cacophony. Moreover, their separation from the harmonic environment asks the listener to understand them as entities in themselves rather than as ornamental features of that environment.

"The first idea I conceived in *Cerulean Skies* [*sic*] brought to mind the earth—fertile earth full of trees and life", writes Schneider.[87] She refers here to the main theme, performed in unison (excepting the piano's left hand) by piano, guitar and accordion, first appearing at 1:45 (measure 1—Example 8). She writes of how she wanted the piece's opening minutes to evoke the feeling of a forest gradually opening up at the start of a new day as birds add their voices one by one to the dawn chorus. This she seems to do twice, first in the rubato introduction with its more literal representations of bird sounds, then again beginning at 1:45 as the calls are abstracted into melodies which she adds to the texture one by one. The first voice to join is vocalist Luciana Souza, who enters at 2:08. This line sounds lower than the already low upper voice of the piano figure, and she sings it in a breathy voice that makes it difficult to hear as a distinct counter-line, though it reappears much later in the piece in a

[87] Schneider, Liner notes to *Sky Blue*.

more prominent role. Nevertheless, the line's presence adds richness to the texture here. This is then followed by the brass (first only the trombones, the trumpets joining in after three measures) taking over the main figure. Similar to the layering of birdsong in the introduction, Schneider continues to layer melodies, culminating in the angular countermelodies beginning at 3:37 and 3:55 (mm. 52 and 60), which can quite appropriately be described as "soaring". Schneider and her band surround the listener with birds, filling the sonic space with imitations and representations until it is nearly saturated.

A distinction can be made between this piece's representation of birdsong/calls and its melodic allusion to birdsong. Schneider favours particular timbres for representation, especially accordion, flute and piccolo, high reeds—soprano saxophone and clarinet—and harmon-muted trumpets or trombones. Each of these contributes its own unique timbral elements. Returning to Moskeland's comments on the harmonic content of Bleckmann's voice, she notes that recent research shows that, while the avian voice box produces harmonically rich sounds, just as the human voice box does, many birds have some physical mechanism that filters those overtones out, resulting in a "pure tone".[88] This filter, however, is not well understood at this time. Such harmonically "pure" instruments as the flute and piccolo, then, are ideal for representing the sounds of many of these birds, especially small birds. Other bird sounds are more harmonically rich, though the reedy timbre of saxophones and the accordion better represents these sounds than does the punchier and more focused timbre of the unmuted brass instruments. Additionally, at several points, the ensemble is joined by vocalist Luciana Souza, whose human voice highlights the musical-vocal connection between humans and birds.

[88] The article she cites is: Beckers, G. J. L.; Suthers, RA; & Cate, C. (2003) Pure-tone birdsong by resonance filtering of harmonic overtones. *Proceedings of the National Academy of Sciences of the United States of America.* 100: 7372-7376.

The melodic material developed throughout the piece is based largely around a few simple elements—wide interval leaps, arpeggiated triads, and, most importantly, what I referred to in the previous chapter as "the bird motive". To restate, this motive consists of a single pitch reiterated several times which may or may not be followed by a three-note tag in which the first pitch ascends to the second and the third drops below the first, as seen in Example 7a. The rapid reiteration of a single pitch is a common element in the calls and songs of a large number of bird species and is remarkably effective for conveying melodically the sounds of a non-specific bird. This motive is pervasive throughout the piece, and it is highly effective in tying together the abstracted birdsong of the piece's melodies with the considerably more realistic—though still quite abstract—representations of birdsong. Because of this, the listener can hear clearly that birds are more than an aesthetic ornament decorating an otherwise abstract musical piece. Rather, they have been absorbed into the piece at a fundamental level.

But these melodies are more than their pitches alone. Just as in the previous two pieces discussed, a sense of motion plays a key role in "Cerulean Skies". But unlike the representations of weather that set the listener in a particular place, here the intent is to musicalize the movements of small birds in flight. The large upward and downward leaps evoke the image of a bird catching a thermal column or pitching downward into a steep dive. There are also moments evoking gliding, as the melody ceases rising and falling for a moment before pitching upward or downward once more. Schneider's ability to effectively capture such movements is informed not only by her experiences watching and being with birds, but also from her personal experiences of flying through the air. Her father had a pilot's licence, necessary for his job as a designer of agricultural machinery, which required

frequent trips to Canada and neighbouring states.[89] This allowed him to take the young Maria on flights in his small personal aircraft. As an adult, she had experienced hang gliding in Brazil, after which she composed her piece "Hang Gliding", whose melodies feature many of the same techniques—wide intervallic leaps interspersed with periods of slow melodic movement—that she would later use in "Cerulean Skies". Her own experiences in the sky help to shape both her musical and her personal relationships with her fellow flyers.

ANTHROPOMORPHISM, EMPATHY, AND IMPROVISING BIRDNESS

The joyous cascades of twittering instruments that follow the melody statement give way to a dark groove in 12/8 time, and tenor saxophonist Donny McCaslin slowly creeps in with his solo. "I tried to make this sort of tense and instinctual", says Schneider.[90] She is speaking of the instinct behind migratory birds' need to fly north to mate during the summer months, and the quiet intensity of this section, beginning at 4:25 (measure 76), feels from the outset as if it is straining to keep from bursting. Her parallel between 'tension' and 'instinct' is interesting, and she uses similar language to describe her means of communicating her intensions to McCaslin:

> I brought one of my bird books to the recording session to inspire Donny with photos of migrating birds. On this page we stumbled upon copulating raptors. In a way it was perfect because I wanted him to imagine millions of birds having the urge to fly north to procreate.[91]

---

[89] Ratliff, *Jazz Ear*, 73.
[90] Maria Schneider, "Maria on 'Cerulean Skies' ", ArtistShare, accessed February 18, 2018, video, part 2 – 7:08, https://www.artistshare.com/v4/fans/ProjectDashboard.
[91] Schneider, Liner notes to *Sky Blue*.

She equates the instinctual drive to migrate in order to procreate/copulate with an *urge*, taking a hard turn from the clinical language of science to the experiential language of human desire and back again. She slips easily between the two, as if avian instinct were directly comparable with human lust. She also does this in her video analysis of the piece, in which she says that her goal was to capture "instinct", before then describing bird mating as a "sex orgy".[92] This sort of anthropomorphic language mixed with non-anthropomorphic language points to some intriguing questions regarding how Schneider views the experiences of birds.

"Anthropomorphism" has gained a reputation as a dirty word, and its modern use is almost always an accusation. The word comes with a variety of different, though related meanings. In its most quotidian sense, the word easily brings to mind memories of any number of Disney and Warner Brothers cartoons, along with countless other instances of talking animals and animal who wear clothes. But "the one most frequently encountered in scientific and philosophical literature", according to Tom Tyler, "…refers to the practice of attributing *intentionality, purpose* or *volition* to some creature or abstraction that (allegedly) does not have these things".[93] Scientific positivism, he alleges, rejects anthropomorphism because it cannot rationally and empirically prove at this point whether animals possess these traits at all, and such assumptions risk damaging perceived scientific credibility. This makes sense for certain kinds of scientific enquiry, however over-application of such proscriptions risks denying animals any traits at all, effectively making them into complex machines. In certain fields, however, this position is losing ground. While it certainly remains a controversial

---

[92] "Maria on 'Cerulean Skies' ", part 2 – 7:00.

[93] Tom Tyler, "If Horses had Hands..." in *Animal Encounters*, ed. Tom Tyler and Manuela Rossini (Boston: Brill, 2009), 14. Italics in the original. Tyler compellingly argues that both positive and negative usage and application of anthropomorphism are inherently anthropocentric, because it presupposes that humans and animals are fundamentally separate categories. His central argument is further down the "posthuman" branch of animal studies than I want to go in this chapter, but his general discussion and dissection of anthropomorphism is illuminating.

position, many ethologists—researchers of animal behaviour—question the prohibition against anthropomorphism. Foremost amongst this contingent, cognitive ethologist Marc Bekoff is a staunch advocate of using anthropomorphic thought and language as a tool to aid in scientific research of animal behaviour and cognition. "As humans who study other animals", he writes,

> we can only describe and explain their behaviour using words with which we're familiar from a human-centered point of view. So when I try to figure out what's happening in a dog's head, I have to be anthropomorphic, but I try to do it from a dog-centred point of view … Being anthropomorphic is a linguistic tool to make the thoughts and feelings of other animals accessible to humans.[94]

The phrase "dog-centred point of view" is crucial here. Uncritical anthropomorphism is damagingly anthropocentric, as it denies animals their subjectivity just as much as rejection of their capacity for emotion. It makes the animal into the observer's image and denies what makes a species—and, indeed, each individual—unique, rather than acting as a bridge between species. "We must make every attempt to maintain the animal's point of view", writes Bekoff; "we must repeatedly ask, 'what is that individual's experience?'".[95] Schneider does exactly that in her commission write-up, which contains a number of questions that run through her mind as she bird-watches:

> I often ask: Where did you journey from? Do the people speak Spanish? Portuguese? Did you ever cross paths with any of my musician friends in Brazil? Do you carry their music in you, songs and sounds you might have picked up? What sounds and smells will feel like home when you return? Will your habitat still be there when you

[94] Marc Bekoff, *The Emotional Lives of Animals: A Leading Scientist Explores Animal Joy, Sorrow, and Empathy - and Why they Matter* (Novato, Calif: New World Library, 2008), 123.
[95] Ibid, 125.

> go back? What on earth are you thinking about on a 3000 km flight in changing winds in a starlit, moonlit sky? Are you exhausted? God, you must be hungry! Is there ever a year where you feel like, 'migration again?!' Can you possibly take this all in stride? Do you worry about finding a mate? Are you simply a creature of instinct, or is there much more?[96]

It is interesting to trace the gradual shift from human-centred questions to increasingly bird-centred ones, as if she is narrating her own evolution from an anthropocentric to a biocentric point of view. The later questions are undeniably based in human emotions, and her anthropomorphising is not always as careful as it could be, but it remains that they are keenly focused on the birds' own subjective experience. Schneider clearly thinks of birds as *subjects*, and the participatory nature of jazz improvisation allows her to demand that her musicians think of them as subjects as well. And though crude anthropomorphism has often been used to reduce humans to a "lower", animal status, Schneider's anthropomorphism seeks understanding of these creatures and treats them as our equals.

Over the course of his long solo, McCaslin captures the tension of the rising sexual urge through his masterful use of *musical* tension. In the early stages of his solo, he makes frequent use of chromatic suspensions, which he resolves slowly. He builds many phrases from a scale sometimes referred to as the symmetric augmented scale, starting on C (C–D♯–E–G–G♯–B), which alternates minor third and minor second intervals. This choice allows him to string together consecutive falling half-steps, avoiding the root and fifth of the underlying 'D13sus' harmony, while emphasising the more colourful notes of the chord. As his solo progresses, McCaslin's side-slipping evolves from melodic to harmonic as he begins

[96] Schneider, "Inspirations for 'New Crowned Hope' Commission".

to arpeggiate full chords and other intervallic structures foreign to the underlying harmony. He is not alone in this, however. Guitarist Ben Monder, who provides chordal accompaniment for the solo, slides his voicings around chromatically. Such chromatic movement must have been what Schneider had in mind when composing this section, because, beginning at 6:34 (measure 88), the brass accompaniments also begin to move downward by half-steps. This chromatic movement, along with the potentially sexual associations suggested by the heavy groove, serves to musicalize Schneider's conception of instinct as tension, a tension which resolves in climactic fashion as the birds take flight and McCaslin soars over top of a new variation of the piece's melody (8:08, measure 128).

McCaslin's interpretation of avian sexual energy must have resonated with Schneider's vision for the solo because he would play a similar role in her later piece "Arbiters of Evolution", from *The Thompson Fields*, a piece which represents the elaborate mating displays of male birds-of-paradise. There, McCaslin and baritone saxophonist Scott Robinson act as two rivals competing for the attention of a female. Though its point of reference is more specific than that of "Cerulean Skies" in that it represents the behaviour of a specific species rather than representing the *concept* of that behaviour, "Arbiters" covers much of the same thematic ground as the piece under consideration here: movement, animal instinct, and animal agency. It develops further this idea of instinct as desire in its suggestion of an aesthetic motivation behind mate choice rather than a coldly objective analysis of desirable genes. In both pieces, Schneider attempts to musicalize the base instinct behind animal mating, but her understanding of instinct is a far cry from the Cartesian mechanomorphism that paints animals as instinct-driven machines whose behaviours are little more than algorithmic output. Instinct, for her, seems to be less of a command protocol and more like something akin to human lust.

Following the wild intensity of McCaslin's solo, the piece makes a dramatic turn in both sound and perspective as Schneider takes the listener up into the open sky and "into the mind of just one small warbler—the consciousness of a single bird amongst thousands of fluttering wings, flying by the light of the stars and moon".[97] The role of that bird is performed by accordionist Gary Versace. Versace's improvisation is full of little flits and darts, and he often leaves long pauses between very short phrases. His very quick, very short phrases give the impression of short bursts of energy, which, like the melody proper, give the impression of alternating between flapping and gliding. It is interesting that Schneider asks Versace to imagine himself as a *single* bird in a flock, when human observers are apt to marvel at an entire flock's ability to seemingly move as a single unit. They trade the awe-inspiring spectacle of the constantly morphing flock for quiet contemplation of what it might be like to be one of thousands, moving together. Music's limitations prevent the listener from hearing to what extent Versace was able to place himself inside that warbler's mind (we

EXAMPLE 9 – SCHNEIDER, "CERULEAN SKIES", PIANO FIGURE BEHIND ACCORDION SOLO (8:51), MM. 146–161.

146 G♭Lyd
Piano
151 B♭Mix(♭6) E♭HarmMin* E♭Mix(♭6)
Pno.
* Incorrectly labeled as Aeolian in score
157 A♭HarmMaj FMix(♭6)
Pno.

---

[97] Schneider, Liner notes to *Sky Blue*.

far more clearly hear representations of its movement), but this radically empathetic gesture surely had some effect on the musician himself.

It is easy to imagine the gently twisting music that surrounds Versace as a flock of thousands, moving together with liquid grace. In contrast to the Lydian- and Mixolydian-based harmonies and melodies throughout most of the piece, this section features its densest and most intricately coloured sonorities, drawn largely from the melodic and harmonic minor modes.[98] These chords are full of tense intervals—tritones, minor seconds—and tense intervallic relationships—flatted sixths immediately adjacent to natural fifths are common throughout. Rather than pulling toward a resolution, however, these tensions are allowed to hang in the air. The lack of steady tempo here and the overall non-functionality of these sounds let the listener hear them as impressionistic colours. (Example 9) The piano voicings remain strictly in treble clef range at the beginning, but lower pitches are gradually introduced as the section progresses. At the same time, the upper voices continue to reach upward, the spaces between the pitches creating the feeling of a vast open space, high above the earth. But Anderson's bass does not tie this to the ground; instead, he interjects short comments in his upper range, usually sliding between pitches. Guitarist Ben Monder fills the sky with clouds of delay- and reverb-drenched harmonics, which he swells into with a volume pedal, thus eliminating the attack.

The qualities of each chord are meant to evoke different qualities of the birds' wings, especially colour.[99] The colours of birds' feathers are formed in two different ways: by pigmentation and/or by structural aspects of the feathers themselves. Pigments are

---

[98] Most chords in this section in the score are labeled with modal designations rather than traditional chord symbols—for example: G♭Lyd, E♭Mix(♭6), A♭Mel.Maj. This is a common practice in notating contemporary jazz composition.

[99] "Maria on 'Cerulean Skies' ", part 3 – 6:10–7:10.

independent of the structure of the feather and absorb all wavelengths except for those of their perceived colour. Structural colours, on the other hand, are the result of the refraction of light caused by inherent structural elements of the feathers and these colours will appear different depending on lighting conditions. Blue feathers, such as those of the cerulean warbler, are almost always structurally coloured.[100] But Schneider further reveals in her video discussion of the piece that composing this section was the source of some anxiety for her, especially regarding the length of time before one chord moved on to another: "It's hard to decide what takes too long—I mean, God, the journey [migration] takes two weeks, you know, so I'm gonna throw it into a few minutes?"[101] This concern does not seem to be hinted at in the resulting music, but such concerns over ultimately invisible details only serve to underline her genuine care for these animals.

---

[100] "How Birds Make Colorful Feathers" *All About Birds*, accessed September 16, 2017. https://academy.allaboutbirds.org/how-birds-make-colorful-feathers/

[101] "Maria on 'Cerulean Skies' ", part 4 – 0:05.

EXAMPLE 10 – SCHNEIDER, "CERULEAN SKIES", CHORALE AND BIRD RESPONSE (REDUCTION – 12:20), 184-203.

184 Eb Ionian

Eb* Eb/G Ab Bb Cm Bb Ab Bb Eb

*Incorrectly labeled Ab in score

190 Eb/G Ab Bb Cm Bb Ab Bb Eb

Pno.

195 Accordion
Soprano Saxophone
Flute

Pno. Eb Mixolydian

199 Add Tenor Saxophone
Clarinet

Pno.

CONTACT IN THE PARK

The Mixolydian colours from the introduction appear once again during the section beginning at 12:21 (measure 185). Here, Schneider juxtaposes an austere chorale-like passage, associated both with holy reverence and human ingenuity, with a second passage which highlights parallel movement and colourful modal harmonies. The chorale itself begins with purely diatonic sounds and represents, according to Schneider, "the stillness of the [Central] Park".[102] More specifically, it represents a particular section of the park called the Ramble, a spot famous among birders for the vast number of different species that pass through during their migrations, with the Central Park Conservancy reporting that over 230 distinct species have been spotted there.[103] This spot is indeed beautiful and its position in the park and the seclusion provided by the vegetation make it, perhaps, the farthest one can get away from the dense urban space of Manhattan without leaving the island. But at 13:04 (measure 195), the beautiful austerity of the chorale is transformed as the birds begin to appear in the park. The harmonic colour shifts from E♭ major to E♭ Mixolydian and the virtual environment comes alive as human-performed bird sounds re-emerge in the mix and a variation of the bird motive is performed by accordion, soprano saxophone, flute, and clarinet (Example 10). The prominence of the minor-ninth interval between the top and bottom voices lends an exotic dissonance to the sound of this figure, emphasising the otherworldly beauty of the birds. The modal continuity creates a link between the imaginary forest of the introduction and the world of Central Park, but the birds seem to carry it with them. As they are absorbed into the fabric of the chorale, they nevertheless retain their identities. This is illustrated by

---

[102] "Maria on 'Cerulean Skies' ", part 4 – 1:45.

[103] "The Ramble" *Central Park Conservancy*, accessed August 8, 2017. http://www.centralparknyc.org/things-to-see-and-do/attractions/ramble.html

Example 11 – Schneider, “Cerulean Skies”, Wilson’s bird-like soprano saxophone line (14:55), mm. 227–230.

Steve Wilson’s soprano saxophone line at 14:55 (measure 228), which utilises the Mixolydian mode following an authentic cadence in E♭ major (Example 11).

Here we shift perspective once more, this time to Schneider’s own. After the birds’ arrival in the Park, we are invited to take part in her excitement at the meeting of the two worlds. The stately rubato of the chorale disappears entirely, as the rhythm section re-emerges with a dancing quasi-buleria, a rhythm in flamenco music. Schneider continues to develop the earlier melodic material, and at measure 248 she shifts the key from E♭ major to C major and she transforms the bird motive into a driving rhythmic theme which then builds into Charles Pillow’s climactic alto saxophone solo.

Pillow’s solo deftly brings together many of the melodic elements of “Cerulean Skies”, including the two previous improvisations—wide intervallic leaps, repeating pitches, McCaslin’s cascading twitters, and Versace’s flitting about. His pervasive syncopation also helps to drive the energy ever forward, as Schneider’s music sends it upward.
Notably, between 17:41–19:34 (mm. 300–347), the key changes 6 times, once every 8 measures, following a repeating pattern of A–F♯–C, before finally settling back into the key of A at 19:34 (measure 348). In an interview with Ben Ratliff, conducted while she was in the process of writing “Cerulean Skies” (Ratliff writes that sketches for the piece were on her

piano), Schneider refers to upward modulation by a minor third as "the flying modulation".[104] While none of the modulations here follow this movement exactly, the minor third relationship of C (above) and F♯ (below) to the axis-point of A suggest that this might be a variation on the basic idea of the "flying modulation". Indeed, each key change feels like an upward lift, even as the music cycles through only three keys. Additionally, while the tonic chord (or a variation thereof) serves as the upper-structure of each chord, the bass always follows a rising cycle of 3–4–5–♭6, so that at no point is the progression ever resolved. In fact, the first resolution to a root-position tonic chord during Pillow's solo comes at 19:43 (measure 352), after the piece has finally settled back into its final key-centre of A. Moreover, the bass motion is such that at each key change it either descends by a perfect fifth (Asus/F–F♯maj7/A♯, Csus/A♭–Amaj9/C♯), suggesting dominant-tonic movement, or rises by a major second (F♯sus/D–C2/E). The result is something like a harmonic Shepard tone, continually modulating upward infinitely while never actually reaching a peak. Pillow responds to this perceived lift by reaching higher into his instruments range (and even beyond the natural range, well into its altissimo register), reaching a higher peak pitch in each successive new key.

"Cerulean Skies" ends where it began—in the impossible fantasy forest. The musical material is virtually identical to that of the introduction, though it takes on a slightly greater intensity following the dramatic material that immediately precedes it. But as the piece fades out, Schneider introduces one more musical element performed by an additional musician: a cerulean warbler. She writes in her liner notes, "[it] is a marvelous and rather rare bird. Though not presently listed as 'endangered,' it is considered by many to be in need of such a

[104] Ratliff, *The Jazz Ear*, 83.

classification. I saw my first and only in Central Park and it was a sight I'll never forget".[105] Since 2004, the International Union for Conservation of Nature (IUCN) has classified the cerulean warbler as 'vulnerable' on its Red List of Threatened Species, better known colloquially as "the endangered species list", and, as of its most recent report in 2016, this classification has not changed.[106] Schneider does not qualify her statement further, but, as 2-3 years had passed between the bird's reclassification as vulnerable and Schneider's writing, it seems reasonable to assume that she believed that such classification did not adequately describe the threat faced by this particular species. But while the word 'vulnerable' lacks the rhetorical urgency carried by 'endangered', it nevertheless indicates that these birds are greatly at risk: "This species has undergone a large population decline of 72% over the last 44 years in North America (-2.8% per year) ... This equates to a reduction of 26% over three generations (10.8 years), assuming exponential decline".[107] Additionally, in its report *The State of North American Birds 2016*, the North American Bird Conservation Initiative (NABCI), an international organization created by the governments of Canada, the United States, and Mexico, rated the cerulean warbler as a 15 on its 20-point scale of conservation concern.[108] This earns it a spot on the organization's Watch List, which includes those species that are at the greatest risk of extinction if significant conservational actions are not taken.

But if the alternative to conservation is extinction, why, then, is Schneider's response to looming apocalypse to write a piece as openly hopeful and celebratory as "Cerulean Skies"? As long ago as 1995, Lawrence Buell observed that "apocalypse is the single most

[105] Schneider, Liner notes to *Sky Blue*.
[106] BirdLife International, "*Setophaga cerulea*" *IUCN Red List of Threatened Species* e.T22721740A94727829 (2016), downloaded September 4, 2017, http://dx.doi.org/10.2305/IUCN.UK.2016-3.RLTS.T22721740A94727829.en.
[107] Ibid.
[108] North American Bird Conservation Initiative "Species Assessment Summary and Watch List", *StateoftheBirds.org*, accessed September 4, 2017, http://www.stateofthebirds.org/2016/resources/species-assessments/.

powerful master metaphor that the contemporary environmental imagination has at its disposal",[109] and this remains the orthodox position to this day. The thinking behind this is that imagination of catastrophe creates a sense of urgency and breeds activists, while appeals to nostalgia set that urgency aside by asking us to think of nice things. Even if it asks us to think about what the world would be like without those "nice" things, the emphasis is squarely on our pleasure. She wants the listener to experience the same excitement that she does when the birds migrate through Central Park in the spring.[110]

As mentioned above, though Schneider shows great concern for the difficulties faced by these animals over the course of their migration, there is little sense of this struggle within the piece itself. The musical tension that gives "Cerulean Skies" its sense of forward momentum does little to reflect the real-world tension inherent in their long and harrowing intercontinental journey. Schneider seems to have left those details outside the frame, accessible only to listeners who search outside of the bounds of the piece. Some may wonder, then, whether such representation may constitute a negative and inauthentic depiction of migratory birds, one which is sanitised and thus reduces them to mere aesthetic objects meant to elicit good feelings in human listeners. Steve Baker, however, questions such pessimistic views, arguing that "in the case of animals, most people's sympathy for them and pleasurable experience of them is grounded entirely in their 'inauthentic' representations".[111] So, while its 'authenticity' is questionable, "Cerulean Skies", with its multiple perspectives and subject positions, exemplifies our complex cultural understanding of avian life, just as it highlights Schneider's own complex understanding of it. Hers is based

---

[109] Lawrence Buell, *The Environmental Imagination: Thoreau, Nature Writing, and the Formation of American Culture* (Cambridge, MA: Harvard University Press, 1995), 285.
[110] Schneider, "Inspirations for 'New Crowned Hope' Commission".
[111] Baker, *Picturing the Beast*, 150-151.

simultaneously in scientific objectivity, personal experience, aesthetic appreciation, and instilled cultural narrative. For Schneider, birds are indeed living, breathing animals with lives beyond where they cross over with the human sphere, while at the same time, she appreciates them for their aesthetic beauty and for their potential to symbolise a model society. This is very much in line with the values of the land ethic, which demands that we acknowledge that other members of the biotic community have lives and experiences beyond our own. And while it may be presumptuous to assume that the experiences of migrating birds are anything like the lives of humans, the community-concept of the ethic asks that we avoid thinking of our non-human neighbours as inherently Other, as opaque as their minds may seem.

It is an open question, then, whether such a nakedly celebratory piece constitutes a "positive" representation of birds, one that is, more so than not, concerned with them as living beings in their own right.[112] Does its overall optimistic outlook unintentionally undermine the ecological impulses that drove Schneider to write the piece in the first place? None of these questions ultimately have answers, and many of them revolve around the question of the "Real" animal, because, after all, questions of representation are irrelevant if they have no impact on a real-world referent. But, as Baker suggests, they do have an impact on the animal, because they have an impact on how we see the animal. Many ornithological books, articles, and websites emphasise the emotional impact of birds and their music on humans. And many, such as Baptista and Keister, who see the combined studies of avian bioacoustics and music in birdsong as a "conservation tool",[113] and West, King, and

---

[112] Baker questions whether such "positive" representation is even possible, because, "[g]enerally speaking, the reality which the positive image purports to depict is nothing more than an aestheticized and romanticized image of nature; it is reality constructed in conformity to our own aesthetic preferences" (*Picturing*, 190).

[113] Luis Felipe Baptista and Robin A. Keister, "Why Birdsong is Sometimes Like Music", *Perspectives in Biology and Medicine* 48, no. 3 (2005): 426.

Goldstein, who argue that "part of the fascination with nature's sounds and music is the opportunity for shared moments",[114] are strong advocates for the kind of empathetic representations we can see behind "Cerulean Skies".

[114] Meredith J. West, Andrew P. King, and Michael H. Goldstein, "Singing, Socializing, and the Music Effect", in *Nature's Music*, ed. Peter Marler and Hans Slabbekoorn (San Diego: Academic Press, 2004), 375, http://dx.doi.org.ezproxy.library.dal.ca/10.1016/B978-012473070-0/50017-7.

CHAPTER 5 – CONCLUSION

The themes I have traced throughout this thesis are by no means confined to only these pieces in Schneider's oeuvre. I have made references at various points to other such pieces, each of which could just as well have been the subject of another chapter: "The Monarch and the Milkweed", "Arbiters of Evolution" (which was included in my original conception, but was cut for length considerations), *Winter Morning Walks*, as well as others I did not mention. It is telling that these themes, while not necessarily apparent at the outset of my project, continued to reassert themselves once they emerged. When I at last began to research Leopold's work, having noted that Schneider had made several references to it, I found considerable resonances between Leopold's most enduring concept and the common themes in Schneider's music that had already made themselves known.

If I could distill a musical land ethic—at least as Schneider writes and her orchestra plays it—down to a handful of musical characteristics, it would be these:

a) An emphasis is placed on immersing the listener in a sonic environment, rather than on presenting an object for the listener to aurally "look" at.

b) Individual musical elements affect one another in such a way that newly introduced elements shape the development of those already present, and vice versa.

c) Composer(s) and performers likewise enjoy a reciprocal relationship, in which all parties recognise that making music is a collaborative process.

Characteristic *a* applies most obviously to "Nimbus", but it can also be applied to the third phase of "The Thompson Fields" and to the imaginary forest of the opening and closing sections of "Cerulean Skies". Characteristic *b* was at the centre of my analysis of "The

Thompson Fields", but it is also reflected in the layers of melody and the transformation of Central Park at the birds' arrival in "Cerulean Skies". And while *c* can be said to be characteristic of jazz in general, its resonance with the non-hierarchical nature of the land ethic suggests that jazz can serve as an ideal generic framework in which to explore these ideas. Of course, these attributes could apply just as well to any number of pieces or any number of collaborative ensembles, but the land ethic was never a list of rules to be followed. Rather, it was and continues to be an ethos, an attitude that informs the ways in which one understands and interacts with the world. Throughout this thesis, the implication has been that compositional and performance decisions are not necessarily neutral, that how a composer or performer chooses to represent an idea, even through as abstract a medium as music, caries the imprint of their own understandings of and attitude toward those ideas. My suggestion is in no way that Schneider consciously writes her music with the land ethic always in her mind; I have no doubt that the opposite is true. It makes more sense that the ways in which she—and other composers and performers—represents aspects of the world through music are informed by a set of values to which she adheres. It is for this reason that it is important to consider the ways in which the environment is transposed into music, especially in the midst of the ongoing climate crisis. In this context, it is encouraging that artists such as Schneider and her orchestra are making music that promotes to a large audience an ecological ethos that aspires toward a non-hierarchical relationship with the other members of their biotic community.

But this sort of analysis is not restricted to explicitly programmatic/representational music either, especially if we consider 'environmental' to mean more than simply 'ecological',

the way most ecocritics now do.[115] Music has always borne at least some relationship to the environments in which it is performed. Even music created specifically for listening in headphones must either fabricate a virtual environment or embrace its placelessness. R. Murray Schafer was keenly aware of the effect that environment has had upon music. He argues that urbanization and the cacophony it brought about was responsible for the development of the concert hall, which allowed for concentrated listening in an increasingly noisy environment.[116] This had an interesting double-effect in which it "simultaneously brought about absolute musical expression and also the most decisive imitations of nature".[117] For Schafer, the musical landscapes of the 18th century were "colourful, exact, and benign", nature "[performing] while [the composer] provides the secretarial services"; while the Romantic composers of the 19th century wrote themselves and their feelings into their virtual musical environments. Urbanisation not only necessitated specially designed spaces for experiencing music, in its pushing the natural world ever further from people's daily lives, it also created a need for a virtual nature within the bounds of the city, a need that musicians sought to fulfill. It is also interesting that he characterises the musical nature-writing of the 18th and 19th centuries the way he does, because it speaks to the point I make above and that has run through this whole thesis: that one's attitude toward and relationship with the natural world has a demonstrable effect on the techniques one uses to render it.

Jazz is largely construed as an "urban" music, and this may account for at least part of the reason why jazz has as yet received little attention from ecomusicologists.[118]

---

[115] Buell, for example, prefers the term 'environmental criticism' over 'ecocriticism', in part because the *eco-* prefix tends to carry a "natural" or "un-built" connotation that simply does not comport with the hybridity at play in our contemporary world. (*Writing*, 11–13).

[116] R. Murray Schafer, *The Soundscape: Our Sonic Environment and the Tuning of the World* (Rochester, VT: Destiny Books, 1994), 103.

[117] Ibid, 104.

[118] I must stress that such a presumption, while not without precedent, is reductive.

Schneider's openness regarding her environmental concerns as well as the unambiguously ecological themes of much of her music have made her an obvious candidate for a preliminary study on this topic, but more can be done. Further ecomusicological studies of jazz would do well to follow a progression similar to that taken by literary ecocriticism and acknowledge that environmental issues affect urban sites as well as exurban ones. In its earliest days, ecocriticism focused almost exclusively on nature-writing and works centred around wilderness and rural locales. But as it matured, it became increasingly interested in the interplay between the two halves of the hoary old dichotomy of "nature" and "culture", neither of which have ever been separate for as long as there has been a culture to speak of. Just as Schneider's music is informed by her relationship to her environment(s), so, too, is the music of other jazz composers and performers. The genre often imagined as reflective of the heavy traffic and small, dark nightclubs of the essential New York City is likewise shaped by its environment. Pulling back even further, if we consider environment as not only literal space/place, but also social space (a critical ingredient in place-making and -identification), we can see how the environmental and the social are once again connected. Further ecomusicological studies of jazz must also consider the interrelation between race and environment, emblemized by the twin connotations of jazz as urban and urban as black, and also how race and environment collide in the concepts of environmental justice and toxification. My hope is that this work will serve to open up further discussion on these important topics.

Finally, I must acknowledge the profound role that the music of the Maria Schneider Orchestra and all the writings I have read over the course of this project have played in developing my own ecological consciousness. My emphasis on the importance of ecocritical analysis of music is a direct result of my own engagement with this sort of work. It is more

important now than ever that we examine our own conceptions of what it means to exist in the world and to seek to understand our place within the biotic community.

Bibliography

Included among the secondary sources are a number of books and articles that, while not referenced specifically in this text, had such a profound influence on my thinking on these topics that it would seem wrong to exclude them.

Discography

Maria Schneider Orchestra. *Sky Blue—LTD Edition.* ArtistShare AS0065, 2007, compact disc.

———. *The Thompson Fields.* ArtistShare, 2015, iTunes.

Schneider, Maria and Dawn Upshaw, *Winter Morning Walks.* With the Australian Chamber Orchestra and the St. Paul Chamber Orchestra. ArtistShare, 2013, iTunes.

Primary Sources

Scores and writing

Schneider, Maria. "Cerulean Skies," Self-published via ArtistShare, 2006.

———. "Nimbus," Self-published via ArtistShare, 2010.

———. "The Thompson Fields," Self-published via ArtistShare, 2010.

———. "Inspiration for 'New Crowned Hope" Commission." Unpublished document, n.d. PDF.

Video

Access to all videos on Schneider's ArtistShare site requires purchase of the corresponding study score. Additionally, all videos share an identical URL.

Schneider, Maria. "Maria on 'Cerulean Skies'." Streaming video. ArtistShare, n.d. https://www.artistshare.com/v4/fans/MyExperience.

———. "Maria on 'Nimbus' - Study Score." Streaming video. ArtistShare, n.d.

———. "Maria on 'The Thompson Fields' - Study Score." Streaming video. ArtistShare, n.d.

Schneider, Maria and Frank Kimbrough. "Frank Kimbrough on 'The Thompson Fields'." Streaming video. ArtistShare, n.d.

Interviews

Leonard, Pat. "An Interview with Maria Schneider, Jazz Composer." *Birdscope* (Autumn 2010, 2010): January 16, 2018. doi:http://www.birds.cornell.edu/Page.aspx%3Fpid%3D1955.

Tutt, Paige. "Maria Schneider: Music is about Life." *JAZZed* 11, no. 3 (2016): 12-14,16-17.

Woolfe, Zachary. "Prairie Jazz Companion." *New York Times Magazine* (2013): 20-23,6.

SECONDARY SOURCES

"How Birds make Colorful Feathers." AllAboutBirds.org. Accessed September 16, 2017. https://academy.allaboutbirds.org/how-birds-make-colorful-feathers/.

"The Ramble." Central Park Conservancy. Accessed August 8, 2017. http://www.centralparknyc.org/things-to-see-and-do/attractions/ramble.html.

Allen, Aaron S. "Ecomusicology: Bridging the Sciences, Arts, and Humanities." In *Environmental Leadership a Reference Handbook*, edited by Deborah Rigling Gallagher, 373-381. Thousand Oaks, CA: SAGE Publications, 2012.

Allen, Aaron S., Daniel M. Grimley, Denise von Glahn, Holly Watkins, and Alexander Rehding. "Colloqui: Ecomusicology." *Journal of the American Musicology Society* 64, no. 2 (2011): 391-424.

Armbruster, Karla and Kathleen R. Wallace. *Beyond Nature Writing: Expanding the Boundaries of Ecocriticism*. Charlottesville: University Press of Virginia, 2001.

Baker, Steve. *Picturing the Beast: Animals, Identity, and Representation*, Illinois Paperback ed. Urbana: University of Illinois Press, 2001.

Baptista, Luis Felipe and Robin A. Keister. "Why Birdsong is Sometimes Like Music," *Perspectives in Biology and Medicine* 48, no. 3 (2005): 426-443.

Bekoff, Marc. *The Emotional Lives of Animals: A Leading Scientist Explores Animal Joy, Sorrow, and Empathy—and Why They Matter*. Novato, CA: New World Library, 2008.

BirdLife International. "Setophaga Cerulea." *IUCN Red List of Threatened Species* no. e.T22721740A94727829 (2016): September 4, 2017. doi: http://dx.doi.org/10.2305/IUCN.UK.2016-3.RLTS.T22721740A94727829.en.

Black, Jane. "Smarter Food: Does Big Farming Mean Bad Farming?" *The Washington Post*, August 27, 2013,

https://www.washingtonpost.com/lifestyle/food/smarter-food-does-big-farming-mean-bad-farming/2013/08/26/fb1cbb94-0b7f-11e3-9941-6711ed662e71_story.html?utm_term=.adde4ebd864a.

Buell, Lawrence. *The Environmental Imagination: Thoreau, Nature Writing, and the Formation of American Culture.* Cambridge, MA: Belknap Press of Harvard University Press, 1995.

———. *The Future of Environmental Criticism: Environmental Crisis and Literary Imagination*. Malden, MA: Blackwell, 2005.

———. *Writing for an Endangered World: Literature, Culture, and Environment in the U.S. and Beyond.* Cambridge, MA: Belknap Press of Harvard University Press, 2001.

Casey, Edward S. *Representing Place: Landscape Painting and Maps*. Minneapolis: University of Minnesota Press, 2002.

Clarke, Eric F. *Ways of Listening: An Ecological Approach to the Perception of Musical Meaning.* Oxford; New York: Oxford University Press, 2005.

Coupe, Laurence, ed. *The Green Studies Reader: From Romanticism to Ecocriticism*. London; New York: Routledge, 2008.

Doyle, Peter. *Echo and Reverb: Fabricating Space in Popular Music Recording, 1900-1960*. Middletown, CT: Wesleyan University Press, 2005.

Feld, Steven. *Sound and Sentiment: Birds, Weeping, Poetics, and Song in Kaluli Expression.* 3rd ed. Durham, NC: Duke University Press, 2012.

Garrard, Greg. *Ecocriticism*. 2nd ed. London; New York: Routledge, 2012.

Gifford, Terry. *Pastoral.* London; New York: Routledge, 1999.

Givan, Benjamin. "Gunther Schuller and the Challenge of Sonny Rollins: Stylistic Context, Intentionality, and Jazz Analysis." *Journal of the American Musicological Society* 67, no. 1 (2014): 167–237, DOI: 10.1525/jams.2014.67.167.

Grimley, Daniel M. "Music, Landscape, Attunement: Listening to Sibelius's *Tapiola*." *Journal of the American Musicology Society* 64, no. 2 (Summer 2011): 394-398. http://www.jstor.org/stable/10.1525/jams.2011.64.2.394.

———. *Grieg: Music, Landscape and Norwegian Identity.* Woodbridge: Boydell Press, 2006.

———. "Storms, Symphonies, Silence: Sibelius's *Tempest* Music and the Invention of Late Style." In *Jean Sibelius and His World*, edited by Daniel M. Grimley, 186-226. Princeton, NJ: Princeton University Press, 2011.

Heise, Ursula K. *Sense of Place and Sense of Planet: The Environmental Imagination of the Global.* Oxford; New York: Oxford University Press, 2008.

Herzog, George. "Do Animals have Music?" *Bulletin of the American Musicological Society* no. 5 (1941): 3-4. doi:10.2307/829426.

Ingold, Tim, "Against Soundscape." In *Autumn Leaves: Sound and the Environment in Artistic Practice*, edited by A. Carlyle, 10-13. Paris: Double Entendre, 2007.

Ingold, Tim. "Earth, Sky, Wind, and Weather." *Journal of the Royal Anthropological Institute* 13 (2007): S19-S38. http://www.jstor.org/stable/4623118.

Isenberg, Andrew C. "The Moral Ecology of Wildlife." In *Representing Animals*, edited by Nigel Rothfels, 48-64. Bloomington: Indiana University Press, 2002.

Johnson, Bruce. "The Jazz Diaspora." In *The Cambridge Companion to Jazz,* edited by Mervyn Cooke and David Horn, 33-54. Cambridge; New York: Cambridge University Press, 2002.

Johnson, Robert Sherlaw. "Birdsong." In *The Messiaen Companion*, edited by Peter Hill, 249-265. Portland, OR: Amadeus Press, 1995.

Leach, Elizabeth Eva. *Sung Birds: Music, Nature, and Poetry in the Later Middle Ages.* Ithaca: Cornell University Press, 2007.

Leopold, Aldo. *A Sand County Almanac, and Sketches here and there*. Special commemorative ed. New York: Oxford University Press, 1989.

Marler, Peter. "The Science of Birdsong: The Good Old Days." In *Nature's Music: The Science of Birdsong*, edited by Peter Marler and Hans Willem Slabbekoorn, 1-38: Amsterdam; Boston: Elsevier Academic, 2004.

Marx, Leo. *The Machine in the Garden: Technology and the Pastoral Ideal in America*. New York: Oxford University Press, 1964.

Monson, Ingrid T. *Saying Something: Jazz Improvisation and Interaction*. Chicago: University of Chicago Press, 1996.

North American Bird Conservation Initiative. "Species Assessment Summary and Watch List." StateoftheBirds.org. Accessed September 4, 2017, http://www.stateofthebirds.org/2016/resources/species-assessments/.

Ratliff, Ben. *The Jazz Ear: Conversations Over Music.* New York: Times Books, 2008.

Rehding, Alexander. "Ecomusicology between Apocalypse and Nostalgia." *Journal of the American Musicological Society* 64, no. 2 (Summer 2011): 409-414. doi:10.1525/jams.2011.64.2.409.

Rothenberg, David. *Why Birds Sing: A Journey through the Mystery of Bird Song*. New York: Basic Books, 2005.

Schafer, R. Murray. *The Soundscape: Our Sonic Environment and the Tuning of the World*. Rochester, VT: Destiny Books, 1994. First published 1977 as *The Tuning of the World* by Knopf (New York).

Schama, Simon. *Landscape and Memory*. New York: Vintage, 1995.

Schuller, Gunther. "Sonny Rollins and the Challenge of Thematic Improvisation." In *Keeping Time: Readings in Jazz History*, edited by Robert Walser, 212-222: New York: Oxford University Press, 1999.

Soper, Kate. *What is Nature? Culture, Politics and the Non-Human*. Oxford; Cambridge, MA: Blackwell, 1995. Reprinted 2000.

Suthers, Roderick A. and Carel Ten Cate. "Pure-Tone Birdsong by Resonance Filtering of Harmonic Overtones." *Proceedings of the National Academy of Sciences of the United States of America* 100, no. 12 (2003): 7372-7376. doi:10.1073/pnas.1232227100.

Tyler, Tom. "If Horses had Hands..." In *Animal Encounters*, edited by Tom Tyler and Manuela Rossini, 13-26: Leiden; Boston: Brill, 2009.

Von Glahn, Denise. *The Sounds of Place: Music and the American Cultural Landscape.* Paperback ed. Boston: Northeastern University Press, 2009.

———. *Music and the Skillful Listener: American Women Compose the Natural World*. Bloomington: Indiana University Press, 2013. Google Play Books.

Watkins, Holly. "The Pastoral After Environmentalism: Nature and Culture in Stephen Albert's Symphony: RiverRun." *Current Musicology*, no. 84 (Fall 2007): 7-24.

West, Meredith J., Andrew P. King, and Michael H. Goldstein. "Singing, Socializing, and the Music Effect." In *Nature's Music*, edited by Peter Marler and Hans Slabbekoorn, 374-387. San Diego: Academic Press, 2004. doi: http://dx.doi.org.ezproxy.library.dal.ca/10.1016/B978-012473070-0/50017-7.

Will, Richard. *The Characteristic Symphony in the Age of Haydn and Beethoven*. Cambridge: Cambridge University Press, 2004.