

# Ambient culture: coping musically with the environment

**Marcus Maeder**

Zurich University of the Arts ZHdK

Institute for Computer Music and Sound Technology ICST

Zurich, Switzerland

marcus.maeder@zhdk.ch

## ABSTRACT

Since its creation by the composer Brian Eno in 1976, the term *ambient* has undergone significant change. The musical style *ambient* has developed into a framework of reception and terminology within which digital electronic music as well as visual art are conceived and received. The term *ambient* opens up a context of artistic and social practices reflecting a reality that is increasingly transported via and created by media technologies. Using as point of departure biologist Jakob von Uexküll's concept of »Umwelt« which postulates a world-generating context of body, cognition and environment, modern constructions of immanence are examined: *Ambient* as a sort of mimetic ceremony produces extremely complex yet coherent images of the world. The study develops a phenomenology of the sounds found in current *ambient* music as well as associations and meanings elicited by them. *Ambient* is a compound of spaces in which a reflection of the world takes place, created through artistic, social, geographical and increasingly virtual devices. The idea of space as the expansion of thought, enclosing its infinite movements as an absolute horizon is implied by the concept of the plane of immanence proposed by Gilles Deleuze and Félix Guattari. In *Ambient*, a soundtrack of immanence is created, a polyphonic sound of the environment as we experience it, which renders the world in its diversity imaginable and experienceable.

## 1. INTRODUCTION

Current discourses in philosophy and the arts aiming for new approaches in our relationship to the world (currently negotiated under terms like *speculative realism*, *object-oriented ontology (OOO)* and *environmental aesthetics*) resume subjects (ourselves) and objects (the world) as a whole, following a long subject-centered period in continental conceptions of the world. A new object-oriented shift in epistemology is emerging, putting the still common idea of the subject as the sole »worldmaking« [1] instance into question. How we can embed ourselves into the world theoretically and ethically, is the central issue in discourses that encompass concepts of immanence. The discussion gained importance facing the catastrophic changes in our environment caused by human civiliza-

tion. Developing new and different ways of reference to the world seems inevitable. The arts, and music in particular, could play a key role here: Recent digital electronic forms of art and music, having evolved in areas between the artistic disciplines during the last years, possess – with all their inconsistency – the potential to produce immanence. Immanence is an old and powerful idea in philosophy – it places our thoughts and concepts back on earth (as the framework of all possible knowledge) and denies transcendent(al) conceptions of the world (such as metaphysical, religious or subjectivist substantiations). Immanence, as the French philosopher Gilles Deleuze and the psychiatrist Félix Guattari wrote in the 1990s, is a dangerous idea: »It engulfs sages and gods« [2]. – Here, the link from artistically created, immersive spaces of reflection to immanence as the philosophical dimension behind them implies to aim for a more intense and undivided relationship to the world and its objects.

## 2. UMWELT

*Ambient/Ambiente* according to its etymology denotes the circumjacent, the environment, a *milieu* of things and states. A modern, still authoritative definition of the term »environment« was formulated by biologist, philosopher and zoologist Jakob von Uexküll a hundred years ago in his book *Umwelt und Innenwelt der Tiere* (Environment and inner world of the animals) [3]. Uexküll is seen as the father of biosemiotics, an interdisciplinary field of study in which communication, signs and their meanings in living systems are explored. According to Uexküll, environment and ambience are differentiated by the latter merely describing the spatial adjacency of objects or organisms, while an environment is largely defined and shaped by living creatures. To Uexküll, a living creature is always partially identical with its environment – an animal's environment is reflected in its inner life, the environment is created through a creature's interactions with it. Uexküll later expanded his holistic descriptions of the environment in the animal kingdom to include the living environments of the human and divided them into »Merk- und Wirkwelten« (worlds of perception and effect) [4] which structure an individual's spheres of experience and action to the most remote level – »the farthest plane«.

Of particular interest in Uexküll's semiotics in biological systems is his concept of an »Erlebniston« (experiencing tone) present in environmental experiences: Using a musical vocabulary, Uexküll describes the meaning things in

our environment take on when we interact with them. The meaning they take on has a »tone« of its own corresponding to the nature of the relationship we establish with things. A group of tones thus becomes a melody, representing the interaction of subject and »Umwelt«:

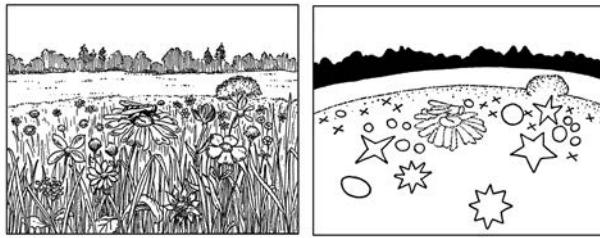


Abb. 23. Umgebung und Umwelt der Biene

**Figure 1.** »Everything that falls under the spell of an Umwelt (subjective universe) is altered and reshaped until it becomes a useful meaning-carrier [5]«.

It is sounds and the simultaneous cognitive categorization of their meanings that make the environment recognizable. In cognitive sciences and artificial intelligence, the term *embodiment* is used to describe reception and consciousness, thus the constitution of intelligence, as an interaction of body and environment. Mental processes and representations are constituted by the history of interactions of body and environment. The world-creating relationship of body, cognition and environment is of great importance for an analysis of the interrelations of body, sound, world and meaning: Ambient experiences are immersion experiences made in symbolic settings rich with signs. These settings aim to achieve immanence: to live (with)in the world, to be a comprehending part of it, to be able to cope with it by correctly interpreting its signs. This goal was affirmed by Marshall McLuhan as early as in the sixties of the twentieth century: »The aspiration of our time for wholeness, empathy and depth of awareness is a natural adjunct of electric technology« [6]. More recent studies in evolutionary music psychology and biomusicology have shown that from the earliest times, man has strived for immanence through means and significances of music [7].

### 3. MIMETICAL CEREMONIES

In its origins, music can be seen as the adaption of human communication to life in larger social groups. There exist several theories about the early origins of music, it has been hypothesized that music evolved from language and that music is its emotional amplification, or that, conversely, language evolved from singing, the musical gesture, or that language and music were predicated by another nonverbal form of communication. We do know for sure, however, that music is at least as old as modern man. From the perspective of evolutionary biology and evolutionary cognitive sciences in particular, music plays an important role in sexual courtship and parental care, it increases coordination, solidarity and cooperation in social groups and enhances the chances of survival through mimetical practices. To this day, music retains many of these attributes.

Of eminent importance for these considerations is the (musical) relationship between subject and environment: The environment had in pre-historical times already been conjured through analogy, mimesis and aesthetical means in order to be able to understand and cope with it in the framework of an immersive setup. This is witnessed by early cave paintings that are mostly found in spots that also have good acoustics. There is good evidence that people aimed to achieve a high degree of immersion, to amplify their »Umwelt« by audio-visual means. Hanns-Werner Heister calls such acts »mimetical ceremonies« [8], a term coined by Georg Knepler [9]:



**Figure 2.** *Pour Your Body Out* (7354 Cubic Meters), an audio-visual installation by Swiss artist Pippilotti Rist at MoMA New York, 2009.

Mimetical ceremonies are a central theme in human efforts to achieve immersion and immanence from the rituals of early tribal cultures – where sound often played a central role, as experience spaces of many historical cultures or so-called »indigenous peoples« are structured acoustically [10] – to present-day music cultures. Present-day ambient culture and digital electronic music<sup>1</sup> show certain analogies to imitating a bird's song through whistling as well as using a rattle to simulate the sound of rain that is to be conjured up in the remote and more recent past: Ambient culture and music can be seen as a celebration of the adoption of the reality which engulfs us, as a modern mimetical hunting charm creating a multisensory ideal reality far from everyday life, existent where electronic/digital music is performed and medial spaces are put into scene, where sequences and patterns of medial functions and medial actions are »incorporated«, meaning they become part of the embodied knowledge of the participants of the ceremony. Ambient and digital electronic music in a transritual way create immanence in a highly technological and fragmented world; they embed us in electricity, communication streams and medial imagery of the world.

<sup>1</sup> The Prix Ars Electronica committee describes »Digital Music« as the making of electronic music and sound art through digital means. The category was formerly known as »Computer Music«. My construction »digital electronic music« aims to include all other genres of today's electronic music into one term.

## 4. THE AESTHETICS OF AMBIENT MUSIC

In order to describe present-day ambient music, one must point out the marked change that »ambient« has undergone since the term was coined by musician Brian Eno in 1976. Ambient as a musical style has evolved into a set of reception modes and terminologies within which electronic/digital music as well as visual arts are conceived and perceived and where »Umwelt« is being reflected. Nowadays, the works conceived within the context of ambient culture are quite different in several respects from the original form of ambient music close to pop culture, the rather esoteric »cosmic music« of the 1970s [11]. In the past few years, ambient art and music presentations have occasionally been classified with terms such as *environmental art* [12] or *ambient poetics* [13]. Several musical forms have evolved that are closer to concepts within the visual arts than pop or orchestral music. Marcus Kleiner called such forms »media music« [14]. If one speaks of media music in the context of ambient, technologies and communication forms hitherto not used in music are involved in the making and contextualization of music: medial artifacts and fragments; design elements, network technology, scientific figures and so on. Thus, the term media music not only denotes the medial, substantial and aesthetical polyphony inherent in ambient, but also technological innovations in music production that have turned media technologies into music technologies (above all, the computer).



**Figure 3.** *Biosphere* (Geir Jenssen) live at State-X New Forms, Paard van Troje, Den Haag, 2013. Photo: Stephan C. Kappa

The fact that ambient has its roots in musical modernity, particularly in »classical« electronic music in the 20<sup>th</sup> century is common knowledge not only with electronic musicians. It is therefore not necessary to relate the development of electronic music since there exists plenty of literature on the subject [15]. More illuminating with respect to sound, meaning and environment would be a description of the sounds and sound structures, the sound techniques, as well as their meanings. In her book on Erik Satie, Grete Wehmeyer refers to these meanings as »association field of musical formulations« [16]: The following paragraphs try to describe the most characteristic musical techniques, the sounds and their connotations in ambient music.

### 4.1 White Noise

Among the omnipresent elements in the »association field« of ambient music is white noise. On one hand it is the paradigmatic sound of a society enveloped by technological and medial cacophonies. On the other hand, our sensual reception, Uexküll's »farthest plane«, relies on white noise which as a kind of conceptual skin separates the unperceivable from the perceivable. All statements on white noise can only be statistical and theoretical. White noise means the moment in which signs cannot any more be individually recognized and interpreted, where they dissolve in the multitude, randomness or remoteness of their appearance. White noise is what lies beyond our perception and our comprehension: »However, as an element intentionally integrated into the structures of (pop) music it can serve as a code for producers as well as the audience, it becomes meaningful nonsense which stands for the perception of an unclear, confusing environment. White noise is, however, not experienced in a negative way or as irritating, it symbolizes a hyper complex environment in which the abundance of sensations does not seem frightening, but is relished by the listener« [17], writes Andreas Kissling.

### 4.2 Clicks & Cuts

Media based communication is shaping our living environment. In the process, a vast number of artifacts and fragments are produced through the use of communication technologies. Communication, the flow of image, music and language is cut, interrupted, distorted or changed by transmission errors. There is clicking, stuttering and pulling in the channels, communication streams are segmented into transmission fragments; they form polyvocal rhythms of content transfer. Increasingly, meaning is established through the individual imaginativeness of the recipient and his ability to interpret. A communication of omission and truncation has evolved (one could refer to this as metaphoricity conditioned by communication technology – E-mailing and SMSing can serve as examples). Digital music uses acoustic fragments and distortions as aesthetic means, this practice has since the 1990s been categorized under *Clicks & Cuts*. The expression was introduced by Achim Szepanski who used it for a series of compilations of his music label *Mille Plateaux*. Along with the »cut«, the »click«, the interference, has likewise become part of the new poetics, of many-voiced microscopic sound aesthetics that honor chance. The use of faulty, distorted sounds and medial fragments can be linked to similar strategies in literature, for example William S. Burrough's »cut-up« technique and in modern arts, Dadaist collages made of newspaper fragments by Kurt Schwitters: Meaning is not anymore created and conveyed exclusively by the artist's hand, but the work's recipient creates context, creates the work through his being involved with his own perception and imagination. Umberto Eco in the 1960s called works of art conceived and functioning in this manner »open works« [18], a term that can also be applied to the structure and experience framework of ambient music.

### 4.3 Drones, Patterns, Loops: Musique d'ameublement

Another element of many ambient works is a kind of constant tone called »drone«. They are mostly found in the lower frequency bands (i. e. the bass), thus their name: It is derived from the drone, the male bee, or rather its humming. Droning is an artistic element of a great number of pieces found in the direct precursor of today's digital electronic music; »Industrial music«, from between the late 1970s and early 1990s. The drone or bordun (French: *bourdon*, Italian: *bordone*) can also be found in European medieval popular music. Every hurdy-gurdy or bagpipe produces a bourdon, a low tonic or a fifth upon which the following mostly improvised sequences are based. In written European music the bourdon was until modern times almost never used, since it does not so much establish a narrative succession of sounds but rather a kind of sounding state. It can be found in classical Indian music where it is produced on the Tanpura and sounds below the lines of the improvising solo instruments, yielding a specific sound that has been reproduced in many new age and esoteric music productions. Of particular interest with respect to the bourdon is its capability to suspend the listener's sense of time and to give the impression of time standing still. It is arguably this quality that makes the use of bourdon attractive in any sacred or meditative music. In ambient settings, the bourdon creates a sonic background, a »tuned« sound space; it charges the room with a basic energy and thus the room becomes different from everyday spaces or situations, it becomes a quasi-sacred room. Sounds similar to the bourdon can be found in late romantic and impressionist music from the 19<sup>th</sup> century, however, the concepts differ greatly: While Richard Wagner used his »unendliche Melodie« to give momentum to a musical tale and bring it to a climax, the younger composers Claude Debussy and Erik Satie were creating »mood music« incorporating sounds without any narrative direction intended to create or evoke a certain mood. Debussy and Satie were fascinated by an Indonesian gamelan orchestra that was performing at the 1889 world exposition. The music it was playing used repetitive patterns that created a constant musical flow. Inspired by this, Satie would experiment with sequencing of musical elements, as with building blocks. Satie in 1920 publicly performed his experiment playing *musique d'ameublement* with Darius Milhaud in a performance at Galerie Barbazange in Paris: Such utility music, functional music, a »tapis sonnant« that succumbs to social activities was not a new thing. For example, chamber music would originally provide the background for aristocratic card games. Satie and Milhaud, however, at the said performance devised a prototypical recipe for ambient music: The musicians were placed in the room in such a way that »the music seemed to be coming from all sides« [19], and they played ritornelli<sup>2</sup> – repeated se-

quences from pieces by Ambroise Thomas and Saint-Saëns. This was not only a modern, but actually a post-modern concept: to use musical loops, i.e. samples of existing music, to create an ambient atmosphere; the public, however, did not understand and the experiment failed.

Repeated sound patterns tend to create a contemplative mood in a musical situation: Satie was inspired by the orational tone he found in Gregorian chant. Loops are akin to the many repetitions in litanies and prayers – the repetition of sound sequences can have an intensifying function and elicit ecstatic states of mind. But loops also generate and transport knowledge; sound sequences and what is associated with them are internalized through repetition. Furthermore, the loop has become a mimesis of mass production in the industrial technological age. Its association field includes machines that produce an unlimited number of artifacts; they produce loops of products and sounds. Technical reproduction has been exerting direct influence on sound and structure in music as well as in the arts in general. In the early 20<sup>th</sup> century this was achieved by mechanical means (wax cylinders and records), then magnetically (the tape without which there would have been no *musique concrète*) and today digitally through »copy and paste«.

### 4.4 Field Recordings

Field recordings, recordings of our living environment were not only used in *musique concrète* but can be found in a lot of recent ambient, and digital electronic music. Over the course of the history of photography and film, a huge set of theories has evolved concerning the recorded and reproduced visual image of the world. Only about half as many studies in the field of media theory or semantics are dedicated to sound recordings as an appendix of film recording. There are studies that deal with semantic aspects of environmental sounds in acoustic ecology – moreover there have been studies in ethnology, bioacoustics and more recently in geography [20].

A lot can certainly be said about sound recording from the perspective of film theory taking into account that similar cognitive fields of association are activated through seeing and hearing [21]. Some of Walter Benjamin's thoughts on film apply to sound recordings in particular: »The characteristics of film lie not only in the way in which man handles the filming device, but in the way in which he uses it to depict his environment. (...) Film has indeed enriched our perceptive world with methods that can be illustrated by referring to those of Freud's theory. (...) It has isolated and rendered analyzable things that before swam unrecognized in the broad stream of what we perceive. Film has led to a comparable deepening of apperception in the area of visual, and now also acoustic, perception« [22].

Sound recordings deepen the acoustic perception and our grasp of our environment; they expand our knowledge of it and allow access to the documentation of its phenomena from everywhere. Frank Hartmann wrote in his book

<sup>2</sup> The ritornello is well-known from baroque music: It is the part of a rondo that in the course of a piece return several times like a refrain. To Gilles Deleuze and Félix Guattari, the ritornello in an expanded conceptual sense is a soundtrack, a melody, an acoustical signature marking a certain territory in nature.

*soundcultures*: »Media in their advanced state of development do not only make reference to the »world« in order to represent it, but new things are created and reality is perceived differently. Computerized media in particular overcome the strict separation of nature and art, they create information aesthetics that do not need the real referential background of a perceivable reality« [23].

## 5. AMBIENT SPACES

Ambient also denotes a physical spatial situation, an installation, a place where ambient situations can be created. To the techno generation such settings are known from the chill-out rooms of the 1990s where ravers would relax after the exertion on the dance floor, listen to relaxing music without beat and occasionally consume drugs. In no time, these chill-out rooms developed into listening rooms, spaces for sound art, since ambient DJs would often play new, hitherto unheard sounds, sounds that soon did not merely create a contemplative atmosphere, but astonish the public and start processes of imagination and immersion. As opposed to the concert hall, music in these spaces is played in the background, non-centrally and omni-directionally. It is an artificial acoustic environment and on a perceptive level merges with conversations, projection of images, lighting and so on. A typical ambient situation:



**Figure 4.** The author in concert at »Club Transmediale«, Berlin, 2004.

Although the artist can be identified as a sort of master of ceremonies operating technical devices, he is not in the center of things, he is part of a situation, part of the equipment, a kind of musical furniture – and this somehow shows in the faces of the public: there are intense mental processes happening in which impressions are concentrated and associations aroused, imagination is triggered. One listens, watches, reflects, and communicates. Physical space, social space, media space, they all create an immersive framework for reception – space in a general sense is an essential element in any ambient setting. Space turns into an artistically conceived repository of a milieu of artistic communication, within the performed music through simulated space as in echo or surround rendering, within the image through three-dimensional representations of space. Through the inte-

gration of the virtual, ambient situations become a combination of real and virtual experiences of space. One could say that ambient fulfills an old desire of the surrealists. André Breton wrote in his first surrealist manifesto in 1924: »I believe in the future resolution of these two states, dream and reality, which are seemingly so contradictory, into a kind of absolute reality, a surreality, if one may so speak« [24]. This quote thus describes contemporary ambient situations created or completed through virtual means of media technology. These are not only made up of spatial/technological simulations, but are conceived artistically, which means that fictitious, invented – possible – elements are part of an immersive experience. The »real« world is expanded to include the possible, the sketch becomes part of a reality imitated through means of media technology. In this way, space and imagination create an emergence that describes our »Umwelt« in a new way.

## 6. IMMANENCE

The path of the thoughts laid out here finally lead us from immersion to its philosophical dimension, immanence. As a situative point of departure, immersion not only describes the degrees of a virtual environment's real perceptibility, but as emergence of a mimetical ceremony, an ambient situation brings forward a comprehensive perception of the world. The immersive mimetical ceremony through analogy puts our perception into context with the world, even though such a ceremony is enacted by separating it from the world. The »celebrated« soundscapes of the world as we experience it, created and performed through media technology aim to convey immanence; a soundtrack of immanence is created, a polyphonic sound of our environment as we experience it, which allows us to experience and imagine our environment in all its diversity. In ambient our time that is strongly marked by technology is being explored and brought to bear fruit aesthetically. Artistic vocabularies operating within it are developed that seem to correspond to a new type of philosophy – a media-related reflection creating meaning and terminology, which sonically and visually formulates and analyses. Imagination, thinking and artistic expression turn into acting in and dealing with the world.

Immanence defines the expansion and relations of thinking as inner-worldly. In the term's long history, a lot of very different concepts of »being one with the world« can be found. As a metaphysical as well as an epistemological concept its history goes back as far as to the stoicists; mostly it is used in the discussion of substance or as dialectical counterpart to transcendence, as well as transcendental/Kantian conceptions of knowledge. In modern times epistemological aspects became more important, as with Deleuze/Guattari in their outline of the *plane of immanence* as part of their »geophilosophy«, a concept of thought within a non-transcendent(al) reflection of the world. The plane of immanence here is the basis of thought, »which would be like the earth, neither moving nor standing still«, since »thinking takes place in the

relationship of territory and the earth» [25]. The plane of immanence is the perception of the world, »being thinking«, »nature thinking«, an absolute horizon of terms and events of the real and the possible, it can be understood as a conception of the environment, as the cosmos that can be grasped by thought which within Uexküll's system of »Merk-« and »Wirkwelten« ideally encloses »the farthest plane«. There are as many levels as there are subjects, they interfere with each other – the plane of immanence is porous, foliated. Under the levels of »here« and »now«, there lie older layers of world conceptions, forming a history of thought:



**Figure 5.** Calcite from the Gonzen mine, *FocusTerra*, Department of Earth sciences, Swiss Federal Institute of Technology Zurich (ETH).

This is what a cutaway of the plane of immanence might look like. Layers of planes superpose each other – »The plane of immanence is interleaved [26] (...), it »is a stratigraphic time where 'before' and 'after' indicate only an order of superimpositions« [27]. Concepts (here as golden inclusions) occupy the planes: »finite movements (...) and each of which constitutes a surface or a volume, an irregular contour marking a halt in the degree of proliferation. The former are *directions* that are fractal in nature (...), whereas the latter are absolute *dimensions*, intensively defined, always fragmentary surfaces or volumes« [28]. Top in the middle is the relative horizon, depending on the subject's position, behind it is the absolute horizon, the »farthest plane«.

For Deleuze and Guattari, the possible, utopic, is constitutive of the plane of immanence: »The word utopia

therefore designates that conjunction of philosophy, or of the concept, with the present milieu – political philosophy [29]«. – a philosophy which thinks the world in pluralities and through the concept of the plane of immanence aims to think and create a world consistency beyond transcendent(al) concepts - A consistency which includes the infinite movements of thought. »This is because one does not think without becoming something else, something that does not think – an animal, a molecule, a particle – and that comes back to thought and revives it« [30].

### Acknowledgments

Parts of this text were previously published in German in Marcus Maeder (ed.): *Milieux Sonores/Klangliche Milieux, Zum Verhältnis von Klang und Raum*. Bielefeld, Germany: Transcript, 2010. English translation: Lucas Bennett.

## 7. REFERENCES

- [1] Nelson Goodman, *Ways of worldmaking*. Hassocks, U. K.: Harvester Press, 1978, pp. 123-25.
- [2] Gilles Deleuze/Félix Guattari: *What is philosophy?* New York: Columbia University Press, 1994, p. 45.
- [3] Jakob von Uexküll: *Umwelt und Innenwelt der Tiere*. Berlin, Germany: Verlag Julius Springer, 1909.
- [4] Jakob von Uexküll: *A Foray into the worlds of animals and humans*. Minneapolis: University of Minnesota Press, 2010.
- [5] Jakob von Uexküll: „The theory of meaning“, in *Semiotica* 42-1, The Hague, Netherlands: Mouton Publishers, 1982, p. 31
- [6] Marshall McLuhan: *Understanding Media*. Oxford, MS: Abacus Books, 1973, p. 13.
- [7] Nils L. Wallin/Björn Merker/Steven Brown, Eds.: *The Origins of Music*. Cambridge, MA: MIT Press, 2000.
- [8] Hanns-Werner Heister, Ed.: *Mimetische Zeremonien: Musik als Spiel, Ritual, Kunst*. Berlin, Germany: Weidler, 2007.
- [9] Georg Knepler: *Geschichte als Weg zum Musikverständnis. Zur Theorie, Methode und Geschichte der Musikgeschichtsschreibung*. Leipzig, Germany: Reclam, 1982.
- [10] Marshall McLuhan: *Understanding Media*, p. 136.
- [11] David Keenan: "Kosmische music", in *The Wire*, No. 308, October 2009, p. 44.
- [12] Sam Bower (2014, March 27). *A profusion of terms* [Online]. Available: [www.greenmuseum.org](http://www.greenmuseum.org)
- [13] Timothy Morton: *Ecology without Nature*. Cambridge, MA: Harvard University Press, 2007.