

Sonic Thinking Reader
Summer Term 2018

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Mapping the Terrain:

Art and Sound I

At the centre of a large, dark gallery space sits a shed from which sound and light emanate. Inside this structure is a theatre-like tableau, populated with messily stacked records, record players, tables and chairs. A large opening at the front is treated by the audience like a cinema screen: they stand peering into it while listening to an unfolding love story. In addition to this narrative there are records playing (although this is a simulation), and loudspeakers at times blast sound, while within the wider space the audio environment shifts phases and zones via the surround speaker system. *Opera for a Small Room* (2005) by Janet Cardiff and George Bures Miller, explores a diversity of registers of sound – initially radiophonic and operatic before turning into a rock concert, complete with stage lighting and (invisible) performer.¹ In a different art space, *33 rpm* (2006) by Phil Dadson is constructed from numerous CD sized discs shaped into a large, three metre-high circle. On each disc are rubbings taken from the surfaces of volcanic rocks. The sonic component of this work is the imagined explosion of the massive volcanoes that spewed out these rocks as molten lava many years ago. Amidst the silence of the work we find imagined noise.²

These two examples of recent artworks, one theatrically enacting sound, the other mutely evoking absent noise, mark an increased interest in sound as a central element in installations. In their divergent methods they convey some of the breadth of recent approaches to the use of sound in contemporary art.

On entering almost any contemporary gallery space we hear sound emanating from TV monitors, computers and projection spaces, or from headphones handed out to gallery visitors, not to mention the echoes of voices and footsteps. The gallery is not the hushed space it was once purported to be but rather is filled with sounds that can range from noisy to quiet, from gentle to aggressive, from overlapping to discrepant or disruptive. This is not unproblematic, as the hard, square surfaces of the traditional gallery do not necessarily manage sound well; it echoes around the space, bumping into sound that has crept out of adjoining galleries, and in the process it interferes and merges with it. However, many galleries are currently working out strategies to deal with the increased volume within their confines. Tate Modern in London, converted from a former power station, has embraced a crowded and often noisy audience in its vast central Turbine Hall, who experience this public area as a playful and interactive place. The way it is used by all age groups including children has raised the ‘noise floor’ of the building’s

environment substantially and begins to change the terms of engagement with contemporary art.

Addressing these sonic shifts in the ambience of art, this anthology seeks to draw attention to sound both in and around current art practice. Sound is now an integral aspect of art, from installation to screen-based, performance-based and participatory practices, yet its presence is too often ignored. Aiding this neglect is the view that sound is difficult to represent: one cannot look at sound in a book; the sound of a particular installation cannot be photographed and retained as a document.³ Critics from a visual art background often have trouble describing sound; their lexicon does not include an ongoing dialogue with audio concepts. Thus mainstream writing on art of recent decades has tended for the most part to avoid critical discussion of sound. Yet in the last few years what once seemed like a subterranean murmur among a small number of artists and theorists concerned with sound has risen to the surface, coalescing into a body of discourse with an unanticipated centrality for art of the present.

The belief that sound is a valid and critical factor in understanding contemporary art marks a shift from what is still called visual art – a term that suggests art engages exclusively with sight and visuality. Can this shift be examined so as to better interpret art created to engage senses other than sight? Is this a change in what it is for something to be art or simply an opening out of what was already there?

Art has explicitly dealt with perceptual regimes outside the visual since the 1960s, as witnessed in various manifestations of Minimalism and conceptualism, with their experiential understanding of the relationship of audience to artwork. Take, for example, Michael Asher's installation at the La Jolla Museum of Art in 1969. Asher altered the exhibition space with carpet and noise reduction rendering on the ceiling. This combination of surfaces had the effect of deadening the acoustics of the space, reducing the typical reverberation or echo of the room, in which he introduced one sound: a simple, electronically generated tone. This work focuses on the experience of the installation by its audience, who cannot help but notice the changed acoustics of the room and the electronic sound within the space.⁴ Its photographic documentation, of course, pictures an empty gallery. We cannot comprehend the experiential nature of the work by viewing the images. In a similar way the huge rolls and stacks of felt in Joseph Beuys' *Fond* series of 1979 engage the senses by deadening the acoustics of any room in which they are installed, completely lining the walls. One cannot enter the space without being aware of the hushed acoustic environment.

A key concept underpinning this anthology is that sound is immanent to contemporary art. It is already there, because all audiences, except for those who cannot hear, attend to artworks with not only their eyes but their ears as

receptors; often they may not be open or attentive, but every audience member is continually processing information gathered through the sense of hearing. It has often been remarked that we cannot close our ears.

In the years since the start of this century there has been an increased theoretical interest in sound in culture – what Jim Drobnick has termed the ‘sonic turn’.⁵ As Michael Bull and Les Back have noted, ‘the experience of everyday life is increasingly mediated by a multitude of mechanically reproduced sounds ... In parallel to this, cities are noisier than they ever were in the past.’⁶ Given this increased awareness, how are we to re-listen to the sound world around us, and how do we situate our bodies and our everyday through these discourses?⁷ Many of these issues are addressed by artists who direct us to rethink how we come to know the world through listening. A productive approach to sound making derives from the physical nature of sound, best described as ‘sound as phenomenon’. The remarkable nature, or phenomenon, of sound is framed within a range of varying practices including Alvin Lucier’s *I am Sitting in a Room* (1969), Laurie Anderson’s *Handphone Table* (1978) and Ryoji Ikeda’s +/- (1996). Another approach is straightforwardly to draw our attention to listening itself. This has often occurred in what have come to be known as ‘sound walks’. Based in the expanded sense of listening espoused by John Cage, and initially pioneered by Max Neuhaus, this practice involves directing the audience around a geographical environment or artificial sound spaces, drawing their attention to the multifarious sounds they come across. This is a very productive area and numerous artists have employed this strategy in diverse forms, including Janet Cardiff, Akio Suzuki and Yasunao Tone.

Another way in which audio has gained a foothold in our recent understanding of art practice is via numerous large-scale art exhibitions focused on sound, such as ‘Volume: Bed of Sound’ (The Museum of Modern Art, New York, 2000), ‘Sonic Boom’ (Hayward Gallery, London, 2000), ‘Bitstreams’ (Whitney Museum of American Art, New York, 2001), ‘Art>Music’ (Museum of Contemporary Art, Sydney, 2001), ‘Sonic Process’ (Centre Georges Pompidou, Paris, 2002), ‘Sounding Spaces’ (I.C.C., Tokyo, 2003), ‘Her Noise’ (South London Gallery, London, 2005), and ‘See This Sound’ (Lentos Art Museum, Linz, 2009). In addition a number of recent publications have attempted to address ‘sound art’ as a concept.⁸ Within these texts sound art has been understood as a movement or a genre, distinct from other forms. The term itself is confusing, as it is used to describe gallery-based works as well as experimental music practices. However, rather than a movement or genre, ‘sound art’ simply describes a medium, much like ‘oil painting’. Terms such as oil painting do not provide any information of the content of the artwork, as they simply describe what it was created from. This misunderstanding is highly problematic and the reason why many artists, art

historians and critics think there is no such thing as sound art as a genre or movement. Max Neuhaus, a prominent exponent of sound installation, argues that 'in art, the medium is not often the message ... Much of what has been called "sound art" has not much to do with either sound or art.'⁹ William Furlong, artist and founder of Audio Arts, begins his discussion of sound in recent art by stating that 'sound has never become a discrete area of art practice.'¹⁰ This anthology argues for sound's importance within contemporary art itself. In doing so it will not focus primarily on 'sound art' – although it includes all the relevant discussions of this term. Rather, the focus is on 'listening' to the visual arts. Once we begin to listen we find that contemporary art is a rather rowdy area of practice.

The first section, *Concepts of the Sonic*, assembles texts that situate and theorize sound in relation to art practice. It begins with manifestos by two of the most referenced figures in the field of an expanded musical practice, Luigi Russolo and John Cage. Due to the close ties sound has with music, it is not possible to discuss sound in art without looking to music, and both Russolo and Cage exerted a major influence on both music and art. Russolo, a member of the Italian Futurists, argued in 1913 for an 'art of noises' as a celebration of the modern city, drawing our attention to the simple fact that in his era industrial noise was born. He called for the opening of music to all sound through the inclusion of the non-musical noises of the city. The use of noise is common in contemporary art practices that engage sound and the very possibility of being able to hear noise as sonically interesting has had a major impact on artistic practice after Russolo.

The second text is by the composer Cage, whose practices and concepts included chance operations, indeterminacy, the impossibility of silence, the incorporation of all sound into music, and the idea of listening to sound in itself. His presence pervades numerous texts in this anthology and his importance cannot be overstated, yet it has only been in the past few years that his influence has been explored in depth, especially in the art world.¹¹

Cage's legacy is in part due to the wide range of practitioners with whom he had close associations, including his partner the choreographer Merce Cunningham, composers such as Morton Feldman and David Tudor, artists such as Robert Rauschenberg, Jasper Johns and the 'intermedia' artists who created Fluxus actions and Happenings.

Another significant figure is the French composer and musicologist Pierre Schaeffer (1910–95), whose writings have only recently been translated into English and for copyright reasons are unavailable for inclusion here. Schaeffer focused on music produced from recordings, which were edited in such a way as to remove the sounds from their referents (the objects that created the sound). He also worked on compositions that involve the use of everyday sounds, such as

those made by trains, for example. His music, known as *musique concrète*, has had a great influence on many contemporary sound forms (including sampling based genres such as Hip-Hop).

The second section explores the dimensions of *Noise and Silence*. Noise has been the focus of a number of theoretical texts that find joy in its complexities. Irregular vibrations of the air constitute noise, whilst regular vibrations produce tones. The complex, irregular nature of noise overloads the listener's capability to understand sound, presenting a chaotic and unstable set of relationships that engulfs the order and simplicity of pitched sound. For Michel Serres, perhaps more than any other theorist, noise forms the backdrop to all communication, the air we breathe and the sea from which all life emerges: 'We breathe background noise, the taut and tenuous agitation at the bottom of the world, through all our pores and papillae; we collect within us the noise of organization, a hot flame and a dance of integers ...'¹² In noise there is a plenitude of form, from which all possible forms can arise, hence for Serres it is a source of celebration rather than the wish for its abatement.

Volume, as distinct from noise, draws our attention to our bodies, alerting us to the phenomena of sound entering the body, slipping into our mouths, our nostrils and our ears. It gets inside us, and when played loudly, it massages and rumbles our internal organs. Steven Shaviro explains the effect this has during a performance by the infamously loud rock band My Bloody Valentine: 'This isn't just a case of being overwhelmed by the sublime. You can't stand it and you can't see beyond it; but for that very reason you get used to it after a while, and you never want it to end.'¹³ The aural 'spectacle' of volume is never so great as when played to a stadium filled with thousands of fans. Scores of people attend live gigs performed above the volume that causes hearing damage, a reminder that incredible volume is not a fringe practice but is at the centre of mainstream culture.

Kim Cascone looks for the detritus of recording production, finding in offcuts a wealth of material ripe for exploitation. He attends to background noise, the underbelly of recording, focusing on the almost silent 'noise floor'. These are some of the hitherto ignored territories that have been exposed and used by artists working with sound or experimenting with new musical tools.

While most writers in this field espouse the virtues of sound, a few are not so ready to embrace the sonic in art. Paul Virilio, for example, argues that silence has been put on trial and that noise in art is 'in the process of lastingly polluting our representations'.¹⁴ Here the desire for quiet and peaceful contemplation goes hand in hand with the belief that art should be separate from daily life: the 'noise' of the everyday somehow lessens the experience of art, 'polluting' it.

After these discussions of noise our attention is directed to the spatiality of sound. How we hear sound in different spatial conditions is an important factor

in much recent practice. *The Listener and Acoustic Space* opens with R. Murray Schafer's definition of the 'soundscape' as 'any acoustic field of study'.¹⁵ These fields include musical compositions, radio programmes and acoustic environments. He argues that the soundscape is continually filled with 'an indiscriminate and imperialistic spread of more and larger sounds in every corner of man's life'.¹⁶ Schafer's ecology of sound has influenced numerous sound makers (Francisco López, Aki Onda, Chris Watson, Hildegard Westerkamp), who have sought out environmental sounds, both 'natural' and 'urban', in a radically changing soundscape. Using Schafer's insights as a starting point, Emily Ann Thompson discusses modernist acoustics and mastery of the audition of sound. The character of sound and its acoustic properties is also addressed by the composer Alvin Lucier, who has been widely influential on artists working with sound phenomena. Lucier argues for an attention to the flow of sound through space, rather than to factors such as tone, harmony and melody that are traditionally privileged in Western art music.

A continuing concern to curators of sound in contemporary art is the space of the gallery itself. Brian O'Doherty, in his influential essay 'Inside the White Cube', wrote that the history of modernism was framed by the exhibition space: 'An image comes to mind of a white, ideal space that, more than any single picture, may be the archetypal image of twentieth-century art'.¹⁷ The stark white cube is cleared and cleaned of anything that might detract from the contemplation of visual art, yet this space is not at all conducive to the contemplation of sound within art. The hard, flat surfaces cause sound to reverberate throughout the space, detracting from the experience of the work itself. Steven Connor alerts us to the issue of the gallery's bent toward visual perception and the logic of the direct line of sight. Sound does not adhere to the line of sight: it moves around walls and bounces through openings and between spaces, invading adjoining rooms. It does not follow safe and contained visuality, causing trouble in the museum, where quiet contemplation of art is expected. We cannot help, for example, but be aware of loud music emanating from the Douglas Gordon's installation *Feature Film* (1998) while trying to listen to the dialogue within Pierre Huyghe's *The Third Memory* (1999).¹⁸

If the white cube is the archetype of twentieth-century art display, then what would be the archetype of twenty-first century exhibition space? It would need to be able to handle new media – large projections, lighting environments and, of course, sound – and still be available for the display of more traditional artefacts. Internationally the black cube is becoming more common – a space that is darkened for projection and acoustically damped for sound. Perhaps we will see the expansion of purpose-built gallery environments dedicated to the needs and specificities of contemporary art, instead of the 'one-size fits-all' white gallery.

Of course there is not a straightforward answer to the exhibition of sound in the gallery. Helmut Draxler asserts that the conventions of the other arts cannot simply be transferred to the gallery: we do not recreate a cinema environment to display video art and thus we should not need to recreate a concert hall in the gallery to display sound works.¹⁹ This argument is a little overstated as it connects video too closely to cinema and sound too closely to music. That said, the gallery can learn from other arts practices, especially cinema, as the contemporary cinematic space has been created to house often loud and dramatic sound. The cinema is dampened with carpet and soft chairs and rendered so as to hold sound within its confines. Set against this practice, contemporary exhibition spaces hold onto their open, white and well lit space, not ready for such dramatic changes to their conception of the perfect space for exhibition.

The fourth section, *Bandwaves*, contains a discussion of the relationship of music to art. Sound does not belong to any one arts discipline, it turns up in music, theatre, literature, dance, film, architecture and art. However, historically music has made the strongest claim to sound's ownership, not least in John Cage's notion that all sound can be, or is, music. Therefore any discussion of sound within contemporary art cannot exclude music, and many of the texts within this anthology directly address music practices. Here artists' relationships to music are surveyed, making clear the obvious: that many artists have a close connection with music; they listen to it in their studios, they make it, they engage with it through popular culture, they connect with the rock ethos, and they are fans. Music and contemporary art are directly and inextricably linked in this way. Some artists are directly connected to music through their participation in 'art school bands' (for example, Kim Gordon, Dan Graham, Mike Kelley, Tony Oursler, Martin Creed), while for Vito Acconci, it is a 'passive spectator sport'.²⁰ Christian Marclay is a special case. His works in music and art are inextricably linked, with each side feeding the other. Here two of his recorded conversations, one with the artist and filmmaker Michael Snow, and the other with Sonic Youth musician and vocalist Kim Gordon, shed light on his connection to both worlds.

The final section, *Artists and Sound*, surveys the diversity of specific artistic practices that have emerged over the last century in response to the developments explored in the previous sections, and demonstrates why sound in art can never be reduced to a movement or genre. An objective of this volume is to heighten the art community's awareness of sound in art, with the hope that both art institutions and audiences – as we become increasingly attuned to the new aesthetics of listening – can fully engage with and participate in the sonic turn that is transforming the practice of numerous artists around the world.

- 1 Janet Cardiff and George Bures Miller, *Opera for a Small Room* (2005), included in the exhibition 'The Dwelling', Australian Centre for Contemporary Art, Melbourne (2009).
- 2 Phil Dadson, *33 rpm* (rock records) (2006), included in the exhibition 'Mistral', at Artspace, Sydney (2006).
- 3 Sound can be recorded, but the recording of audio elements of art does not function in the same way as photographs have come to be employed, as stand-ins for the art objects themselves.
- 4 For a further discussion of this work see Kirsi Peltomäki, *Situation Aesthetics: The Work of Michael Asher* (Cambridge, Massachusetts: The MIT Press, 2010) 22–6.
- 5 Jim Drobnick, 'Listening Awry', in *Aural Cultures: Sound Art* (Banff: YYZ Books, 2004) 10, note 7. The term 'sonic turn' is the audio version of W.J.T Mitchell's 'pictorial turn'. See W.J.T Mitchell, 'The Pictorial Turn', *Artforum* (March 1992) 89–94.
- 6 Michael Bull and Les Back, 'Introduction: Into Sound', in *The Auditory Culture Reader* (Oxford: Berg, 2003) 1.
- 7 Other texts that have sought to fill the gap in academic discussion of sound include: Veit Erlmann, *Hearing Cultures: Essays on Sound, Listening and Modernity* (Oxford: Berg, 2004); Christoph Cox and Daniel Warner, 'Introduction: Music and the New Audio Culture', in *Audio Culture: Readings in Modern Music* (New York and London: Continuum, 2004).
- 8 cf. Brandon LaBelle's *Background Noise* and Alan Licht's *Sound Art* (see bibliography).
- 9 Max Neuhaus, 'Sound Art?' (2000), reprinted in this volume, 72–3.
- 10 William Furlong, 'Sound in Recent Art', reprinted in this volume, 67–70.
- 11 Ina Bloom, 'Signal to Noise', *Artforum* (February 2010) 171–5.
- 12 Michel Serres, *Genesis* (Michigan: University of Michigan Press, 1995) 7.
- 13 Steven Shaviro, 'Bilinda Butcher' (1997), extract reprinted in this volume, 120–23.
- 14 Paul Virilio, 'Silence on Trial' (2003); extract reprinted in this volume, 103–4.
- 15 R. Murray Schafer, *The Soundscape: Our Sonic Environment and the Tuning of the World* (1977) 7; extract reprinted in this volume, 110–12.
- 16 Ibid., 3.
- 17 Brian O'Doherty, 'Inside the White Cube' (1976), in *Inside the White Cube: The Ideology of the Gallery Space* (Berkeley: University of California Press, 1999) 14.
- 18 This juxtaposition of works occurred at the exhibition 'Centre Pompidou: Video Art 1965–2005', Museum of Contemporary Art, Sydney (2006–7).
- 19 Helmut Draxler, 'How can we Perceive Sound as Art?', in *See This Sound* (Linz: Kunsthalle/Cologne: Verlag der Buchhandlung Walther König, 2009) 26; extract reprinted in this volume, 139–43.
- 20 Vito Acconci, 'Words before Music' (manuscript, 2000); included in this volume, 155–6.

Douglas Kahn

The Latest: Fluxus and Music//1993

The future therefore belongs to philophonics.

– Erik Satie¹

Fluxus was the most musical of the avant-garde (or experimental or neo-avant-garde) art movements of this century. Surrealism had gone as far as working up an antipathy toward Western art music; other avant-gardes incorporated music but rarely created it; and, with the exception of Italian Futurism, achievements in music certainly could not stand next to those of the visual arts, literature, performance and cultural thinking in general. Fluxus became the beneficiary of this ‘tardiness of music with respect to the arts’ John Cage once noted,² tardiness

stemming from the relatively minor role music played in the important avant-gardes that preceded it.

Fluxus was the first of the avant-garde movements to have counted among its members so many involved in musical composition and performance, and key participants such as La Monte Young, Nam June Paik, and Benjamin Patterson were, in fact, highly trained. Many of the acknowledged influences on the formation of Fluxus were events conducted under the auspices of music, ranging from Cage's legendary classes at the New School for Social Research in the late 1950s to the numerous musical performances associated with the string of events at the loft of Yoko Ono (married at the time to the composer Toshi Ichiyangai), at George Maciunas' AG Gallery, and elsewhere. The inaugural Wiesbaden festival was presented under the guise of 'new music', and many of the Fluxus events that followed were billed as 'concerts'. Even the eventual major split in the Fluxus ranks was understood as having been occasioned by a music-world controversy – the protest over the 1964 New York performance of Karlheinz Stockhausen's music-theatre event *Originale*.

That it was more musical than its predecessors, however, is not to say that Fluxus itself should be considered predominantly musical. Much of the Fluxus corpus defied categorization along the lines of established artistic disciplines – music, performance and the written word often coalescing into hybrid forms, exchanging places, or fitting themselves into the cracks between existing media. But because its ostensibly 'abstract' nature provided good ground for a malleability of meaning, because the highly codified nature of its practice served as the perfect foil for an anti-practice, and because it was historically unexploited, music played a central role in the overall conception and evolution of Fluxus; and ideas about music, especially those that concerned the relationship of art to nature, society, mass media and the everyday, played a significant part in the formulation of theoretical positions in important Fluxus documents.

The Limits of Avant-Garde Music

The strategy that had propelled music into an avant-garde practice in the first place was the progressive incorporation of extramusical sounds into the circumscribed materials of music. Based on a response to existing conceptions of what was and what was not a musical sound, it asked the questions: Which extramusical sounds should be imported into the domain of music? and How should such an importation be accomplished? Within this inquiry, there was a presumption that the central component of music was its sonicity – that composition was to start with a notion of sound. This may seem a fairly mundane proposition, but in the context of Western art music at the time and to a surprisingly great extent today, it was very radical, set as it was against the

entrenched conservatism of musical thought and practice. Western art music had treated musical sound in an unproblematic way: the range of instruments and the types of sounds the instruments were supposed to make did not vary fundamentally from one composer to the next or from one generation to the next; the primary task at hand was how to organize this finite set of sounds. Why these sounds should be privileged to the exclusion of all other possible sounds was of little or no concern.

The Italian Futurist Luigi Russolo inaugurated avant-gardism in music when he questioned the nature of musical materiality. In his famous 1913 manifesto 'Art of Noises' (and 1916 book of the same title) he proposed that, because musical sound was self-referential and thereby had no link with the world and its sounds, music had stood still and become self-occupied, while everything that happened in life all around it had energetically advanced into the modern world. His stated goal was to open up music to all sounds, the 'subtle and delicate noises' of nature and rural settings, the brutal noises of the modern factory and city. But he also stated, both in his writings and in the way he designed his class of *intonarumori*, the noise-intoning instruments he built to play his music, that he wished to avoid imitation of these worldly sounds. It is hard to have it both ways, to invoke the sounds of the world – say, by phonographically reproducing them, by bringing the actual sound-making device or event into the concert hall, or by simulating them through other means – without to some degree being imitative. Thus Russolo's embrace of 'all sounds' became conditional upon the tenacious requisites of musical signification. If he had chosen to create a compositional and performance practice based upon the tension between sound and musical sound, he might have created a (relatively) autonomous art of noises. Instead, his 'great renovation of music'³ became one that would not confound the representational bounds of what stood as musical sound. For the next half-century it represented the strategy propelling or repelling composers with avant-garde motives. They, too, were allured by extramusical sounds but refused to become too associative, too referential. Edgar Varèse's 'liberation of sound' actually domesticated the implications of Russolo's radicalism enough to be ushered into mainstream orchestral practice, while Pierre Schaeffer's *musique concrète*, with its notion of *acousmatiques*, served only to repeat the general presuppositions of Russolo's project.

It was Cage who took Russolo's impulse to its logical conclusion when he proposed that any sound can be used in music; there need not be even any intention to make music for there to be music, only the willingness to attune to aural phenomena. In other words, sounds no longer required any authorial or intentional organization, nor anyone to organize them – just someone to listen. This new definition of music served to extend the range of sounds that could qualify as musical raw material as far as possible into the audible, or potentially

audible, world. Categories like dissonance and noise became meaningless, and the line between sound and musical sound disappeared; every sound had become musical sound.

In practice, however, Cage (like Russolo) could go only so far if he was to remain within the bounds of music. Despite the expansiveness of his theoretical programme, he too had to keep sounds from referring to phenomena too far afield from the restricted realm of musical sound.⁴ When he used recorded or radiophonic sound, for instance, he manipulated it either in order to decrease or destroy its recognizability (as in *Williams Mix*, 1952) or to decrease or destroy any context that might make a sound, or set of sounds, sensible in other than a received musical way (as in *Variations IV*, 1964). His famous 4'33" (1952) silenced the expected music altogether and thus tacitly musicalized the surrounding environmental sounds – including the sounds of an increasingly restless audience.

To musicalize sound is just fine from a musical perspective, but from the standpoint of an artistic practice of sound, in which all the material attributes of a sound, including the materiality of its signification, are taken into account, musicalization is a reductive operation, a limited response to the potential of the material. For Cage himself, the reductions and impositions that came with the musicalization of worldly sound were at odds with the core precepts of his own aesthetic philosophy, especially as expressed in his famous axiom 'Let sounds be themselves.' To ask, as Cage did, for sounds bereft of their associations was to dismiss the vernacular, deny experience, and repress memory – for there are no sounds at the material level heard by humans that are heard outside culture and society. There are no sounds heard through a pure perception – only an apperception 'contaminated' by sociality. Cage's ideas, in fact, can be understood as protecting Western art music against an aurality that, during this century, had become increasingly social.

Sounds have always carried a multiplicity of extant and potential, real and imaginary associations and codifications, changing all the time with different contexts and through different modes of transformation. But with the advent of the acoustic and electronic mass media, the number of sounds and their associations actually accumulated, proliferated and became accelerated; what once may have been assuredly 'natural' sound, for instance, might have become both common and oblique, immediately familiar but ultimately understandable only at the end of a fairly fragile, long string of associations.⁵ This was certainly the state of aurality by the 1950s, for there had been more than two decades of sound film and radio broadcast, and television was on the rise. This was also the time during which Cage's ideas on sound were first registered in any pronounced way and the time that served as an incubator for the Fluxus artists.

It was Cage, in fact, who exerted the greatest initial influence on that loose,

continually reconfiguring group of individuals associated with Fluxus. Indebtedness to Cage was widely and freely proclaimed – Nam June Paik confessing, for instance, that ‘my past 14 years is nothing but an extension of one memorable evening at Darmstadt ’58.⁶ La Monte Young also had become well aware of Cage while he was studying with Stockhausen in Darmstadt (his important ‘Lecture 1960’ derives from Cage’s own ‘Indeterminacy’ lecture, published in 1959 in Stockhausen’s journal *Die Riehe*) and the stark conceptual reductions of his early events resonate with the theatrics of Cage’s 4’33’. In the historical genealogies that George Maciunas (and others) drew up for Fluxus Cage is positioned as the bridge between the avant-garde of the earlier part of the century and artists of the postwar period. Maciunas, in fact, devised one genealogical chart for Fluxus structured specifically by the influences on Cage himself:

We have the idea of indeterminacy and simultaneity and concretism and noise coming from Futurism, theatre, like Futurist music of Russolo. Then we have the idea of the Ready-made and concept art coming from Marcel Duchamp. Okay, we have the idea of collage and concretism coming from Dadaists ... They all end up with John Cage with his prepared piano, which is really a collage of sounds.⁷

After funneling all these historical moments into the person of Cage. Maciunas attributes successive developments to his singular influence: ‘Wherever John Cage went he left a little John Cage group, which some admit, some not admit his influence. But the fact is there, that those groups formed after his visits.’⁸ While in New York, Cage faithfully attended many performances of lesser-known artists, who often looked upon him – with his pedigrees from North Carolina’s Black Mountain College and elsewhere – as a father figure. His classes at the New School for Social Research attracted the likes of George Brecht, Al Hansen, Dick Higgins, Allan Kaprow and Jackson Mac Low, all of whom went on to participate centrally within Fluxus and/or associated activities.⁹ In one of the classes led by the electronic composer Richard Maxfield, who had taken over for Cage, George Maciunas met La Monte Young and was thus introduced to the new music, performance and intermedia scene he later helped to transport to Wiesbaden and beyond. ‘That the introduction of Fluxus at Wiesbaden was presented as a ‘Festival of New Music’, the writer Bruce Altshuler has noted. ‘points to a critical influence from this [Cagean] direction. And the equipment list for the subsequent 1962 concerts in Copenhagen and Paris – with its radios, candles, broken glass and junk metal, wooden blocks and vacuum cleaner – displays as much as anything else what came out of the [Cage classes at the New School].’¹⁰

To have freshly confronted the Cagean aesthetic in the late 1950s would have been both exhilarating and frustrating: so much was allowed that nothing, it

might seem, was left to be set free. 'Every young artist tried to define himself/herself as going past Cage but this was very difficult because the Cagean revolution was very thorough', recalls the composer James Tenney, citing an influence so total as to have 'created a situation where we don't have to kill the father anymore'.¹¹ Yet it was no accident that Nam June Paik, in an act of symbolic emasculation, chose to cut off Cage's tie as part of his performance *Étude for Pianoforte* (1959–60), for throughout Fluxus literature and activities there are repeated attempts to supersede or escape the Cagean aesthetic, to get to the point somehow of being 'post-Cage'.

Teased by Cagean avant-gardism, and simultaneously provoked by the difficulty of advancing a musical practice based upon its expansive rhetoric of all sound, Fluxus artists chose to exercise a number of strategic options. These break down into two general, often related categories, the first concerned explicitly with the sonic materials of music, and the second with the relatively unexplored territory of musical practice and performance. Both were grounded in an exploration of the boundaries of music – the inside-outside dilemma – that had challenged the musical avant-garde from Russolo through Cage.

Fluxus and the Properties of Sound

The first strategy that informed the Fluxus aesthetic was a response to the difficulty of conjuring up and recuperating into music the figure of a plenitude of sound that exists on the outside of music. Rather than focusing on the expanse of all sounds, one group of artists who were influential in the early formation of Fluxus concerned themselves with the more circumscribed investigation of sound in its singular, existential and elemental state, concentrating on questions of border cases of sound production and audition, of the integrity of the various integrities of a sound per se. Thus, the historically earlier question of What sounds? receded in Fluxus and was replaced with questions such as Whether sounds? or Where are sounds in time and space, in relation to the objects and actions that produce them? or What constitutes the singularity of 'a sound'?

Cage had already thrown the last dirt on dissonance and noise; in the Fluxus venture the question of noise was forgotten once and for all, and musical sound and sound moved very close to each other. However, Fluxus questions about sound were framed almost entirely in terms of its acoustic, physiological and kinaesthetic properties. Focusing on these states and activities did little more to challenge the status of musical materials as entities divorced from their worldly associations than had the practice of Cage and his predecessors.¹² So although the exploration of the 'borderline', as it was called in the Fluxus vernacular, did not introduce fundamentally new artistic aural practices, it did extend existing processes and configurations and produced a number of compelling pieces, with

La Monte Young's foray into sustained sounds, in particular, pointing to a rich and unexplored artistic area of sonic spatiality in relation to physical acoustics.

One way Fluxus explored the margins of musical sound was to separate these sounds from their normal connections. In the performance of music, the making of a sound is always connected with a task. For example, sounds will always occur if the task is to play a violin or smash it. But the converse – that every task produces a musical sound – is not always true. There are many tasks executed in the midst of an orchestral performance from which no sounds are supposed to emanate. Fluxus took the next logical move: whereas these small or silent sounds in an orchestra are repressed in favour of the production of the musical work, in Fluxus sound-producing tasks do not need to produce musical sound each and every time, or even produce audible sound, in order to produce works. Some sounds, for instance, are produced only 'incidentally', as in George Brecht's *Incidental Music* (1961):

INCIDENTAL MUSIC

Five Piano Pieces,

any number playable successively or simultaneously, in any order and combination, with one another and with other pieces.

1.

The piano seat is tilted on its base and brought to rest against a part of the piano.

2.

Wooden blocks.

A single block is placed inside the piano. A block is placed upon this block, then a third upon the second, and so forth, singly, until at least one block falls from the column.

3.

Photographing the piano situation.

4.

Three dried peas or beans are dropped, one after another, onto the keyboard. Each such seed remaining on the keyboard is attached to the key or keys nearest it with a single piece of pressure-sensitive tape.

5.

The piano seat is suitable [sic] arranged, and the performer seats himself.¹³

Brecht himself described the incidentalness:

What you're trying to do is to attach the beans to the keys with nothing else in mind – or that's the way I perform it. So that any sound is incidental. It's neither intentional nor unintentional. It has absolutely nothing to do with the thing whether you play

an A or C, or a C and a C sharp while you're attaching the beans. The important thing is that you are attaching the beans to the keys with the tape'.¹⁴

Mieko (Chieko) Shiomi referred to incidentalness a few years later in her *Boundary Music* (1963):

Make the faintest possible sound to a boundary condition whether the sound is given birth to as a sound or not. At the performance, instruments, human bodies, electronic apparatus or anything else may be used.¹⁵

La Monte Young's *Piano Piece for David Tudor #2* (1960) made use of an incidental sound connected with the normal act of playing a piano and sequestered it, through the skill of the performer, so that the small sound produced by this act would become perceptible only to the performer, and not the audience. The point of the piece, in fact, was to eliminate even this remaining degree of incidentalness.

Open the keyboard cover without making, from the operation, any sound that is audible to you. Try as many times as you like. The piece is over either when you succeed or when you decide to stop trying. It is not necessary to explain to the audience. Simply do what you do and, when the piece is over, indicate it in a customary way.¹⁶

Young's *Composition 1960 #5* (1960), known as 'the butterfly piece', split the tasks of sound production and sound perception between species, further isolating the question of audibility by eliminating the human performer altogether. In this case, the human listener must consider that sounds may exist even though humans may not be able to hear them unaided:

Turn a butterfly (or any number of butterflies) loose in the performance area. When the composition is over, be sure to allow the butterfly to fly away outside. The composition may be any length but if an unlimited amount of time is available, the doors and windows may be opened before the butterfly is turned loose and the composition may be considered finished when the butterfly flies away.¹⁷

Audibility, for those who dare wonder, is usually the absolute minimum requirement for the existence of music. The music semiotician Jean-Jacques Nattiez has written, for example, that 'we can ... allow (without too much soul-searching) that sound is a minimal condition of the musical fact'.¹⁸ In this respect Young's *Composition 1960 #2*, written concurrently with the butterfly piece, was

easier to think of as music since the work, 'which consists of simply building a [small] fire in front of the audience'¹⁹ at least produced sounds that would go in and out of audibility. (As Satie wrote, 'Here, we are in pyrophonics.')²⁰ Yet, according to Young,

I felt certain the butterfly made sounds, not only with the motion of its wings but also with the functioning of its body and ... unless one was going to dictate how loud or soft the sounds had to be before they could be allowed into the realms of music ... the butterfly piece was music as much as the fire piece.²¹

Young's line of reasoning marked a departure from Cage's ideas about what music requires in order to exist. For Cage – firm in the belief that there is no such thing as silence and following a strategy of all sounds – to bring certain small sounds into audibility through amplification was to bring them into music. He was even willing to entertain the idea that sounds produced by molecular vibrations might one day be amplified and musicalized, echoing the conjecture of a 1933 Italian Futurist radio manifesto:

The reception amplification and transfiguration of vibrations emitted by matter. Just as today we listen to the song of the forest and the sea so tomorrow shall we be seduced by the vibrations of a diamond or a flower.²²

Cage's interest in amplified small sounds went back to 1937, when in his essay 'The Future of Music: Credo' he called for 'means for amplifying small sounds', and can be found later scattered in various of his scores and writings.²³ It is no coincidence that he cited amplified small sounds in referring to his *O'00'* (1963), for this work can be considered Cage's response to the Fluxus developments of that time, especially to its emphasis on performance and everyday life.²⁴

O'00' ... is nothing but the continuation of one's daily work, whatever it is, providing it's not selfish, but is the fulfilment of an obligation to other people, done with contact microphones, without any notion of concert or theatre or the public, but simply continuing one's daily work, now coming out through loudspeakers.²⁵

Cage claimed that 'the piece tries to say ... that everything we do is music, or can become music through the use of microphones ... By means of electronics, it has been made apparent that everything is musical.'²⁶

But while Cage was saying that the amplification of a small sound to make it audible creates music. Young was beginning to say, with respect to *Composition*

1960 #5, that any sound could be music as long as the existence of sound was conceivable; in other words, the arbitrary limitations of the human ear or technology (imagine the difficulty of placing a microphone on the butterfly) should not define the bounds of music. Young was nevertheless still quite Cagean in the way he argued for musical sound existing apart from human audition. Like Cage, he said he did not want to impose sense upon sounds because that would be anthropomorphizing them – ‘the usual attitude of human beings that everything in the world should exist for them’.²⁷ But he was willing to think of the butterfly sounds as music, as though music were somehow not exclusively a human activity but practised by other species as well.

Small sounds were on the mind of Milan Knizak when he composed a Flux-radio piece in 1963 that, barring wind, would be very quiet: ‘Snowstorm is broadcast’.²⁸ The previous year Alison Knowles, in her *Nivea Cream Piece for Oscar [Emmett] Williams* (1962), had already used the microphone to amplify the small sound of a daily task:

First performer comes on stage with a bottle of Nivea Cream or (if none is available) with a bottle of hand cream labelled ‘Nivea Cream’. He pours the cream onto his hands and massages them in front of the microphone. Other performers enter, one by one, and do the same thing. Then they join together in front of the microphone to make a mass of massaging hands. They leave in the reverse of the order in which they entered, on a signal from the first performer.²⁹

The fascination with small sounds and sounds going in and out of audibility has a definite fetishistic quality about it. Any attempt to possess a sound, to become engrossed in it, however, will be frustrated by the very transience and ephemerality of sound itself. The problem in such an enterprise, then, becomes how to hold onto a sound, keep a sound around long enough to hear it truly: to make the minute, fleeting and banal into something captivating or even profound. Both Young and Takehisa Kosugi attempted to address this problem of ‘holding on’ to a sound by experimenting with techniques of repetition and sustainment. Breaking through traditional notions of the integrity of a single sound, their work in this area demonstrated that any single sound contained exceedingly complex processes of production, of internal configuration: that a single sound’s interaction with corporeal and environmental space transformed it from one moment to the next; and, therefore, that a simple musical structure of repetition or sustainment was not simple at all.

Perhaps the most outstanding repetition piece was Young’s *X for Henry Flynt* (1960), in which a loud sound is repeated steadily every one to two seconds, a great number of times, with instrumentation and the number of repetitions left

unspecified. While repetitive works such as Satie's *Vexations* (1893) and *Vieux séquins et vieilles cuirasses* (1913) have often been cited as precursors of *X for Henry Flynt*, there were, in fact, significant differences in the enterprises. Satie's works repeated units of organized musical sounds (not individual sounds, as did Young's), and thus any attempt to perceive the interiority of a sound first had to contend with how that sound might relate to others. (This condition also pertains to the subsequent 'minimalist' work of such composers as Philip Glass, Steve Reich and Terry Riley.) Young's piece, moreover, made evident the fact that, despite attempts at repeating a sound, true repetition is actually impossible: factors of performing the task, of the physics of the instrument, the acoustics of the setting, the vicissitudes of listening, and the resonant complexity of the chosen sound itself forbid it. And, although repetition may have been understood by some individuals with a certain religiosity to enable access to a sonic 'essence', a piece like Young's confirmed that no such thing as essence or identity could exist: even the mechanical act of skipping a record will fail to yield such an inviolable musical entity. Thus, the repetition of a single sound, as it invokes the influences of all those external factors usually overlooked or excluded from consideration, is neither repetitious nor singular, nor conducive to possession.

Through its simplicity, one of the factors that *X for Henry Flynt* highlighted was the disciplined, task orientation of the performance. Kosugi's Fluxus events, such as *Theatre Music* (circa 1964) 'Keep walking intently' – integrated this type of performance with aural aspects, in this case the sound of the repetition of footsteps. But Kosugi also created an intermediary form – set between the techniques of repetitive sounds and sustained sounds – that employed the idea of gradual processes. Perhaps the best-known gradual process pieces were his *South No. 1 to Anthony Cox*, in which the word south is pronounced for a 'predetermined or indetermined duration', and *South No. 2 to Nam June Paik* which more specifically instructs the performer to prolong the task of pronunciation for a minimum of fifteen minutes. Shiomi's *Disappearing Music for Face* (1964), a performance, film and flip-book that all involve a smile very gradually dropping (over the course of about five minutes in performance to twelve minutes in film) to no smile, employs a similarly slow transformation, no matter how mute. Shiomi's 'music' was entirely visual, and thus it could be filmed at high speed to extend its duration. But in the Kosugi process pieces, slowing down the utterance 'south', using the technology of that time, would have altered the pitch beyond recognition. The yogic discipline of Kosugi's pronunciation of 'south' over a very long duration derived from an unusual vocal technique that turns in on its own minute operations, a rough technology that allowed a possible phonetic interior of the word to be divulged and further revealed that this interior was comprised not of syllabic segments but of an interpenetration between and among sounds. The

entirety of the sound ‘south’ – its integrity – was shown to be at once indivisible and exceedingly complex, and thus the specific integrities of other sounds or other things, like the words that roll so easily off the tongue, were revealed to be potential worlds in themselves.

Kosugi’s gradual process takes place in a temporal dimension, its duration unfurling like the distance travelled (south). Sustaining an individual sound for a long period, on the other hand, promotes an experience of time decidedly different from the measured time of traditional music, including that of Cage, who preferred rhythm to harmony and championed Satie the ‘phonometrologist’.³⁰ It was not until several years after Young’s *Composition 1960 #7* (1960), in which a B and an F sharp are ‘held for a long time’, that Cage himself began to depart from measured time. As he described it:

[0'00', *Variations III* and *Variations IV*] have in common no measurement of time, no use of the stopwatch, which my music for the previous ten years had – the structure of time, or the process of time; but in these pieces I’m trying to find a way to make music that does not depend on time.³¹

Young’s *Composition 1960 #7*, however, was so much within time, so drastically simplified, that the very idea of time (measured or nonmeasured) in the conventional sense was dislodged and removed altogether. Time could no longer be measured as units of sound passed by, nor could any sequential organization of sound exist. The idea of a ‘single sound’ that would normally have some type of morphological standing ceased to exist and was replaced by an emphatically phenomenal and experiential situation, as attention shifted fully onto the interior, vertical dynamics of the sound and upon the act of listening.

Practically any sound contains elements within it that may need a duration longer than the life of the sound itself to come into being and to interact with other elements of a sound: sustaining a sound allows these activities to exist. The sustained sound, in all its dynamics, is not only to be heard but also to be transformed by the act of listening itself, with changing positions of the head, with the more noticeable thresholds and durations of attention. The unfolding of the dynamics of the sound within a particular space, relative to the heightened experience of a constantly modulating mode of listening, provided the markers for this new sense of time. The diminishment of time also accentuates the spatiality of sound. Sustained sound can occupy and be heard differently in different rooms and from different places within a room, and it also may ‘drift’ from one spot to another. A space ‘filled’ with an almost palpable sound develops around one’s body, thereby heightening a sense of corporeality, especially when the body is vibrated by amplified sound.

Thus the turning inward on sound that constituted the strategic impulse of Fluxus to this point inverts with Young's sustained sounds from the fetishistic preoccupation with the constitution of the isolated, ever-smaller unit to the general structure of the entire work based upon time that has no meaning, to the expanses of spaces and mobility of bodies, to an autonomy of internal dynamics. In other words, a sound turns inside out. In relation to avant-garde practice from Russolo through Cage, this is an extremely important moment: a self-exhausting, inward-directed trajectory that suddenly creates, in its paradigmatic state, an entirely new form, signalling an end with elegance, a beautiful flourish as the last device. But as it marks such an end, Young's *Composition 1960 #7* at the same time makes possible music and acoustic works based upon new elaborations of space and the body (factors also repressed within the traditions of Western art music). Although Young and a few other composers and artists have continued to pursue this area, it remains largely unexplored. [...]

- 1 Erik Satie, 'Memories of an Amnesic (Fragments)' (1912–13), in Robert Motherwell, ed., *The Dada Painters and Poets: An Anthology* (New York: Wittenborn, Schultz, 1951) 18. The reader can assume that much of the content of this important book was familiar to many who were vital to the formation of Fluxus.
- 2 John Cage, 'Happy New Ears', *A Year from Monday* (Middletown, Connecticut: Wesleyan University Press, 1963) 31. However, in the same essay, Cage says in a deterministic spirit that 'changes in music precede equivalent ones in theatre, and changes in theatre precede general changes in the lives of people.' Historically, the term avant-garde music is almost entirely oxymoronic for the first half of this century. The mythic audiences that rioted at performances of compositions by Schönberg or Stravinsky were too bourgeois to represent an honest reaction. Other activities within the avant-garde (such as painting, performance, and writing) did not require the big technology of a symphony orchestra in order to be realized: all they needed was the modest technology of paint and a brush, a pen, an audience. Most composers, with only a few exceptions such as Antheil, Matiushin, Satie and Varèse, had little regular contact with the avant-garde.
- 3 Luigi Russolo, 'The Art of Noises. Futurist Manifesto', *The Art of Noises*, trans. Barclay Brown (New York: Pendragon Press, 1986) 23–30. The main source on Russolo is G.F. Maffina, *Luigi Russolo e L'Arte dei Rumori* (Torino: Martano Editore, 1978). Russolo's tactic was to provide extramusicality, noise and the realm of worldly sound by providing an expanded timbral range. For many timbral effects, even those residing unused within conventional orchestration, had themselves been restricted within Western art music. This strategy allowed him to make a discursive appeal outside the confines of musical materiality, while not fundamentally disrupting those confines.
- 4 See Douglas Kahn, 'Track Organology', *October*, no. 55 (Winter 1991) 67–78; and Frances Dyson, 'The Ear That Would Hear Sounds in Themselves: John Cage, 1935–1965', in Douglas Kahn and Gregory Whitehead, eds, *Wireless Imagination: Sound, Radio and the Avant-Garde* (Cambridge, Massachusetts: The MIT Press, 1992).

- 5 Because of the climate of repetition established by the mass media, metonymic snatches of sound could stand for an instance, class or context of sounds (and not just those in the mass media proper) and replace these at a greatly increased pace. Sounds, in other words, could be perceived at shorter and shorter durations and, thereby, in a compositional respect. Citation could occur at an elemental level and not, as was the case in musical practice, only at an organizational level, as in a melodic fragment. Cage's ideas at this time – his desire for a comprehension of a greater range of sounds (not just musical sounds) and for an apprehension of their singular integrity – are thus part of an understanding of this fundamental social transformation in aurality as delimited by the theoretical vein of Western art music.
- 6 Nam June Paik, 'Letter to John Cage' (1972), in Judson Rosebush, ed., *Video 'n' Videology: Nam June Paik (1959–1973)*, exh. cat. (Syracuse, New York.: Everson Museum of Art. 1974) unpaginated. Paik first met Cage in 1958 in Darmstadt, the centre for musical experimentation that included the circle of the composer Karlheinz Stockhausen. For a discussion of the 'major sensation' Cage created at Darmstadt with his new ideas on music, see Andreas Huyssen, 'Back to the Future: Fluxus in Context', in *In the Spirit of Fluxus*, ed. Elizabeth Armstrong and Joan Rothfuss (Minneapolis: Walker Art Center, 1993) 140–51.
- 7 'Transcript of the Videotaped Interview with George Maciunas by Larry Miller, March 24, 1978', in Jon Hendricks, ed., *Fluxus etc/Addenda I: The Gilbert and Lila Silverman Collection*, exh. cat. (New York: Ink &, 1983) 12.
- 8 Ibid.
- 9 See Bruce Altshuler, 'The Cage Class', in Cornelia Lauf and Susan Hapgood, eds, *FluxAttitudes*, exh. cat (Ghent: Imschoot uitgevers, 1991) 17–23.
- 10 Ibid, 17.
- 11 James Tenney, interview with the author, 21 March 1991.
- 12 Russolo's strategy had been possible only because Western art music excluded whole classes of sounds – and Cage's only because Russolo had settled for timbre and not for a general sonicity. Fluxus, in turn, was possible only because Russolo and Cage were not directed inwardly upon the unexploited ground of traditional Western art music.
- 13 George Brecht, *Water Yam* (1963); re-editioned (Brussels and Hamburg: Edition Lebeer Hossmann, 1986).
- 14 Michael Nyman, 'George Brecht: Interview', *Studio International*, vol. 192, no. 984 (November/December 1976) 257.
- 15 Reproduced in Ken Friedman, ed., *The Fluxus Performance Workbook*, special ed. of *El Djarida* magazine (Trondheim, Norway: Guttorm Norde, 1990) 47.
- 16 La Monte Young, ed., *An Anthology* (New York: La Monte Young and Jackson Mac Low, 1963) unpaginated.
- 17 Idem, 'Lecture 1960', *Tulane Drama Review*, vol. 10, no. 2 (Winter 1965) 73; 83.
- 18 Jean-Jacques Nattiez, *Music and Discourse: Toward a Semiology of Music*; trans. Carolyn Abbate (Princeton: Princeton University Press. 1990) 43.
- 19 Supra, 75, note 17.

- 20 Supra, 18, note 1.
- 21 Supra, 75, note 17.
- 22 F.T. Marinetti and Pino Masnata, 'La Radia', in F.T. Marinetti, *Teoria e Invenzione Futurista* (Verona: Arnoldo Mondadori editore, 1966); trans. Stephen Satarelli, in Kahn and Whitehead, eds, *Wireless Imagination*, op. cit., 176–80. [...]
- 23 Cage's magnetic audiotape piece *Williams Mix* (1952), for example, calls for 'small sounds requiring amplification to be heard with the others' as one of the six categories of sonic raw material, and *Cartridge Music* (1960) requires 'amplified small sounds'. In a rumination on the sound of mushroom propagation he proposed the following: 'That we have no ears to hear the music the spores shot off from basidia make obliges us to busy ourselves microphonically' (supra, 34, note 2). 'The Future of Music: Credo' (1937) is included in *Silence* (Middletown, Connecticut: Wesleyan University Press, 1961).
- 24 What was often termed 'everyday' in the Fluxus vernacular, however, oddly denied the increasing incursion of media technologies and mass media into daily life. The Fluxus events taken to be emblematic of the everyday were in fact reduced to a generally asocial state in the same way that the Cagean aesthetic promoted a reduction of worldly sound to musical sound.
- 25 John Cage, quoted in Richard Kostelanetz, ed., *Conversing with Cage* (New York: Limelight Editions, 1988) 69–70.
- 26 Ibid., 70.
- 27 Supra, 75, note 17. We should probably look to save for the final word: 'We cannot doubt that animals both love and practise music. That is evident. But it seems their musical system differs from ours. It is another school ... We are not familiar with their didactic works. Perhaps they don't have any.' (Satie quoted in John Cage, 'Erik Satie' [1958], in supra., 77 note 23.)
- 28 Hendricks, ed., supra, 194, note 7.
- 29 Supra, 33, note 15.
- 30 Russolo addressed complex sounds in the way he designed his *intanorumori* (noise-intoning instruments), basing them on a rotary action that could sustain sounds, hurdygurdy style. Other sustained sounds were decidedly mechanical. For example, Russolo tuned the exhaust manifolds of the airplane of the aviopoet Fedele Azari while, elsewhere in Italian Futurism, motorcycles were used in a theatrical setting for their sustained raucousness. Varese's klaxons or Cage's test-tone records, instead of rotating to hear a sound, were used to build a better glissando. Today, sustained sounds are regularly heard in motors, fans, transformers, and the like.
- 31 Cage quoted in supra., 69–70, note 25.

Douglas Kahn, extract from 'The Latest: Fluxus and Music', in Elizabeth Armstrong and Joan Rothfuss, eds, *In the Spirit of Fluxus* (Minneapolis: Walker Art Center, 1993) 102–8.

Mapping the Terrain:

Sound and Art II

Suzanne Delehayn

Soundings//1981

[...] The transmission of Schwitters' *Ursonate* or Archetypal Sounds on German radio in 1932 carried his art to a wider audience and showed, as Marinetti and Bertolt Brecht had demonstrated in the same decade, that radio could be a medium for artists. László Moholy-Nagy used sound in quite another way. In 1922 he ordered works of art by telephone and thereby used the spoken language and modern technology to distance himself from the art object to point out that the artist's conceptual process is more essential than the materials used to create art. Since Schwitters and Moholy-Nagy made their bold experiments, the development of the telephone, radio and recording industries has allowed sound to be extended or stored to hold the past moment in the present, like traditional painting and sculpture, or more aptly the camera's image. These discoveries – along with talking films, which became a commercial success in the late 1920s, and television, which was mass-produced after the Second World War – expanded artists' interest in the aesthetic as well as the political and social influence of the systems of mass distribution and global communications. Since the 1960s many painters and sculptors – often working in collaboration with engineers under the auspices of the organization Experiments in Art and Technology (EAT) – have made records, films, videotapes and multimedia works, such as the Pepsi Pavilion for Expo '70, and frequently have used these technologies side by side with the more traditional materials of the plastic arts. In the sixties many artists also turned to the transitory medium of events and performances, which have a long genealogy in our century. The Dada performances of Hugo Ball at the Cabaret Voltaire in Zurich in 1916 and Gilbert and George, the British artists who transformed themselves into singing sculptures in the late sixties, are just two examples of the transformation of the artist's own body and voice into the

material, the object of art. The expansion of the materials of art to include sound, noise, music, silence and the spoken word – all invisible to the eye – satisfied the desire of artists to present the passage of time in the once timeless world of the visual arts. At the beginning of the fifth century BCE Heraclitus saw the world in flux. In the transmission of the philosophy of the Greeks to the Renaissance, Heraclitus' view was subsumed by a concept of time as a sequence of measurable points that could be arrested by the laws of Renaissance perspective and symbolized by an hourglass held captive in the illusory stillness of representation. This mechanistic notion of time was overturned at the end of the nineteenth century by the philosopher Henri Bergson, who echoed Heraclitus in his influential book of 1889 *Time and Free Will*. Bergson saw time as the ever changing process of duration and movement in which the past flowing into the present could not be truly discerned by either the human consciousness or memory.

In the twentieth century the use of sound allowed visual artists to express duration in Bergson's sense. Sound, both implied and actual, became inseparable from the realization that the viewer's perception of a work of art transpires in time which, as John Cage has observed, 'is what we and sound happen in'. The artist's gestures and moments of thought also unfold in time. In Man Ray's *Indestructible Object* of 1923 (re-editioned in 1958), for instance, the sound of the metronome recalls the artist's process: the eye is the viewer *in absentia*, who watches the artist working in the solitude of his studio. Sound is used for a similar purpose in Robert Morris's *Box with the Sound of Its Own Making* of 1961 and in the series of paintings with accompanying recordings that Roman Opalka began in 1965. Howard Jones, whose sonic wall relief from the sixties responds to human activity, considers that 'light and sound, like life and thought, are actively involved with time, change and interval'. Time and change were also the substance of the ephemeral mixed-media events that George Brecht, Dick Higgins, Alison Knowles and other Fluxus artists staged on both sides of the Atlantic in the early sixties. Like the concurrent and often overlapping Happenings of the Pop artists, these audio-visual actions exist today only by recollection or in such announcements as George Maciunas' 1964 poster for the Perpetual Fluxus Festival. The Fluxus artists' choice of the word 'perpetual' may seem contradictory but in fact it signified that time and change, rather than static permanence, are the material of life and, therefore, of art. Perpetual change is also at the heart of Jean Tinguely's *Tokyo Gal* of 1963. In this flirtatious assemblage of found objects and old radio parts, sound inseparable from movement expresses Tinguely's belief that 'everything changes, everything is modified without cessation; all attempts to catch life in its flight and to want to imprison it in a work of art, sculpture or painting, appear to me a travesty of the intensity of life!' [...]

In the last two decades, artists have used actual sound to investigate our experience of space itself. Bernhard Leitner, trained as an architect and urban planner, considers sound and its movement, rhythm and intensity as events in time. In his room-like environments from the seventies, Leitner has created new perceptions of space with intersecting invisible lines of transmitted sound. Max Neuhaus, who abandoned a career as a virtuoso percussionist in 1967, has made more than a dozen sound installations in such unexpected locations as Times Square, where he amplified a ventilation chamber of the subway to create a volume of activated space at street level. While invisible and not generally identified as a work of art Neuhaus' environmental piece may be perceived aurally by attentive passers-by. Bruce Nauman, by contrast, warps our habitual way of hearing and its capacity to inform our sense of proper physical location in space by removing or reflecting the ambient sound along his thirty-foot wall constructed from acoustic insulation. When we walk past Nauman's wall, the presence of ambient sound in one of our ears and its absence from the other alters our customary sense of balance. For Liz Phillips 'air is a material'. With an archway of delicate copper tubing and a bronze screen that receive and project electronically controlled sounds, somewhat like a Theremin or proto-synthesizer, Phillips creates what she calls capacitance fields that make the space sensitive to our actions, our weight and density, and allow us to mould and shape sound as if it were plaster or clay that a magician had removed from our sight but not from our touch. The singing bridge of Doug Hollis gathers the wind to make 'spaces to be discovered by the ears'. [...]

The entrance of sound, both heard and unheard, into the plastic arts heralded nothing less than a new beginning. In this beginning was the word, the spoken word, ambient sound, noise, music and silence; all allowed artists to transform the visual arts into a new and third realm. In this realm, compounded in the artist's mind of physical and metaphysical reality, the once discrete, static relations among artist, art object and viewer began to quiver and resound. The artist, once merely a craftsman, became a creator. The onlooker, once solely a passive observer, became the artist's collaborator. The work of art, once silent, permanent and timeless, became a hybrid object that began to resonate in a third realm beyond the worlds of illusion and reality. Sound announced that human experience, ever changing in time and space – the substance of life itself – had become both the subject and object of art.

Suzanne Deleahny, extract from *Soundings: An International Survey of Sound in the Plastic Arts*
(Purchase, New York: Neuberger Museum/State University of New York, 1981)

The desire to compile [the anthology *Sound by Artists*] was driven by the noticeable lack of information and critical analysis regarding an art of sound. Although there has been an abundance of activity centred on explorations into sonic expression, there is no sound art movement as such. In relation to artists' works, sound occupies a multitude of functions and its employment is often coupled with other media, both static and time-based. As a result, it is not possible to articulate a distinct grouping of sound artists in the way one is able to identify other art practices. As the reader will discover, the ideas and projects put forth between the covers of this book are diverse and at times at odds with one another. The contributors included span many disciplines: critic, curator, writer, composer, video artist, installation artist, visual artist, performance artist and some more aptly described as sound, audio or radio artist. *Sound by Artists* is a collection of information pertaining to a disparate artform, presented in the hopes of stimulating dialogue.

The terms experimental music and sound art are considered by some to be synonymous and interchangeable. In fact, it is difficult to identify an art of sound precisely because of its historical attachment to music. Although music is sound, the tendency has been to designate the entire range of sonic phenomena to the realm of music. With the introduction of *noise* – the sounds of life – into a compositional framework tending towards the ephemeral and avoiding the referential, artists and composers have created works based on the assumption that all sounds uttered are music. The Futurist Luigi Russolo, envisioning an all-inclusive music, stated in *The Art of Noises* (1913) that:

We want to give pitches to these diverse noises, regulating them harmonically and rhythmically. Giving pitch to noises does not mean depriving them of all irregular movements and vibrations of time and intensity, but rather assigning a degree or pitch to the strongest and most prominent of these vibrations. Noise differs from sound, in fact, only to the extent that the vibrations that produce it are confused and irregular. Every noise has a pitch, some even a chord, which predominates among the whole of its irregular vibrations.¹

Noise is considered by Russolo for its expressive musical qualities only and not for any other significant meaning(s) that it may hold. Here, we have a definition of music that considers all (organized) sound as music, limiting the possibilities

for an art of sound autonomous from the structures and presuppositions traditionally attached to musical composition and reception. The imposition of a 'musical template' onto the sounds that otherwise, in a day to day context, have meanings other than musical ones, leads us to a dead end conclusion: all sound is music. In defence of a music autonomous from noise, Chris Cutler, drummer and critic has written:

But if, suddenly, *all sound* is 'music', then by definition, there can be no such thing as sound that is not music. The word music becomes meaningless, or rather it means 'sound'. But 'sound' already means that. And when the word 'music' has been long minted and nurtured to refer to a particular activity in respect of sound – namely its conscious and deliberate organization within a definite aesthetic and tradition – I can see no convincing argument at this late stage for throwing these useful limitations into the dustbin ...²

The 'useful limitations' that constitute and enrich a musical art practice, restrain and limit an art of sound. The stripping away of meaning from the noise of our world constitutes a refusal- fetishizing the ear, while ignoring the brain – to engage ourselves in dialogue with the multiplicity of meanings conveyed by the sounds we produce, reproduce and hear. If a critical theory of sound (*noise*) is to develop, the urge to 'elevate all sound to the state of music', will have to be suppressed. *Noise* – your lover's voice, a factory floor, the television news – is ripe with meaning and content distinguishable from the meaning and content of musical expression. It is this content that constitutes any possibility for an art of sound.

Recorded sound, like the photographic picture, is a form of representation and whether the method employed is optical film, magnetic tape or digital sampling, recording is fundamental to the development of the audio arts. Although photography, for which theories of representation are well established, preceded that of sound recording, a theory of phonography (recorded sound) has yet to emerge. In fact, the process involved in both media is similar. A mechanical instrument is used to collect data which is edited, then manipulated and finally presented as a finished work of art, conveying a particular point of view and revealing the political and social attitudes of its author. And yet, compared to the visual arts, for which theories of representation are well developed and refined, phonography, as a form of cultural and social representation, exists in a vacuum, devoid of any substantial critical discourse.

With the introduction of relatively inexpensive tape recorders, microphones and signal processing instruments, recording has become accessible. However, general usage of tape recorders remains limited to two passive acts: recording and playing back previously recorded music. By contrast, most people use their

camera as a tool for documenting their family, friends, travel and other activities, not as a duplication machine to copy other photographs. Furthermore, what one sees when looking at their photographs is self-generated and self-referential: you were there. Listening to a recording (even one that you have made yourself) of pre-recorded music amounts to nothing more than the selection of a cultural product that exists with or without your 'participation'. The potential of the microphone/tape recorder is boundless - compact, battery operated, inexpensive and readily available - as an instrument for artistic and social expression. Any social or private activity that emits sound can be recorded. Can you imagine placing an LP on the turn-table that contains the sound of your first words, your grandfather's diary or the sounds of the social function that you attended last weekend? As William S. Burroughs points out, you could

record your boss and co-workers analyse their associational patterns learn to imitate their voices oh you'll be a popular man around the office but not easy to compete with the usual procedure record their body sounds from concealed mikes the rhythm of breathing the movements of after-lunch intestines the beating of hearts now impose your own body sounds and become the breathing word and the beating heart of the organization the invisible brothers are invading present time the more people we can get working with tape recorders the more useful experiments and extensions will turn up ...³

Artists whose works are specifically constructed for recording tape are aware of the possibilities brought about by the inherent properties of the medium. Contrary to other artforms such as painting and sculpture, sound recordings are not bound to a fixed space; and through duplication, multiples can be distributed, allowing the work to be heard at various sites and at various times. Furthermore, what the listener hears is not a representation of the work, but the *work itself*. In fact, like bookworks, many listeners can be in possession of the actual artwork and, over time, gain an intimacy with the work that is impossible with traditional artforms. Given the fact that playback systems are so abundant, and cassette tapes and postage so affordable, artists working with recorded sound have, at least theoretically, the potential to reach a wide and diverse audience autonomous from the institutions and bureaucracy associated with the contemporary art museum system.

Of course, another form of distribution is radio, which would seem to offer an unlimited space in which an art (of radio?) could proliferate. However, radio, as we have come to know it – 'don't touch that dial' – is already full of itself. Baudrillard states that

in terms of the medium the result is space – that of the FM frequency – which is saturated with overlapping stations, so that what was once free by virtue of there having been space is no longer so. The word is free, but I am not; the space is so saturated, the pressure of all which wants to be heard so strong that I am no longer capable of knowing what I want. I plunge into the negative ecstasy of radio.⁴

Contemporary radio is a state-controlled medium, ever moving, always full, offering brief interludes of nostalgic re-runs from its mythical ‘golden era’ and attempting, endlessly, through its smooth and icy voices, to inform us of the mundane. Radio has been co-opted as a tool for the dissemination of state and corporate ideology. As a medium, radio is underdeveloped because it refuses to recognize the perpetration of its self-defined limitations. Like television, radio is a stagnant technology. Unless access to radio is gained, we may never come to realize its implementation as a vehicle for cultural expression and dissension. If radio were to become a space where imagination, experimentation and chance-taking could occur, the numerous possibilities that the medium may hold might begin to bear fruit. Although there are practitioners of radio art, the conditions governing the medium make tenuous the realization of an art of radio: the self-conscious casting out of disembodied objects, ephemeral and tangible in the same breath. If a sound liberation is to occur it will mean confronting the meaning(s) of the noise we produce, challenging the context of its reproduction and transmission, and engaging in an active, rather than passive, investigation of sound recording technologies.

1 Luigi Russolo, *The Art of Noises* (1913) (New York: Pendragon Press, 1986).

2 Chris Cutler, ‘Editorial Afterword’, *Records Quarterly*, vol. 2, no. 3 (London, 1988).

3 William S. Burroughs, *The Ticket That Exploded* (New York: Grove Press, 1987).

4 Jean Baudrillard, *The Ecstasy of Communication* (New York: Semiotext(e), 1988).

Dan Lander, Introduction, *Sound by Artists*, ed. Dan Lander and Micah Lexier (Toronto: Art Metropole, 1990) 10–14.

Max Neuhaus

Sound Art?//2000

From the early 1980s on there have been an increasing number of exhibitions at visual arts institutions that have focused on sound. By 1995 they had become almost an art fad. These exhibitions often include a subset (sometimes even all) of the following: music, kinetic sculpture, instruments activated by the wind or played by the public, conceptual art, sound effects, recorded readings of prose or poetry, visual artworks which also make sound, paintings of musical instruments, musical automatons, film, video, technological demonstrations, acoustic re-enactments, interactive computer programs which produce sound, etc. In short, 'Sound Art' seems to be a category which can include anything which has or makes sound and even, in some cases, things which don't.

Sometimes these 'Sound Art' exhibitions do not make the mistake of including absolutely everything under the sun, but then most often what is selected is simply music or a diverse collection of musics with a new name. This is cowardly.

When faced with musical conservatism at the beginning of the last century, the composer Edgard Varèse responded by proposing to broaden the definition of music to include all organized sound. John Cage went further and included silence. Now even in the aftermath of the timid 'forever Mozart decades' in music, our response surely cannot be to put our heads in the sand and call what is essentially new music something else – 'Sound Art'.

I think we need to question whether or not 'Sound Art' constitutes a new art form. The first question, perhaps, is why we think we need a new name for these things which we already have very good names for. Is it because their collection reveals a previously unremarked commonality?

Let's examine the term. It is made up of two words. The first is sound. If we look at the examples above, although most make or have sound of some sort, it is often not the most important part of what they are – almost every activity in the world has an aural component. The second word is art. The implication here

is that they are not arts in the sense of crafts, but fine art. Clearly regardless of the individual worth of these various things, a number of them simply have little to do with art.

It's as if perfectly capable curators in the visual arts suddenly lose their equilibrium at the mention of the word sound. These same people who would all ridicule a new art form called, say, 'Steel Art' which was composed of steel sculpture combined with steel guitar music along with anything else with steel in it, somehow have no trouble at all swallowing 'Sound Art'.

In art, the medium is not often the message.

If there is a valid reason for classifying and naming things in culture, certainly it is for the refinement of distinctions. Aesthetic experience lies in the area of fine distinctions, not the destruction of distinctions for promotion of activities with their least common denominator, in this case sound. Much of what has been called 'Sound Art' has not much to do with either sound or art.

With our now unbounded means to shape sound, there are, of course, an infinite number of possibilities to cultivate the vast potential of this medium in ways which do go beyond the limits of music and, in fact, to develop new art forms. When this becomes a reality, though, we will have to invent new words for them. 'Sound Art' has been consumed.

Max Neuhaus, 'Sound Art?', in *Volume: Bed of Sound* (New York: P.S. 1, 2000) n.p.

Concepts of the Sonic I

II. Modes of Listening

Introduction

For centuries, European art music prescribed a particular mode of listening exemplified by the ritual of the concert hall: In a closed space, separated from the outside world and the sonic domain of everyday life, a silent audience, seated some distance from a stage, listened to performers on that stage produce a narrow range of timbres on a limited array of musical instruments. In the second half of the 20th century, these listening conventions were mapped onto popular musics; and today, despite differences in genre and venue, they continue to define the ideal mode of listening to music, whether it be classical, jazz, rock, etc. Yet contemporary musical practices and technologies have problematized this traditional mode of auditory apprehension and have necessitated a new discourse around listening.

Radio and sound recording radically changed the act of listening to music, and altered the very nature of music as well. Music could now be detached from its source, from its ties to any particular setting and location. This made possible at least two new modes of listening. On the one hand, it allowed what Pierre Schaeffer termed “acousmatic listening”: listening to sound without any visual clue to its source. This shift was not only phenomenological but ontological as well. Thus, instead of existing as mere reproductions of live events, recordings disclosed ontologically distinct and autonomous soundworlds. In Schaeffer’s view, this afforded a new kind of experience: that of pure sound. On the other hand, recorded sound allowed music to infiltrate the spaces of everyday life, making possible “ambient” listening, music heard as an accompaniment to mundane activity: driving, shopping, working, etc. This idea was already envisioned in the early 1920s by Erik Satie and Darius Milhaud, who produced what they called “furniture music,” “music that would be a part of the surrounding noises and that would take them into account.”¹ But it took the technology of recording to fully realize this idea.

Already in the 1940s, theorists such as Theodor Adorno and Aldous Huxley noted the pernicious ideological effects of such passive listening. Indeed, the Muzak Corporation had already begun using background music to regulate mood and increase worker productivity. Despite Muzak’s ubiquity and corporate success, the term “Muzak” quickly became a kind of musical insult, signifying bad music and a bad listening experience. Nonetheless, in the 1970s, progressive rock and experimental music composer Brian Eno began to see the liberatory possibilities of “Ambient” listening, the ways in which it afforded listeners a new experience of music and sonic space. The advent of the Walkman stirred similar reactions. Critics complained about its anti-social aspects. Yet, theorists such as Iain Chambers saw in it the possibility of actively producing a soundtrack for one’s daily perambulations.

Cox, Christoph & Warner, Daniel (ed). *Audio Culture: Readings in Modern Music*. New York & London: Continuum, 2004.

The advent of recording had an effect not only on listening practices but also on what sounds could be heard as music. Recording equipment allowed one to amplify and focus upon previously unheard or inconspicuous sounds. Moreover, as recorded entities, the sounds of trains or frogs, for example, could be placed on par with sounds made by violins or trumpets. From there, it was a short step to begin to perceive environmental sound aesthetically, radically transforming the nature of musical sound and composition. "This blurring of the edges between music and environmental sounds," wrote R. Murray Schafer in 1973, "is the most striking feature of twentieth century music."²

Within this new context—opened up by John Cage—Pauline Oliveros, J.K. Randall, and others began to extend not only Cage's compositional ideas but also his vernacular discursive style, which, however informal, helped admit into musical discourse a vast experiential domain foreclosed by traditional musical and musical-logical approaches. Oliveros' musical phenomenology demanded an expanded sonic depth-of-field that took what traditionally might be considered distractions (the bulldozer outside, the radio playing in the next room) to be a significant part of listening, composing, and writing. For Randall, the act of consuming "Some Warm Pepsi and Part Of A Baloney Sandwich" was not outside but within the experiential totality of listening to Wagner's *Götterdämmerung*.

The advent of recording and broadcasting forever altered the experience of listening and drew attention to the act of listening itself. Contemporary music reflects these phenomenological changes and continues to work through the problems and possibilities inherent in these new modes of listening.

NOTES

1. Erik Satie as quoted by Fernand Léger in Alan M. Gillmor, *Erik Satie* (Boston: Twayne, 1988), 232.
2. See Schafer, chap. 7, above.

Acousmatics

(1966)

PIERRE SCHAEFFER

The founder of *musique concrète* (see the introduction to Section I), Pierre Schaeffer (1910–1995) is equally important as a theorist of musical listening. Trained as a radio engineer and announcer, Schaeffer was fascinated by the fact that radio and recording made possible a new experience of sound—what he called “reduced listening” or “acousmatic listening”—that disclosed a new domain of sounds—“objets sonores” or sonorous objects, the objects of “acousmatic listening.”

Like many post-War French intellectuals, Schaeffer was attracted to the philosophy of Edmund Husserl, founder of “phenomenology.” Phenomenology disregards the traditional philosophical distinctions between “subject” and “object,” “appearance” and “reality” and instead attempts simply to describe the contents of experience without reference to its source or subjective mode (e.g., dreaming, waking, etc.). In the case of sound, for example, instead of distinguishing sounds with reference to their sources (the sound of a guitar, the sound of a violin), phenomenology attempts to “reduce” (separate or distill) signal from source, and to restrict itself to describing the differences among sounds themselves. For Schaeffer, technologies such as radio and the phonograph made palpable this phenomenological experience, which was already envisioned by the Pythagoreans, among the first European musical theorists. These technologies effectively subvert the hierarchical relationship of source to signal, allowing sounds themselves (the sonorous objects) to have their own existence distinct from their sources. In this chapter from his *magnum opus*, *Treatise on Musical Objects*, Schaeffer introduces the concepts of “acousmatic listening” and the “sonorous object.”

The Relevance of an Ancient Experience

Acousmatic, the Larousse dictionary tells us, is the: “Name given to the disciples of Pythagoras who, for five years, listened to his teachings while he was hidden

behind a curtain, without seeing him, while observing a strict silence.” Hidden from their eyes, only the voice of their master reached the disciples.

It is to this initiatory experience that we are linking the notion of acousmatics, given the use we would like to make of it here. The Larousse dictionary continues: “*Acousmatic, adjective: is said of a noise that one hears without seeing what causes it.*” This term [...] marks the perceptive reality of sound as such, as distinguished from the modes of its production and transmission. The new phenomenon of telecommunications and the massive diffusion of messages exists only *in relation to and as a function of* a fact that has been rooted in human experience from the beginning: natural, sonorous communication. This is why we can, without anachronism, return to an ancient tradition which, no less nor otherwise than contemporary radio and recordings, gives back to the ear alone the entire responsibility of a perception that ordinarily rests on other sensible witnesses. In ancient times, the apparatus was a curtain; today, it is the radio and the methods of reproduction, along with the whole set of electro-acoustic transformations, that place us, modern listeners to an invisible voice, under similar conditions.

Acoustic and Acousmatic

We would utilize this experience erroneously if we subjected it to a Cartesian decomposition by distinguishing the “objective”—what is behind the curtain—from the “subjective”—the reaction of the auditor to these stimuli. In such a perspective, it is the so-called “objective” elements that contain the references of the elucidation to be undertaken: frequencies, durations, amplitudes . . . ; the curiosity put into play is that of acoustics. In relation to this approach, acousmatics corresponds to a reversal of the usual procedure. Its interrogation is symmetrical: it is no longer a question of knowing how a subjective listening interprets or deforms “reality,” of studying reactions to stimuli. It is the listening itself that becomes the origin of the phenomenon to be studied. The concealment of the causes does not result from a technical imperfection, nor is it an occasional process of variation: it becomes a precondition, a deliberate placing-in-condition of the subject. It is *toward it*, then, that the question turns around: “What am I hearing? . . . What exactly are you hearing”—in the sense that one asks the subject to describe not the external references of the sound it perceives but the perception itself.

Nonetheless, acoustics and acousmatics are not opposed to each other like the objective and the subjective. If the first approach, starting with physics, must go as far as the “reactions of the subject” and thereby integrate, in the end, the psychological elements, the second approach must in effect be unaware of the measures and experiences that are applicable only to the physical object, the “signal” of acousticians. But for all that, its investigations, turned toward the subject, cannot abandon its claim to *an objectivity that is proper to it*: if what it studies were reduced to the changing impressions of each listener, all communication would become impossible; Pythagoras’ disciples would have to give up naming, describing, and understanding what they were hearing *in common*; a particular listener would even have to give up understanding himself from one moment to the next. The question, in this case, would be how to rediscover, through confronting subjectivities, something several experimenters might agree on.

The Acousmatic Field

In the sense of acoustics, we started with the physical signal and studied its transformations via electro-acoustic processes, in tacit reference to the norms of a supposedly known listening—a listening that grasps frequencies, durations, etc. By contrast, the acousmatic situation, in a general fashion, symbolically precludes any relation with what is visible, touchable, measurable. Moreover, between the experience of Pythagoras and our experiences of radio and recordings, the differences separating direct listening (through a curtain) and indirect listening (through a speaker) in the end become negligible. Under these conditions, what are the characteristics of the current acousmatic situation?

a) Pure Listening

For the traditional musician and for the acoustician, an important aspect of the recognition of sounds is the identification of the sonorous sources. When the latter are effectuated without the support of vision, musical conditioning is unsettled. Often a surprise, sometimes uncertain, we will discover that much of what we thought was heard was in reality only seen, and explicated, through the context. This is why certain sounds produced by instruments as different as string instruments and wind instruments can be confused.

b) Listening to Effects

In listening to sonorous objects [*objets sonores*] whose instrumental causes are hidden, we are led to forget the latter and to take an interest in these objects for themselves. The dissociation of seeing and hearing here encourages another way of listening: we listen to the sonorous forms, without any aim other than that of hearing them better, in order to be able to describe them through an analysis of the content of our perceptions.

In fact, Pythagoras' curtain is not enough to discourage our curiosity about causes, to which we are instinctively, almost irresistibly drawn. But the repetition of the physical signal, which recording makes possible, assists us here in two ways: by exhausting this curiosity, it gradually brings the sonorous object to the fore as a perception worthy of being observed for itself; on the other hand, as a result of ever more attentive and more refined listenings, it progressively reveals to us the richness of this perception.

c) Variations in Listening

Furthermore, since these repetitions are brought about in physically identical conditions, we become aware of the variations in our listening and better understand what is in general termed its "subjectivity." This does not refer, as one might perhaps tend to think, to an imperfection or a kind of "fuzziness" [*flou*] that would scramble the clarity of the physical signal; but rather to particular clarifications or precise directions that reveal, in each case, a new aspect of the object, toward which our attention is deliberately or unconsciously focused.

d) Variations in the Signal

Finally, we should mention the special possibilities we have for intervening in the sound, the implementation of which accentuates the previously described fea-

tures of the acousmatic situation. We have focused on the physical signal fixed on a disk or magnetic tape; we can act on it, dissect it. We can also make different recordings of a single sonorous event, approaching the sound at the moment of its taping [*prise de son*] from various angles, just as one can film a scene using different shots [*prise de vues*]. Assuming that we limit ourselves to a single recording, we can still read the latter more or less quickly, more or less loudly, or even cut it into pieces, thereby presenting the listener with several versions of what was originally a unique event. What does this deployment of diverging sonorous effects from a single material cause represent, from the point of view of the acousmatic experience? What correlation can we expect between the modifications that are imposed on what is recorded on the tape and the variations in what we are hearing?

On the Sonorous Object: What It Is Not

We have spoken at several points of the sonorous object, utilizing a notion that has already been introduced, but not clarified. It is clear, in light of the present chapter, that we were able to propose this notion in advance only because we were implicitly referring to the acousmatic situation that has just been described. If there is a sonorous object, it is only insofar as there is a blind listening [*écoute*] to sonorous effects and contents: the sonorous object is never revealed clearly except in the acousmatic experience.

Given this specification, it is easy for us to avoid erroneous responses to the question raised at the end of the preceding paragraph.

a) The sonorous object is not the instrument that was played.

It is obvious that when we say "That's a violin" or "That's a creaking door," we are alluding to the *sound* emitted by the violin, to the *creaking* of the door. But the distinction we would like to establish between the instrument and the sonorous object is even more radical: if someone plays us a tape which records a sound whose origin we are unable to identify, what are we hearing? Precisely what we are calling a sonorous object, independent of any causal reference, which is designated by the terms *sonorous body*, *sonorous source* or *instrument*.

b) The sonorous object is not the magnetic tape.

Although it is materialized by the magnetic tape, the object, as we are defining it, is not on the tape either. What is on the tape is only the magnetic trace of a signal: a *sonorous support* or an *acoustic signal*. When listened to by a dog, a child, a Martian, or the citizen of another musical civilization, this signal takes on another meaning or sense. The object is not an object *except* to our listening, it is relative to it. We can act on the tape physically, cutting it, modifying its replay speed. Only the act of listening by a listener [*seule l'écoute d'un auditeur*] can provide us with an account of the perceptible result of these manipulations. Coming from a world in which we are able to intervene, the sonorous object is nonetheless *contained entirely in our perceptive consciousness*.

c) *A few centimeters of magnetic tape can contain a number of different sonorous objects.*

This remark follows from the preceding one. The manipulations just mentioned do not modify a sonorous object having an intrinsic existence. They have created other objects from it. There is, of course, a correlation between the manipulations to which one subjects a tape or its diverse conditions of reading, the conditions of our listening and the perceived object.

A simple correlation? Not at all, it must be expected. Suppose, for example, that we listened to a sound recorded at normal speed, then slowed down, then again at normal speed. The slowed-down portion, acting like a magnifying glass in relation to the temporal structure of the sound, will have allowed us to discern certain details—of grain, for example—which our listening, thus alerted and informed, will rediscover in the second passage at normal speed. We must let ourselves be guided here by the evidence, and the very way we have had to formulate our supposition dictates the response: it is indeed the same sonorous object, subjected to different means of observation, that we are comparing to itself, original and transposed. But what makes it one and the same object is precisely our will to comparison (and also the fact that the operation to which we have subjected it, in this very intention to compare it to itself, has modified it, without rendering it unrecognizable).

Suppose now that we play this slowed-down sound to an unwarned listener. Two cases can arise. Either the listener will still recognize the instrumental origin and, at the same time, the manipulation; for him there will be an original sonorous source that in fact he does not hear, but to which, however, his listening refers him: what he hears is effectively a transposed version. Or else he will not identify the real origin, will not suspect the transposition, and he will then hear an original sonorous object, which will be so automatically. (It cannot be a question of an illusion or a lack of information, since in the acousmatic attitude our perceptions cannot rest on anything external.) Inversely, for those of us who have just subjected the sonorous object to one or more transpositions, it is likely that there will be a unique object and its different transposed versions. However, it may also happen that, abandoning any intention to comparison, we attach ourselves exclusively to one or the other of these versions, in order to make use of them, for example, in a composition; they will then become for us so many original sonorous objects, completely independent of their common origin.

We could devote ourselves to similar analyses of other types of manipulations (or variations of the act of recording [*prise de son*]) which, as a function of our intention, our knowledge, and our prior training, will have as their result either variations of a single sonorous object, or the creation of diverse sonorous objects. With the slowing-down, we have voluntarily chosen a modification that lends itself to equivocation. Other manipulations can transform an object in such a way that it becomes impossible to grasp any perceptible relations between the two versions. In this case, we will not speak of the permanence of a single sonorous object, if the identification no longer rests on anything but the recollection of the diverse operations to which “something that was on the magnetic tape” was subjected. If it is impossible for a listener to recognize a kinship between the diverse sonorous results—even guided by recollections and a will to comparison—we will say that

the manipulations of a single signal have given way to diverse sonorous objects, whatever our intention may have been.

d) *But the sonorous object is not a state of the mind [âme].*

To avoid confusing it with its physical cause or a “stimulus,” we seemed to have grounded the sonorous object on our subjectivity. But—our last remarks already indicate this—the sonorous object is not modified for all that, neither with the variations in listening from one individual to another, nor with the incessant variations in our attention and our sensibility. Far from being subjective (in the sense of individuals), incommunicable, and practically ungraspable, sonorous objects, as we shall see, can be clearly described and analyzed. We can gain knowledge of them. We can, we hope, transmit this knowledge.

Our rapid examination of the characteristics of the sonorous object reveals this ambiguity: as an objectivity linked to a subjectivity, it will surprise us only if we obstinately insist on opposing “psychologies” and “external realities” as antinomies. Theories of knowledge did not have to wait for the sonorous object to perceive the contradiction that we are indicating here, and which is not revealed in the acousmatic situation as such [. . .].

The Originality of the Acousmatic Procedure

Our approach is thus distinguished from the spontaneous instrumental practice in which [. . .] everything is given at once: the instrument, as the element and means of a musical civilization, and the corresponding virtuosity, and thus a certain structuration of the music extracted from it. Nor do we any longer lay claim to “the most general instrument that exists”; what we are aiming at, in fact, and which follows from the preceding remarks, is the most general musical situation that exists. We can now describe it explicitly. We have at our disposal the generality of sounds—at least in principle—without having to produce them; all we have to do is push the button on a tape recorder. Deliberately forgetting every reference to instrumental causes or preexisting musical significations, we then seek to devote ourselves entirely and exclusively to *listening*, to discover the instinctive paths that lead from the purely “sonorous” to the purely “musical.” Such is the suggestion of acoustics: to deny the instrument and cultural conditioning, *to put in front of us the sonorous and its musical “possibility.”*

One more remark before finishing [. . .]. In the course of this chapter, we have already begun to *hear* with another ear [. . .]. The interest of this remark is not a matter of pure form: it consists in noting that the operative technique has itself created the conditions of a new listening. Let us give audio-visual techniques what is owed to them: we expect from them unheard-of sounds, new timbres, deafening plays—in a word, instrumental progress. Indeed, they provide all that, but very quickly we no longer know what to do with it all; these new instruments are not added easily to the old ones, and the questions they pose singularly disrupt received notions. The tape recorder has the virtue of Pythagoras’ curtain: if it creates new phenomena to observe, it creates above all new conditions of observation [. . .].

Profound Listening and Environmental Sound Matter

FRANCISCO LÓPEZ

The work of Spanish sound artist Francisco López (1964–) grows out of his experience as an entomologist. While doing fieldwork in Latin American rainforests, López was struck by the connection between the rainforest soundscape and Pierre Schaeffer's concept of "acousmatic listening." Though rainforests are full of sound, the sources of these sounds (insects, birds, monkeys, etc.) remain largely hidden. Over the past two decades, López's work as a sound artist has exploited this connection between field recordings and acousmatic listening. He considers himself an ecologist; yet rejects many of the assumptions and practices of the Acoustic Ecology movement and its founder, R. Murray Schafer. In this piece, López rejects the idea that sound recording can ever be simply representational and argues instead that it is always a creative act. López's recordings are nearly all "untitled" in an effort to call our attention to the sounds themselves rather than to their sources. For the same reason, he asks that audience members wear blindfolds during his live performances. In this discussion of his 1997 recording *La Selva* (composed entirely of field recordings from the La Selva rainforest reserve in Costa Rica), López summarizes his compositional philosophy and theory of listening.

Many nature recordings as well as some current sound art embody an aesthetic that is governed by traditional bioacoustic principles, which emphasize procedural, contextual, or intentional levels of reference. Whenever there is such a stress on the representational/relational aspect of nature recordings, the meaning of the sounds is diminished, and their inner world is dissipated.

Counter to this trend, I believe in the possibility of a "blind" listening, a profound listening freed as much as possible from such constraints. This form of listening doesn't negate what is *outside* the sounds but explores and affirms all that

is *inside* them. This purist, absolute conception is an attempt at fighting against the dissipation of this inner world.

Nature Sound Environments vs. Bioacoustics

My approach departs from traditional bioacoustics, which follows a reductive interpretation of nature recordings. This discipline focuses on capturing the sounds produced by different animal species, mainly for identification purposes [. . .] The sounds of many animal species are included in the recordings that constitute my work, *La Selva*, and they have even been identified, but none of them has been singled out in the processes of recording and editing. With traditional bioacoustics, the aim of which is scientific, the calls, songs, or other sounds of a certain species are usually isolated from the "background" sound of its environment in both the recording and the editing processes, and the contrast between the foregrounded species and its background is even further enhanced.

In *La Selva* the sound-producing animal species appear together with other accompanying biotic and non-biotic components that inhere in the sound environment. Any resulting distinction between foreground and background was not arranged purposefully but emerged incidentally, due to the location of the microphones, as might occur with our ears. My attention was "focused" on the sound environment as a whole, which is one of the reasons why there are no indexes on the CD. I wanted to discourage a focal listening centered on the entrances of species or other sonic events.

The habitual focus on animals as the main elements in a sound environment is particularly limiting. Not only are non-biotic sound sources evident in many nature environments (rainfall, rivers, storms, wind), but there is also a type of sound-producing biotic component that exists in almost every environment and that is usually overlooked: plants. In most cases—especially forests—what we tend to refer to as the sound of rain or wind might more aptly be called the sound of plant leaves and branches.

If our reception of nature sounds were more focused on the environment as a whole rather than on the organisms we perceive to be most similar to us, we would be more likely to take the bioacoustics of plants into account. Further, a sound environment is the consequence not only of all its sound-producing components, but also of all its sound-transmitting and sound-modifying elements. The birdsong we hear in the forest is as much a consequence of the trees or the forest floor as it is of the bird. If we listen attentively, the topography, the degree of humidity of the air, or the type of materials in the topsoil become as essential and defining of the sonic environment as the sound-producing animals that inhabit a certain space [. . .]

In my work with nature sound environments, I have moved away from the rationalizing and categorizing of these aural entities. I prefer this environmental perspective not because it is more "complete" or more "realistic" but because it encourages a perceptual shift from the recognition and differentiation of sound sources to the appreciation of the resulting sound matter. As soon as the call is in the air, it no longer belongs to the frog that produced it.

The Illusion of Realism or the Fallacy of the “Real”

The recordings that are featured on *La Selva* have not been modified or subjected to any process of mixing or additions. One might say that this work features “pure” nature sound environments, as is often claimed on commercially released nature recordings. But I believe this obscures a series of questions that have to do with our sense of reality and our notions about its representation in sound recordings. In some of the nature recordings that attempt to convey an easy sense of naturalness, various animal vocalizations are mixed over a background matrix of environmental sound. As in the case of traditional bioacoustics, in which sounds are isolated, this artificial mixing approach of massive inclusion could be criticized as being unreal or hyperreal. Yet we should then consider on which grounds are we criticizing this tricky departure from reality.

Since the advent of digital recording technology (with all its concomitant sound-quality improvements); it has become all the more evident, in our attempt at apprehending the sonic world around us, that the microphones we use are not only our basic interfaces, they are non-neutral interfaces. The way different microphones “hear” varies so significantly that they can be considered as a first transformational step in the recording process. The consequences of the choices made regarding which microphones will be used are more dramatic than, for example, a further re-equalization of the recordings in the studio.

Yet even if we don’t subtract or add anything to the recording, we cannot avoid imposing on it our version of what we consider to be reality. Attempts have been made to circumvent this problem by means of technological improvements. The ambisonics surround sound system, for example, is foreseen as a means of *reproducing* soundscapes, conveying a more realistic sense of envelopment and an illusion of “being there.” Although I appreciate the palette of new sound nuances and the “spaceness” facilitated by these technological improvements, it isn’t “realism” that I’m after in my work. But this evocation of place seems frequently to be an objective in the creation of nature recordings.

Only I don’t think “reality” is being reproduced with these techniques; rather, a hyperreality is being constructed. The carefully recorded, selected, and edited sound environments that we are able to comfortably enjoy in our favorite armchairs offer an enhanced listening experience, one that we would likely not have if we were hearing those sounds in the “real” world. Ironically, it is often these nonrealistic effects that give this kind of sound work its appeal, as they satisfy our expectations of how “the real thing” sounds. I don’t mean to suggest that the recorded version is better. Rather, I want to suggest that it is not a version but a different entity with its own inherent value.

Sound editing seems to be another unavoidable obstacle in the attempt to portray aural reality. Whereas the “microphone interface” transfigures the spatial and material characteristics of sound, editing affects its temporality. This process has already begun to take place during the act of recording in that there is always a start and an end for the recording. In most cases, further “time windows” are created in the editing process when a new start and a new end are established for the sound fragment. Also, when we have several sound fragments, we create a montage.

If it is naturalness that we are after in our sound work, what kind of editing makes a piece sound more “real”? David Dunn has challenged the decision often

made in nature recording to eliminate human-made sounds. He contends that the elision of sound fragments of natural environments that contain human sonic intrusions (aircraft, road traffic, etc.)—by not recording them or editing them out—is a “false representation of reality” that “lures people into the belief that these places still fulfill their romantic expectations.”¹

But I think the problem goes beyond the issue of phonographic falsification. Our bodies and imaginations engage in sonic transcription and reproduction more than the machines we have invented for these purposes. For instance, we can have a much more striking perception of such a human sonic intrusion than does a microphone, or not perceive it at all, both in the moment it is heard and in the traces it has left in our memory. Do we always realize when there’s some distant traffic noise if our attention is focused on an insect call? Do we remember the nearby voices of people when we are recalling a day we enjoyed the sound of the rain in the forest? If not, was our experience—or what we have retained of it—false? Even if our level of consciousness includes both the traffic and the insect, do we have to embrace both of them in representing reality? Because this perceptual ambiguity is at the basis of our apprehension of “reality,” I don’t think a recording that has been “cleaned up” of human-made sounds is any more false than one that hasn’t.

I don’t believe that there is such a thing as the “objective” apprehension of sonic reality. Regardless of whether or not we are recording, our minds conceptualize an ideal of sound. And not only do different people listen differently, but the very temporality of our presence in a place is a form of editing. The spatial, material, and temporal transfigurations exist independently of phonography. Our idea of the sonic reality, even our fantasy about it, is the sonic reality each one of us possesses [. . .].

This is Not *La Selva*: Sound Matter vs. Representation

“This is not a pipe”

—René Magritte

What you hear on *La Selva* is not *La Selva*. That is, *La Selva* (the musical piece) is not a representation of *La Selva* (the reserve in Costa Rica). While it certainly contains elements that can be understood as representational, the musical piece is rooted not in a documentary approach but in a notion of “sound matter” [. . .].

What I’m defending here is the transcendental dimension of the sound matter *itself*. In my conception, sound recording does not document or represent a richer and more significant “real” world. Rather, it focuses on the inner world of sounds. When the representational/relational level is emphasized, sounds acquire a restricted meaning or a goal, and this inner world is dissipated. I’m thus straightforwardly endorsing Pierre Schaeffer’s concepts of the “sound object” and of “reduced” or “acousmatic” listening.² I prefer the term “matter” to “object,” because I think it better reflects the continuity of the sonic material one finds in sound environments, a continuity affirmed by the non-representational approach to sound recording. I also prefer the term “profound” to the term “reduced” because the latter connotes simplification.

The richness of this sound matter in nature is astonishing, but to appreciate it in depth we have to face the challenge of profound listening. We have to shift the focus of our attention and understanding from representation to being [. . .]

Environmental Acousmatics: The Hidden Cicada Paradox

Acousmatics, or the rupture of the visual cause-effect connection between the sound sources and the sounds themselves, can contribute significantly to the “blindness” of profound listening. Like most tropical rain forests, La Selva is a dynamic example of what we could call “environmental acousmatics.” There are many sounds in the forest, but one rarely has the opportunity to see the sources of most of those sounds. This is not only because the multitude of animals are hidden in the foliage. The foliage also obscures itself, concealing myriad plant sound sources, caused not only by wind or rain but by falling leaves and branches—a frequent occurrence in that forest.

Many animals in La Selva live in this acousmatic world, in which the rule is not to see their conspecifics, predators, or preys, but just to hear them. This acousmatic feature is best exemplified by one of the most characteristic sounds of La Selva: the strikingly loud and harsh song of the cicadas. During the day, this is probably the sound that typically would most naturally stand in the foreground of the sonic field. You hear it with an astonishing intensity and proximity. Yet, like a persistent paradox, you never see its source.

A Non-Bucolic Broadband World

Nature sound environments are often characterized as tranquil places, peaceful islands of quietude in a sea of rushing, noisy, human-driven habitats [. . .] While this notion might be true for certain natural environments and under certain conditions, I think it contributes to a restricted and bucolic view of nature that I don’t share. Like many other tropical rain forests, La Selva is quite a noisy place. The diverse sounds of water (rain, watercourses), together with the sound web created by the intense calls of insects or frogs and plant sounds, make up a wonderfully powerful broadband sound environment of thrilling complexity. The textures are extremely rich, with multiple layers that merge with each other and reveal themselves by addition or subtraction, challenging one’s perception and also the very notion of what an individual sound might be.

This contributes to expanding our aural understanding of nature, not by denying stillness but by embracing a more inclusive conception, freed of our judgment and reductive categorization. I’m certainly in favor of defending the “pristine” sound quality of natural environments, but for this reason: I think we should avoid the sound intrusion that leads to sonic homogenization, thus conserving the diversity of sounds in the world. In that spirit, I also support the preservation and enhancement of the diversity of human-made sound environments and devices. The value we assign to sound environments is a complex issue that we shouldn’t simplify. Under some circumstances, nature can also be considered to be an intrusion in human-made sound environments. In this sense, my approach is as futurist as it is environmentalist [. . .]

I consider *La Selva* to be a piece of music, but not in the classical sense of the word. Nor do I subscribe to the traditional concept of what is considered to be musical in nature, or how nature and music have been coupled—for example, the search for melodic patterns, comparisons between animal sounds and musical instruments, or “complementing” nature sounds with “musical” ones. To me, a waterfall is as musical as a birdsong.

I believe in expanding and transforming our concept of music through nature (and through “non-nature”), not in the absolute assignment of sounds to music (either in any restricted traditionally academic sense or in the Cagean universal version). Rather, it is my belief that music is an aesthetic (in its widest sense) perception/understanding/conception of sound. It’s our *decision*—subjective, intentional, non-universal, not necessarily permanent—that converts nature sounds into music. We don’t need to transform or complement the sounds. Nor do we need to pursue a universal and permanent assignment. It will arise when our listening moves away and is freed from being pragmatically and representationally oriented. And attaining this musical state requires a profound listening, an immersion in the *inside* of sound matter.

NOTES

1. David Dunn, “Nature, Sound Art, and the Sacred,” in *The Book of Music and Nature*, ed. David Rothenberg and Marta Ulvaeus (Middletown, CT: Wesleyan University Press, 2001), pp. 95–107.

2. See chap. 14, above.

Concepts of the Sonic II

From Music to Sound: Being as Time in the Sonic Arts

Christoph Cox

In the summer of 1979, The Kitchen, New York's center for the experimental arts, mounted a festival titled "New Music, New York."¹ The week-long program presented performances by Philip Glass, Meredith Monk, Tony Conrad, George Lewis, Michael Nyman and others, and marked the coming-of-age of minimalist and experimental music.² In the Spring of 2004, The Kitchen and a host of other New York arts institutions celebrated the 25th anniversary of that event with a festival titled "New Sound, New York," billed as "a citywide festival of performances, installations and public dialogues featuring new works by sound artists who are exploring fresh connections among music, architecture and the visual arts."³ The shift in title—from *music* to *sound*—is emblematic. For, over the past quarter century, "sound" has gradually displaced "music" as an object of cultural fascination. Not only has "sound art" become a prominent field of practice and exhibition, embraced by museums and galleries across the globe. The academy has also witnessed an explosion of interest in auditory history and anthropology led by social scientists who have turned their attention to sound as a marker of temporal and cultural difference.⁴ Within the field of music itself, composers, producers, and improvisers have become increasingly attracted to the broader sonic domains against which music has always defined itself: noise, silence, and non-musical sound.

It is common to think of *music* as a subcategory of *sound*. According to this view, *sound* encompasses the entire domain of auditory phenomena, while *music* is a narrower domain delimited by some selection and organization of sounds. However compelling this ordinary view may be, I want to propose that we conceive of this relationship differently, that, instead of a mere *difference of degree* we think of music and sound as *differences of kind* marked by their different relationships to

¹ A few sentences in this essay are drawn from previous publications: the introduction to *Audio Culture: Readings in Modern Music*, ed. Christoph Cox and Daniel Warner (New York: Continuum, 2004), pp. xiii–xvii, the original English version of "Wie wird Musik zu einem organlosen Körper? Gilles Deleuze und experimentale Elektronika," *Soundcultures: Über digitale und elektronische Musik*, ed. Marcus S. Kleiner and Achim Szepanski (Frankfurt: Suhrkamp Verlag), 162–93, and "Nietzsche, Dionysus, and the Ontology of Music," *A Companion to Nietzsche*, ed. Keith Ansell Pearson (Malden, MA: Blackwell, 2006).

² Highlights from the festival have recently been released on CD: *From the Kitchen Archives: New Music New York 1979* (Orange Mountain Music, 2004).

³ http://www.thekitchen.org/04S_april.html

⁴ A sampling of such work can be found in *Hearing History: A Reader*, ed. Mark M. Smith (Athens, GA: University of Georgia Press, 2004) and *The Auditory Culture Reader*, ed. Michael Bull and Les Back (Oxford: Berg, 2003).

being and time. Taking my terms from Friedrich Nietzsche and Henri Bergson, I want to argue that the shift from “music” to “sound” marks an **ontological shift from *being* to *becoming*** and a **temporal shift from *time* (*le temps*) to *duration* (*la durée*).**

My argument here will be both conceptual and historical. Drawing on two key moments in the history of sonic experimentation over the past half-century, I want to show how *music* has given way to *sound*, and to offer some philosophical speculations on sound, time, and being.

The Reality of Time: Becoming, Duration, and The Virtual

In the opening pages of his recent book *Architectures of Time*, cultural theorist Sanford Kwinter asks: “What would it change in our arts, our sciences, and our technics if time were conceived as something *real*?⁵ Here, I want to make a start at answering this question with regard to music and sound art. No one has contributed more to the philosophical reconsideration of time than Nietzsche and Bergson. And it is no coincidence that, after periods of neglect, these two philosophers have come to exercise an enormous influence on the thought of the past few decades.

Nietzsche’s ontological project consists in the deconstruction of “being.” Ever since Parmenides and Plato, Nietzsche argues, the West has been obsessed with “being,” that is, with **stable and durable entities that are said underlie change, substances that govern change but are transcendent in relationship to it.** The very paradigm of this conception of being is the Judeo-Christian God. Hence, Nietzsche’s most famous claim, “God is dead,” ought to be seen not as a religious statement but as an ontological one. The death of God means the rejection of being and an affirmation of the alternative position that **there is only nature**, that is, ceaseless becoming and change. Being is not transcendent but immanent; and immanent being is becoming. Throughout his corpus, Nietzsche insists that there is only becoming, and that **being is a fiction**, a pragmatic invention that, for millennia, was misconstrued as a metaphysical reality. “There is no ‘being’ behind doing, effecting, becoming,” Nietzsche writes, “‘the doer’ is merely a fiction added to the deed—the deed is everything.”⁶

Bergson makes a similar move. He insists that there is only becoming and that, if it is anything, being is simply a modality of becoming. “*There are changes,*” Bergson insists, “but **there are**

⁵ Sanford Kwinter, *Architectures of Time* (Cambridge, MA: MIT Press, 2001), p. 4.

⁶ Friedrich Nietzsche, *On the Genealogy of Morals*, III: 13, *Basic Writings of Nietzsche*, ed. and trans. Walter Kaufmann (New York: Modern Library, 1992), p. 481. For other texts along these lines, see *The Gay Science* §§108–109 and “‘Reason’ in Philosophy” and “How the ‘True’ World Finally Became a Fable” in *Twilight of the Idols*. For a development of this argument, see my *Nietzsche: Naturalism and Interpretation* (Berkeley: University of California Press, 1999).

*underneath the change no things which change: change has no need of a support.*⁷ This claim forms part of Bergson's larger project: to restore the reality of time. He notes repeatedly that, particularly since the rise of classical physics in the 17th century, European culture has asserted the hegemony of space over time. For classical physics, time was essentially unreal or conceived solely in spatial terms as the passage from one state to another. The nature of time was exemplified by the figure of the clock, on which moments—discrete, present entities—are laid out side-by-side in spatial succession.

Against this conception, Bergson argues for the priority of time over space. He reveals that the spatialized, quantified conception of time (*le temps*) conceals another, more primordial experience of time as a qualitative process, a flow in which past, present, and future permeate one another to form a genuine continuum. If abstract time (*le temps*) is conceived as a container separate from, and transcendent with regard to the sequence of states and events it measures, this alternative conception of time (which Bergson calls “duration” or *la durée*) is the very flow that produces beings and events and by which they constantly become-other.

Bergson's contrasts between space and time, *le temps* and *la durée* are often construed as contrasts between the objective and the subjective, the physical and the psychological. Yet, as Gilles Deleuze and others have shown, duration, for Bergson, is not a subjective experience of time but a general ontology, a theory of being. Though Bergson began his career by offering an analysis of duration in “the immediate data of consciousness,” he gradually moved toward a notion of *being as duration*, a becoming differentiated by various temporal “rhythms,” “vibrations,” “tensions,” “dilations,” and “contractions.”⁸ We can read Bergson, then, as offering an extension of Nietzsche's conception of becoming that develops its temporal character and that helps us to see how the notion of becoming reconceives both being and time.

I will round off this philosophical *précis* by introducing a final theoretical notion that, inspired by Nietzsche and Bergson, is developed by Gilles Deleuze: the notion of the virtual. Deleuze asks us to conceive of “the real” as consisting of two registers, “the actual” and “the virtual.” For Deleuze, “the virtual” is the repository of potentiality. But this potentiality is not mere futural possibility. Unlike possibility, virtuality is fully existent and real (quoting Marcel Proust, Deleuze calls the

⁷ Henri Bergson, “The Perception of Change,” *The Creative Mind*, trans. Mabelle L. Andison (New York: Greenwood, 1968), p. 173.

⁸ This is most explicit in Bergson's “Introduction to Metaphysics,” *The Creative Mind*, pp. 218–20. See also *Matter and Memory*, trans. Nancy Margaret Paul and W. Scott Palmer (New York: Zone, 1988), pp. 205ff. See Gilles Deleuze, *Bergsonism*, trans. Hugh Tomlinson and Barbara Habberjam (New York: Zone Books, 1988), pp. 34, 76ff.

virtual “real without being actual, ideal without being abstract”).⁹ Rather, the virtual contains the non-actualized tendencies of real existents. It coexists with the actual, which contracts, expresses, or actualizes the virtual whole. For Bergson, the paradigm for the virtual is the past—not *this* or *that* past event but the “pure past,” the entire field of the past, regions of which are now and then illuminated by memory.¹⁰ In Deleuze, this virtual field goes by a various names, most notably the “Body without Organs” and “the plane of consistency.”¹¹

John Cage: Toward Becoming, Duration, and the Virtual

With this philosophical framework in place, I now want to return to my initial suggestion about the shift from music to sound in contemporary culture. I do not have the space here to tell this story in full. So I will simply draw attention to two key turning points. The first of these occurs in the 1950s with John Cage and his circle. Cage, I think, inaugurates a shift in music akin to the philosophical shift prompted by Nietzsche, Bergson, and Deleuze. For Cage inauguates a “deconstruction of music”; and he does so precisely with reference to becoming, duration, and the virtual.

In a lecture delivered at Darmstadt in 1958, Cage lays out what he takes to be the essential formal aspect of European art music, the production of “time-objects”: “the presentation of a whole as an object in time having a beginning, a middle, and an ending, progressive rather than static in character, which is to say possessed of a climax or climaxes and in contrast a point or points of rest.”¹² Such musical “time-objects” are cut by the composer from the flux of becoming and duration. In contrast with this open flux, these musical works are bounded and fixed in the form of a score that insures the identity of the work over time and that determinately regulates the behavior of performers whose role is to carry out the instructions of the composer and score.

One can imagine a number of criticisms of this notion of music, for example that it places the performer in the role of a mere copyist or that, for audiences, such works could soon become predictable and dull. Yet Cage’s objections are of another sort. They are, precisely, ontological. Cage objects to the notion of music as a *being* and insists that it become a *becoming*—“a process essentially purposeless,” “a process the beginning and ending of which are irrelevant to its nature.”¹³ That is, Cage argues that music should come into accord with the post-theological world

⁹ See Deleuze, *Bergsonism*, p. 96, and *Difference and Repetition*, trans. Paul Patton (New York: Columbia University Press, 1994), p. 208.

¹⁰ See Bergson, *Matter and Memory*, chapter 3.

¹¹ On the relationship of this notion to contemporary music, see my “Wie wird Musik zu einem organlosen Körper?”.

¹² John Cage, “Composition as Process II: Indeterminacy,” *Silence* (Hanover, NH: Wesleyan University Press, 1961), pp. 36 (*Audio Culture*, p. 178).

¹³ Cage, “Composition as Process II: Indeterminacy,” p. 38 (*Audio Culture*, pp. 182–3).

in which we live, a world that is fundamentally *open*, without origin, end, or purpose. This is the meaning of Cage's famous imperative: "art must imitate nature in her manner of operation."¹⁴ That is, art—music—must be a becoming not a being, duration not time.

This, of course, is the genius of Cage's *4'33"* (1952), which he consistently deemed his most important and successful piece.¹⁵ At issue in *4'33"* is a confrontation between *le temps* and *la durée*. The title of the piece explicitly refers to the spatialized time of the clock—a fact Cage underscores by noting that the title could also be read "four feet, thirty-three inches."¹⁶ And, of course, the performance of the piece is regulated by a stopwatch. Yet the arbitrariness of this temporal scope (determined through chance procedures) and the sonic experience it discloses indicates that *4'33"* is after another experience of time: the time of duration and the virtual, into which it opens an aural window. Beyond music, it opens up the infinite and continuously unfolding domain of worldly sound.

The sequel to this work, *0'00"* (1962) further radicalizes this argument about temporality. The piece calls for "nothing but the continuation of one's daily work, whatever it is, [...] done with contact microphones, without any notion of concert or theater or the public." "What the piece tries to say," continues Cage, "is that everything we do is music, or can become music through the use of microphones; so that everything I'm doing, apart from what I'm saying, produces sound." Again, Cage includes the temporal marker. But, at the same time, he reduces it to zero, puts it under erasure. "I'm trying to find a way to make music that does not depend on time," he said of the piece. "[I]t is precisely this capacity for measurement that I want to be free of."¹⁷

The aim of *4'33"* and *0'00"*, then, is to open time to the experience of duration and to open musical experience to the domain of sound. It is also to open human experience to something beyond it: the non-human, impersonal flow that precedes and exceeds it. "I think music should be free of the feelings and ideas of the composer," Cage remarks. "I have felt and hoped to have led other people to feel that the sounds of their environment constitute a music which is more interesting than the music which they would hear if they went into a concert hall."¹⁸ Cage urges the composer "to give up the desire to control sound, clear his mind of music, and set about discovering means to let

¹⁴ See, for example, Cage's "Introduction to *Themes & Variations*," *Audio Culture*, p. 221.

¹⁵ See, for example, *Conversing with Cage*, 2nd edition, ed. Richard Kostelanetz (New York: Routledge, 2003), pp. 70–1, 86.

¹⁶ Cage, *Conversing with Cage*, p. 70.

¹⁷ Cage, *Conversing with Cage*, p. 74.

¹⁸ Cage, *Conversing with Cage*, p. 70.

sounds be themselves rather than vehicles for man-made theories or expressions of human sentiments.”¹⁹ “Music is permanent,” he writes, “only listening is intermittent.”²⁰

“Chance” and “silence” are Cage’s transports into this transcendental or virtual domain.²¹ These two strategies allow the composer to bypass his subjective preferences and habits in order to make way for sonic conjunctions and assemblages that are not his own—that, to quote Deleuze, are “preindividual” and “impersonal.” And “silence,” for Cage, names not the absence of sound (an impossibility, he points out), but the absence of *intentional* sound, an attention to the sonic life of the world or nature. *4'33"* remains the Cage’s most elegant attempt along these lines. But so much of Cage’s work—his work with radios in the 1950s, for example—reveals that he conceived of sound (natural and cultural alike) as a ceaseless flow, and composition as the act of drawing attention to or accessing it.

Sound Art and the Experience of Duration

Beginning from Cage, one could go on to show how the post-Cagean legacy furthered this reconception of being, time, music and sound. Episodes in this historical story might include Morton Feldman’s efforts to reclaim “Time in its unstructured existence”²²; musical minimalism’s interest in the “pure sound-event” (Glass) and in what Deleuze calls “non-pulsed time”²³; experimental music’s rejection of a closed, physical model of music in favor of an open, biological model; the eradication of the time-object and the embrace of ephemerality in Free Jazz and Improvised Music; and DJ Culture’s dissolution of the record-object into a continuous and anonymous sonic flux. Such a story would show how, within the domain of “music” itself, the past half-century has witnessed a general shift from *music* to *sound*, from the activity of

¹⁹ Cage, “Experimental Music,” *Silence*, p. 10.

²⁰ Cage, “Introduction to *Themes & Variations*,” *Audio Culture*, p. 224. Compare Gilles Deleuze and Félix Guattari: “music is not the privilege of human beings: the universe, the cosmos, is made of refrains.” *A Thousand Plateaus*, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987), p. 309.

²¹ Note that, following Kant, Deleuze distinguishes between the “transcendental” and “the transcendent.” The former names the conditions for the possibility of actual sensual experience, while the latter names what transcends sensual experience altogether. The description of a “transcendental” or “virtual” field that precedes the subject occupied Deleuze throughout his career, from *The Logic of Sense*, trans. Mark Lester (New York: Columbia University Press, 1990), pp. 100–17 to “Immanence: A Life,” in *Pure Immanence*, trans. Anne Boyman (New York: Zone, 2001), pp. 25–33. In the latter text, Deleuze elaborates on the distinction between “the transcendental” and “the transcendent.”

²² Feldman, “Between Categories,” *Give My Regards to Eighth Street*, pp. 87.

²³ See Philip Glass quoted in Wim Mertens, *American Minimal Music*, trans. J. Hautekiet (London: Kahn and Averill, 1983), p. 90. Deleuze himself associates “non-pulsed time” with Cage and minimalism. See *A Thousand Plateaus*, p. 267 and my “Wie wird Musik zu einem organlosen Körper?” pp. 173–7.

composition and the fixing of sound in space and time to a notion of **sound as time, as flow, duration, becoming.**

Yet, however rich and important were the reconceptions of sonic being and time undertaken by Feldman, minimalism, experimental music, improvised music, and DJ Culture, they remained somehow bound to the discourse and practice of music. The emergence of sound art²⁴ in the early 1970s—and its proliferation over the past decade or so—signals a more profound break with this discourse and practice. Withdrawing from the space of the concert hall and renouncing the rituals of musical performance and musical listening, sound art affirms the idea of sound of an impersonal flow. As such, it constitutes the most thoroughgoing acceptance of the challenge presented by Cage's 4'33" and 0'00".

The discourse and practice of sound art has tended to focus on issues of space, site, and architecture. From Alvin Lucier's *I Am Sitting in a Room* (1971) and Max Neuhaus' "Place Works" to Achim Wollscheid's projects for public buildings and Toshiya Tsunoda's exploration of environmental vibrations, sound art practice has concerned itself with the resonances of sound in space. And, as attested by recent volumes such as *Site of Sound: Of Architecture and the Ear* and *Surface Tension: Problematics of Site*, sound art discourse has followed suit.²⁵ As such, it has ignored the profound reconnection of time fostered by sound art.

For decades now, one of sound art's founding fathers, Max Neuhaus, has contrasted his early career as a musician with his later sound art practice by drawing a distinction between time and space. In a program note from 1974, Neuhaus writes:

Traditionally composers have located the elements of a composition in time. One idea which I am interested in is locating them, instead, in space, and letting the listener place them in his own time. I am not interested in making music exclusively for musicians or musically initiated audiences. I am interested in making music for people.²⁶

²⁴ "Sound art" is a notoriously slippery and contested term. By this term, I mean, first and foremost, works of art that focus attention on the materiality and transmission of sound, and that are presented in galleries, museums, and public spaces. This definition is not intended to be exhaustive or rigorously precise, but merely heuristic.

²⁵ *Site of Sound: Of Architecture and the Ear*, ed. Steve Roden and Brandon LaBelle (Los Angeles: Errant Bodies Press, 1999). *Surface Tension: Problematics of Site*, ed. Ken Ehrlich and Brandon LaBelle (Los Angeles: Errant Bodies Press, 2003).

²⁶ Max Neuhaus, "Program Notes," *Sound Works, Volume I: Inscription* (Ostfildern: Cantz, 1994), p. 34.

This idea is echoed in Neuhaus' introduction to his collection of "Place Works":

Communion with sound has always been bound by time. Meaning in speech and music appears only as their sound events unfold word by word, phrase by phrase, from moment to moment. The works collected in this volume share a different fundamental idea—that of removing sound from time, and setting it, instead, in place.²⁷

Finally, reflecting on his permanent sound installations, Neuhaus recently told an interviewer: "The important idea about this kind of work is that it's not music. It doesn't exist in time. I've taken sound out of time and made it into an entity."²⁸

Neuhaus casts the music/sound art dichotomy in terms of time/space—a distinction reiterated by younger sound artists such as Stephen Vitiello.²⁹ Yet the time/space distinction is a red herring. The real distinction is between two kinds of time: *pulsed time* (the time of music and meaning) and *non-pulsed time or duration* (the time of sound matter itself). The 1974 passage suggests just this distinction, contrasting the time of musical composition with the listener's "own time," and distinguishing the time of "musicians or musically initiated audiences" from the time of ordinary "people." Here Neuhaus' discourse converges with that of Morton Feldman, who dedicated himself to liberating duration from clock time. Alluding to Bergson, Feldman remarked: "I am not a clockmaker. I am interested in getting to Time in its unstructured existence." "I feel that the idea is more to let Time be, than to treat it as a compositional element. No—even to construct with Time won't do. Time simply has to be left alone." Recalling Cage, he concluded: "not how to make an object, not how this object exists by way of Time, *in* Time, or *about* Time, but how this object exists *as* Time. Time regained, as Proust referred to his work."³⁰

Dispensing with the protocols of performance and composition, sound art is better equipped than music to foster this relationship to time. Take, for example, Neuhaus' most famous permanent installation, *Times Square* (1977–92, 2002–), a stream of rich metallic drones broadcast from deep inside a ground vent in New York City's busiest district. Audible but unobtrusive, the piece blends

²⁷ <http://www.max-neuhaus.info/soundworks/vectors/place/>

²⁸ Max Neuhaus quoted in Alicia Zuckerman, "Max Neuhaus' 'Times Square,'" *Arts Electric* (2002): <http://www.arts-electric.org/articles0203/020530.neuhaus.html>.

²⁹ See the conversation between Vitiello and Marina Rosenfeld in *NewMusicBox* (March 1, 2004): <http://www.newmusicbox.org/article.nmbx?id=2414> and "Audio Files: Sound Art Now: An Online Symposium" www.artforum.com (April–May 2004).

with and subtly alters the sonic environment; and in so far as that environment is ever-shifting (dawn, the morning commute, rush hour, midnight), the installation is new each moment. Though continuous, *Times Square* is experienced in temporal slices that serve as openings onto a flow of duration of which we are a part but that also surpasses us. In this way, *Times Square* (which we might read as “time’s square”) presents an indefinite extension of 4’33” and, even more fully than that piece, affirms Cage’s dictum: “music [or sound] is permanent; only listening is intermittent.”

This relationship between sound and duration is equally disclosed in recent projects such as Christina Kubisch’s *Electrical Walks* (2003–), which invite listeners to wander a territory wearing headphones designed to receive electromagnetic signals. Where Janet Cardiff’s audio walks unfold in the pulsed time of narrative and composition, directing the movements of listeners via a pre-recorded sound track, Kubisch’s walks operate very differently and bear a very different relationship to time and space. Open-ended and uncomposed, the *Electrical Walks* simply provide listeners the means by which to tap into the invisible currents of electromagnetic sound that flow through the spaces of modern life. Such an experience not only provides a *figure* for duration, the continuous, open-ended, and qualitatively heterogeneous flow of time. It places us within duration itself.

Conclusion: Toward A Sonic Materialism

I have tried to show that, over the course of the last half-century—and, particularly in the past decade—we have witnessed an important shift from the traditional conception of *music* to a notion of *sound-itself*. I suggested that we think this shift not only as the movement from a narrower domain of music to a broader domain of sound, but as marking a shift in our relationships to being and time. Music, I argued, constitutes a domain of beings, time-objects that spatialize sound and that mark a pulsed time, the tempo of narrative and the subject, forms with beginnings, middles, and ends. I argued that sound reveals to us something different: not being *in* time but being *as* time, what Nietzsche calls “becoming” and Bergson “duration.” And I tried to show that “sound” constitutes a kind of virtual or transcendental dimension, a vast field of sonic forces and fluxes in relation to which any particular sonic environment or piece of music is a mobile section. Music, it seems to me, tends to foreclose this domain and this experience, offering the illusion of being, autonomy, boundedness, fixity, and human invention. Sound art, on the other hand, opens up this domain giving us a glimpse of the virtual whole.

Extending the analyses of Gilles Deleuze and Manuel De Landa, I want to urge that we think of sound as an anonymous, non-human, and impersonal flux, a flow or becoming akin to geological

³⁰ Feldman, “Between Categories,” *Give My Regards to Eighth Street*, pp. 85–88.

flows, flows of genetic material, flows of language—natural fluxes with different rhythms and speeds.³¹ To be sure, music forms a part of this flow. But it is only a part of a more general sonic becoming. On this model, the analysis of sound and music would not concern itself with the examination of *forms* (the organization of pre-given, pre-individuated entities: pitches, scales, meters, works, etc.) but with the investigation of fluid matter distinguished by different speeds, forces, and intensities. Cage's 4'33", Neuhaus' *Times Square*, Kubisch's *Electrical Walks* and so much of contemporary sound art invite us to think of sound in these materialist terms—sound as a continuous and heterogeneous fluid material that makes audible the immanence of being and time.

³¹ See Manuel De Landa, *A Thousand Years of Nonlinear History* (New York: Zone Books, 1997).

DIFFERENCE

Cliff Stagoll

Deleuze is often labelled as a ‘philosopher of difference’, an assessment that highlights the critical place of ‘difference’ in his work. He is concerned to overturn the primacy accorded identity and representation in western rationality by theorising difference as it is experienced. In doing so, Deleuze challenges two critical presuppositions: the privilege accorded Being and the representational model of thought. He considers both to have important and undesirable political, aesthetic and ethical implications that a disruption of traditional philosophy can help to surmount. Deleuze uses his notion of empirical and non-conceptual ‘difference in itself’ in the service of such a disruption.

Difference is usually understood either as ‘difference from the same’ or difference of the same over time. In either case, it refers to a net variation between two states. Such a conception assumes that states are comparable, and that there is at base a sameness against which variation can be observed or deduced. As such, difference becomes merely a relative measure of sameness and, being the product of a comparison, it concerns external relations between things. To think about such relations typically means grouping like with like, and then drawing distinctions between the groups. Furthermore, over and above such groupings might be posited

a *universal* grouping, such as Being, a conception of presence that alone makes the groups wholly consistent and meaningful. It is because Georg Wilhelm Friedrich Hegel drew a comprehensive and cohesive world of Being that made him such a significant target for Deleuze's critique.

On such an account, difference is subordinated to sameness, and becomes an object of representation in relation to some identity. As such, it is never conceived in terms of 'difference-in-itself', the uniqueness implicit in the particularity of things and the moments of their conception and perception. Rather, difference is understood in terms of resemblance, identity, opposition and analogy, the kinds of relations used to determine groupings of things. Yet this tendency to think in terms of sameness detracts from the specificity of concrete experience, instead simplifying phenomena so that they might 'fit' within the dominant model of unity. Deleuze's 'liberation' of difference from such a model has two parts. First, he develops a concept of difference that does not rely on a relationship with sameness and, second, he challenges the philosophy of representation.

Deleuze argues that we ought not to presume a pre-existing unity, but instead take seriously the nature of the world as it is perceived. For him, every aspect of reality evidences difference, and there is nothing 'behind' such difference; difference is not grounded in anything else. Deleuze does not mean to refer, however, to differences of degree, by which he means distinctions amongst items that are considered identical or in any sense the same. Instead, he means the particularity or 'singularity' of each individual thing, moment, perception or conception. Such difference is *internal* to a thing or event, implicit in its being that particular. Even if things might be conceived as having shared attributes allowing them to be labelled as being of the same kind, Deleuze's conception of difference seeks to privilege the individual differences between them.

Such individuality is, for Deleuze, the primary philosophical fact, so that, rather than theorising how individuals might be grouped, it is more important to explore the specific and unique development or 'becoming' of each individual. The genealogy of an individual lies not in generality or commonality, but in a process of individuation determined by actual and specific differences, multitudinous influences and chance interactions.

Deleuze's difference-in-itself releases difference from domination by identity and sameness. Indeed, on this account, identity must always be referred to the difference inherent in the particulars being 'swept up' in the process of constructing a relationship between them. To realise this is to meet Deleuze's challenge of developing a new perspective in order to resist transcendence. However, to do so routinely is not easy. Only by destabilising our thinking, disrupting our faculties and freeing our senses

from established tendencies might we uncover the difference evident in the lived world, and realise the uniqueness of each moment and thing.

Deleuze's theory of difference also challenges the traditional theory of representation, by which we tend to consider each individual as representing ('presenting again') something as just another instance of a category or original. On such a view, difference is something that might be predicated of a concept, and so logically subordinated to it, whilst the concept can be applied to an infinite number of particular instances. To think in terms of difference-in-itself means to set the concept aside and focus instead on the singular, and the unique circumstances of its production. Awareness of such specific circumstances means that the notion of some 'thing in general' can be set aside in favour of one's experience of *this* thing, here and now.

Connectives

Creative transformation

Eternal return

Repetition

DIFFERENCE + POLITICS

Paul Patton

Deleuze's ontological conception of a world of free differences suggests a defence of the particular against all forms of universalisation or representation. Every time there is representation, he argues, there is an 'unrepresented singularity' which does not recognise itself in the representant (D 1994: 52). However, neither this critique of representation nor the ontological priority of difference establishes a politics of difference. Identities presuppose differences and are inhabited by them, just as differences inevitably presuppose and are inhabited by identities. A politics of difference requires the specification of politically relevant kinds of difference.

Deleuze and Guattari's concept of minority and their support for minoritarian politics provides a novel understanding of the kind of difference which is relevant for democratic political change. They define minority in opposition to majority, but insist that the difference between them is not quantitative since social minorities can be more numerous than the so-called majority. Both minority and majority involve the relationship of a group to the larger collectivity of which it is a part. Suppose

human. An immanent use of the synthesis would refuse this *exclusive* disjunction of ‘one must be this *or* that, male *or* female’. Instead of insisting that one must line up beneath the signifier of man or woman and submit to the system of sexual difference, Deleuze and Guattari open the disjunctive synthesis: one can be this or this or this, *and* this *and* this *and* this: neither mother nor father but a becoming-girl, becoming-animal or becoming imperceptible.

Connectives

Becoming

Desire

Kant

Oedipalisation

DURATION (*DURÉE*)

Cliff Stagoll

Henri Bergson interests Deleuze because of his radical departure from philosophy’s orthodoxy. Duration (*durée*) is one of several of Bergson’s key ideas adopted by Deleuze when developing his philosophy of difference. Typical of Deleuze’s usual approach to Bergson, his interpretation and use of the concept is at once almost entirely sympathetic but strikingly idiosyncratic.

According to Deleuze, one can only comprehend the notion of duration by using Bergson’s method of philosophical intuition (*intuition philosophique*), a deliberate reflective awareness or willed self-consciousness. Intuition reveals consciousness (or, more generally, mental life) to be essentially temporal; ongoing mental activity that constitutes, in its dynamism and the mutual interpenetration of its states, a time internal to one’s self. Mental life is, then, a kind of flowing experience, and duration is the immediate awareness of this flow.

Bergson believes that intuition’s findings are best expressed in images, and so explains duration by using analogies with music. Mental states flow together as if parts of a melody, with previous notes lingering and future ones anticipated in the unity of a piece, the permeation of each note by others revealing the extreme closeness of their interconnection. To try and grasp this flow as a complete set of notes is pointless, because the music is always on the verge of ending and always altered by the addition of a new note. To speak of ‘mind’ or ‘consciousness’ as a comprehensive system is

to ignore an analogous attribute of duration: it is always flowing, overtaking what might be called the ‘not yet’ and passing away in the ‘already’.

Bergson considers quantification of duration to be inconsistent with its immediate, lived reality. It can be contrasted with ‘clock time’, the time of physics and practical life, which either spatialises time by situating elemental instants end-to-end on a referential grid or uses the digits of a time-piece as a crass and imprecise physical image. When arranged in accordance with these models, time becomes a series of separable instants, consciousness is ‘situated’ in time as a series of temporally disparate mental states, and movement is conceived in terms of relations between static positions. In other words, clock time abstracts from the notion of duration by distorting its continuity.

But constitutive integration of moments of duration must not be over-emphasised. Bergson’s intuition confirms also that consciousness is not ‘one long thought’, as it were, but a flowing together of mental states that are different from one another in important ways. Bergson contends that differences between mental states allow us to mark one kind of thought or one particular thought from another, whilst constituting simultaneously a singular flow, a merging of thoughts as one consciousness. As such, duration is the immediate awareness of the flow of changes that simultaneously constitute differences *and* relationships between particulars.

Several characteristics of duration are critical for Deleuze. In his early works on David Hume, Deleuze used duration as an explicatory tool, rendering anew Hume’s accounts of habit, association and time. Subsequently, Deleuze adopts it as a means for exploring difference and becoming as key elements of life. If duration ‘includes’, as it were, all of the qualitative differences (‘differences of kind’) of one’s lived experience, Deleuze argues, then it also emphasises the productive, liberating potential of these differences. Even in the continuity of one’s consciousness, there is a disconnection between events that allows creativity and renewal. For example, one is able to call upon new concepts to reinterpret one’s memories or perceive some vista anew in the light of one’s exposure to a work of art.

Deleuze uses duration to make some important philosophical points about time and difference. For philosophers such as Immanuel Kant, time is both a form of receptive experience about the world and a necessary condition for any human experience at all. As such, for Kant, time is not an empirical concept but an *a priori* necessity underlying all possible experience. Furthermore, he considers time to comprise a homogeneous series of successive instants, standing in need of synthesis.

In contrast, duration is always present in the ‘givenness’ of one’s experience. It does not transcend experience, and neither must it be derived

philosophically. Furthermore, duration, unlike matter, cannot be divided into elements which, when divided or reconstituted, remain the same in aggregate as their unified form. Duration, as lived experience, brings together both unity and difference in a flow of interconnections. For Deleuze, these contrasts represent the difference between a dictatorial philosophy that creates ‘superior’ concepts that subsume and order the multiplicities and creativity of life and one that creates opportunities for change and variety.

Connectives

Bergson

Intuition

Kant

BERGSON, HENRI (1859–1941)

Felicity J. Colman

Deleuze has been credited with restoring French philosopher Henri Bergson to the canon of key thinkers of his generation, and Bergson's work continues to impact disciplines concerned with time, movement, memory and perception. Along with the thoughts of Gottfried Wilhelm von Leibniz, Baruch Spinoza, Friedrich Nietzsche, David Hume, Antonin Artaud, Guattari and Lucretius, Deleuze engages Bergson's empiricism as a challenge to the rigidity of philosophy, especially in its use of transcendental elements, phenomenological assumptions, and the quest for 'knowledge' and 'truth'. Deleuze's philosophical interest in Bergson is manifold and central to his entire oeuvre. Although neglected in philosophical canons of the second half of the twentieth century, in the early decades of that century, Bergson's work was well known and widely discussed in many artistic and literary arenas, from the French Cubists to the English writer T. E. Hulme.

In Bergson Deleuze finds an intellectual partner for some of his core philosophical pursuits: concepts and ideas of temporality, the affective nature of movement and duration, the political implications of

multiplicity and difference, the morphological movement of genetics, and the temporal causality of events as habitual and associated series. Deleuze signals his interest in Bergson in his essay on Hume, *Empiricism and Subjectivity*. Then, in 1966, Deleuze published his book *Bergsonism*, in which he called for ‘a return to Bergson’, through an extended consideration of what he saw as Bergson’s three key concepts: intuition as method, the demand for an invention and utilisation of a metaphysical orientation of science, and a logical method and theory of multiplicities. Bergson not only questions the logistics of existence in terms of movement, but his writing indicates his genuine fascination with the subjects and objects of life – appealing to Deleuze’s own propositions concerning vitalism.

Bergson’s concepts are influential for Deleuze’s work in *Difference and Repetition*, where Deleuze develops ideas of difference and repetition, memory and repetition, the intensive and extensive forms of time, and the physical movements of time; all of which are indebted to Bergson’s discussion of the paradoxical modalities of time in his book, *Matter and Memory [Matière et Mémoire]* (1896). Bergson proposes a moving model of duration – a concept of duration that is not spatially predetermined but continually alters its past through cognitive movement. Then, later in *Creative Evolution* Bergson incorporates the cinematic model into his philosophical expression, noting the cinematographical character of ancient philosophy in its apprehension of the thought of ordinary knowledge (B 1911: 331–33). From this model (and the Kantian notion of time, and Hegelian conception of thought and movement) Deleuze develops his explication of how the perceptual recognition of moving images of the cinematic screen operates not through the apprehension of that movement, but through specific moments of sound and optical registration. This Deleuze discusses at length in his two books on the cinema, *Cinema 1: The movement-image* and *Cinema 2: The Time-Image*.

Bergson conceives memory as a temporal blending of perceptual imagery, and this idea becomes central to Deleuze’s hypothesis in his discussion of the philosophical importance of cinema. In his second book on cinema, *The Time-Image*, Deleuze draws from Bergson’s interest in the different types of possible memory states – dreams, amnesia, *déjà-vu*, and death. To these Deleuze adds a breadth of memory functions: fantasy, hallucinations, Nietzsche’s concept of ‘promise-behaviour’ where we make a memory of the present for the future use of the present (now as past), theatre, Alain Robbe-Grillet’s concept of the ‘recognition’ process where the portrayal of memory is through invention and elimination, and numerous others.

Following Bergson, Deleuze describes how the perceptual and cognitive

abilities of the dream or wakeful receptor of memory events or imagery are dependent upon a complex network of factors. As Bergson discusses in *Matter and Memory*, systems of perceptual attention are contingent upon the ‘automatic’ or ‘habitual’ recognition of things. These different modes of remembering are further tempered through the degree of attention given in the perception of things, affecting not only the description of the object, but the features of the object itself. From Bergson, Deleuze’s mature conception of duration and the movements and multiplicities of time are developed.

Connectives

Cinema
Difference
Duration
Hume
Memory
Multiplicity

BECOMING

Cliff Stagoll

Together with ‘difference’, ‘becoming’ is an important component of Deleuze’s corpus. In so far as Deleuze champions a particular ontology, these two concepts are its cornerstones, serving as antidotes to what he considers to be the western tradition’s predominant and unjustifiable focus upon being and identity. This focus is replicated, Deleuze argues,

in our everyday thinking, such that the extent of the variety and change of the experienced world has been diluted by a limited conception of difference: difference-from-the-same. Deleuze works at two levels to rectify such habitual thinking. Philosophically, he develops theories of difference, repetition and becoming. For the world of practice, he provides challenging writings designed to upset our thinking, together with a range of ‘tools’ for conceiving the world anew. At both levels, becoming is critical, for if the primacy of identity is what defines a world of re-presentation (presenting the same world once again), then becoming (by which Deleuze means ‘becoming different’) defines a world of presentation anew.

Taking his lead from Friedrich Nietzsche’s early notes, Deleuze uses the term ‘becoming’ (*devenir*) to describe the continual production (or ‘return’) of difference immanent within the constitution of events, whether physical or otherwise. Becoming is the pure movement evident in changes *between* particular events. This is not to say that becoming represents a phase between two states, or a range of terms or states through which something might pass on its journey to another state. Rather than a product, final or interim, becoming is the very dynamism of change, situated between heterogeneous terms and tending towards no particular goal or end-state.

Becoming is most often conceived by deducing the differences between a start-point and end-point. On Deleuze’s account, this approach means first subtracting movement from the field of action or thinking in which the states are conceived, and then somehow reintroducing it as the means by which another static state has ‘become’. For Deleuze, this approach is an abstract exercise that detracts from the richness of our experiences. For him, becoming is neither merely an attribute of, nor an intermediary between events, but a characteristic of the very production of events. It is not that the time of change exists between one event and another, but that every event is but a unique instant of production in a continual flow of changes evident in the cosmos. The only thing ‘shared’ by events is their having become different in the course of their production.

The continual production of unique events entails a special kind of continuity: they are unified in their very becoming. It is not that becoming ‘envelops’ them (since their production is wholly immanent) but that becoming ‘moves through’ every event, such that each is simultaneously start-point, end-point and mid-point of an ongoing cycle of production. Deleuze theorises this productive cycle using Nietzsche’s concept of ‘eternal return’. If each moment represents a unique confluence of forces, and if the nature of the cosmos is to move continually through states without heading towards any particular outcome, then becoming might be conceived as the eternal, productive return of difference.

Deleuze believes that each change or becoming has its own duration, a measure of the relative stability of the construct, and the relationship between forces at work in defining it. Becoming must be conceived neither in terms of a ‘deeper’ or transcendental time, nor as a kind of ‘temporal backdrop’ against which change occurs. Becoming-different *is its own time*, the real time in which changes occur, and in which all changes unfold. This is not the Kantian *a priori* form of time that depends upon attributes of a particular kind of consciousness. Rather it is the time of production, founded in difference and becoming and consequent to relations between internal and external differences. For Deleuze, the present is merely the productive moment of becoming, the moment correlating to the productive threshold of forces. As such, it represents the disjunction between a past in which forces have had some effect and a future in which new arrangements of forces will constitute new events. In other words, becoming per se is Deleuze’s version of pure and empty time.

Such a view of the world has important implications for concepts traditionally considered central to philosophy. It undercuts any Platonic theory that privileges being, originality and essence. For Deleuze, there is no world ‘behind appearances’, as it were. Instead of being about transitions that something initiates or goes through, things and states are now viewed as *products* of becoming. The human subject, for example, ought not to be conceived as a stable, rational individual, experiencing changes but remaining, principally, the same person. Rather, for Deleuze, one’s self must be conceived as a constantly changing assemblage of forces, an epiphenomenon arising from chance confluences of languages, organisms, societies, expectations, laws and so on.

Connectives

Duration

Nietzsche

BECOMING + MUSIC

Marcel Swiboda

‘Becoming’ and ‘music’ are two terms that can be brought together such that a becoming is capable of proceeding through music, for example through the musical operation known as ‘counterpoint’, or the interweaving of several different melodic lines horizontally where the harmony is produced through linear combinations rather than using a vertical chordal

structure or setting. Counterpoint might most usually constitute a specifically ‘musical’ case in that when one speaks of musical counterpoint the assertions made regarding the term usually refer back to a given musical example: in short, counterpoint is something that we normally *hear*. However, when counterpoint describes the interweaving of different lines as something other than what we can hear, then it opens up to a different function, a function that frees the term from a direct relation to properly musical content. Consider the work of the ethologist Jakob von Uexküll on the relationship between animal behaviour among certain species and the environments inhabited by these species that led him to propound a theory of this relationship based on a conception of counterpoint. To this extent, nature – in the very ways in which it can be figured through the interaction of different *lines* of movement, between animals and their environments, or between and across different species of animals – can be understood as constituting a counterpoint in a sense that extends beyond a strictly metaphorical deployment of the term. From the perspective outlined here, music enters into a relation of proximity to nature where *music becomes nature*.

If in cultural theory the term ‘nature’ is somewhat problematic it is to the extent that it cannot be unquestioningly presupposed as having any objective existence beyond the terms that define it, terms that are often loaded. In the present case, the term aims at neither an objective conception nor a discursive one. Rather, this description attempts to restore to ‘nature’ a material dimension that extends beyond the confines of discourse, to the extent that discourse *implies* material processes that cannot be reduced to interpretation or the status of fixed objects. To im-ply, in this instance, is to en-fold, whereby language can in some instances be deployed in ways that foreground its enfolding of material processes. Implication in this sense is illustrated by the use of the term ‘counterpoint’, a term which has largely been retained by Deleuze and Guattari in *A Thousand Plateaus* because it is highly amenable to a thinking oriented towards *process*. As was mentioned earlier, the term is most often used in a musical context to figure the (harmonic) interactions of melodic lines. As such it does not describe a fixed object and the term’s linguistic or semantic sense is insufficient to account for *what actually happens* when counterpoint takes place as it draws its contingent connections between different melodic lines.

This characteristic of the term makes it amenable to the task of constructing a different conception of nature, in that it is detachable from its strictly musical context in such a way that it still retains its capacity both to describe and *at the same time* to imply, or enfold process. This capacity is what allows us to use the term to describe non-musical as well as musical interactions, where the idea of the melodic line, strictly speaking,

gives way to an expanded conception of linear interactions, such as those taking place between the bodies of different animals, animal species, their environments, and one another. This expanded sense of the term permits the construction of a renewed conception of nature that puts it in proximity to music, where *nature becomes music*. An example of this proximity is embodied in the work of the French composer Olivier Messiaen who famously transcribed the songs of different bird species before incorporating them into his musical compositions. The territorial codings between and across certain bird species and their environments (transcodings) are carried over into the music in the use of birdsong, such that there can no longer be a binary or hierarchical distinction drawn between the productions of ‘culture’ and those of ‘nature’.

Music becomes nature and nature becomes music and their resulting indiscernibility is the product of a philosophical labour: to *select terms best suited to the task of thinking and describing process*. Counterpoint is such a term because it is capable of putting music and nature into proximity and describing the material implications that orient thought towards process.

Sonic Thinking I

sonic thinking—An Introduction

Bernd Herzogenrath

I would like to start with a set of resonances. First of all, a resonance on the word “resonance”—on the one hand it means something like “echo,” or “reverberation,” on the other hand, the word “reason” is somehow hidden in “resonance.” The French verb *résonner* makes this resonance even stronger—one might even be tempted to invent the word *re[a]sonance* here.

Thus, a kind of knowledge is involved here. A kind of thinking—maybe not what we would call rational thinking, but a kind of thinking nonetheless. As the Polish philosopher and mathematician Józef Hoëné-Wronski has it, as quoted by Edgar Varèse: “Music is the corporealization of the intelligence that is in sound” (Varèse 1966: 17). Music as the becoming-body of the knowledge of sound—sound thinking.

Again, also this knowledge that sound is, has a highly interesting resonance in its “wordhood” in French: *connaître*—knowledge as a process of “being-born-with”—this could mean that this knowledge, this thinking, this re[a]sonance, that sound is not a knowledge *about* the world, coming to you only in retrospective reflection, but a thinking *of* and *in* the world, a part of the world we live in, intervening in the world directly.

Friedrich Nietzsche, in his unpublished early notebooks, dating from the period of his *Unfashionable Observations* (1872–3), relates the true philosopher to the scientist and the artist as listener: “The concept of the philosopher . . . : he tries to let all the sounds of the world reverberate in him and to place this comprehensive sound outside himself into concepts” (19[71], 115); whereas the artist lets the tones of

the world resonate within him and projects them by means of percepts and affects. So, here, sound-art practice becomes research and philosophy, and vice versa.

Rainer Maria Rilke, in his 1919 essay “Primal Sound” (*Urgeräusch* in the German original) described an experience he had as a young boy, when introduced to a phonograph for the first time, seeing how the needle produced sounds out of grooves in a wax cylinder, grooves that the recording of actual sounds had put there in the first place. Years later, while attending anatomical lectures in Paris, Rilke connected the lines of coronal suture of the human skull to his childhood observations—“I knew at once what it reminded me of: one of those unforgotten grooves, which had been scratched in a little wax cylinder by the point of a bristle!” (2001: 22). From this incident, Rilke derives the following “experimental set-up”: “The coronal suture of the skull (this would first have to be investigated) has—let us assume—a certain similarity to the closely wavy line which the needle of a phonograph engraves on the receiving, rotating cylinder of the apparatus. What if one changed the needle and directed it on its return journey along a tracing which was not derived from the graphic translation of a sound, but existed of itself naturally—well: to put it plainly, along the coronal suture, for example. What would happen?” (23). Rilke’s obvious answer, is, of course, noise, music—sound! Probing further, Rilke asks himself, “What variety of lines then, occurring anywhere, could one not put under the needle and try out? Is there any contour that one could not, in a sense, complete in this way and then experience it, as it makes itself felt, thus transformed, in another field of sense?” (23).

In a letter, Rilke specifies this idea. Writing to Dieter Bassermann, Rilke speculates on “set[ting] to sound the countless signatures of Creation which in the skeleton, in minerals . . . in a thousand places persist in their remarkable versions and variations. The grain in wood, the gait of an insect: our eye is practiced in following and ascertaining them. What a gift to our hearing were we to succeed in transmuting this zigzag . . . into auditory events!” (2007: 391–2).

The project “sonic thinking” aims to serve two interconnected purposes: on the one hand it wants to develop an alternative philosophy of music that takes music seriously as a “form of thinking” (and that might revise our notion of what “thinking” means). On the other hand, it aims to bring this approach into a fertile symbiosis with the concepts and practices of “artistic research”: art, philosophy, and science as heterogeneous, yet co-equal forms of thinking and researching (and let me point out that we are using the concept of “artistic research” not in the meaning of art being a handmaiden subordinate to [and evaluated by] parameters of the sciences [a highly debatable practice], but more as a mediaphilosophical praxeology—artists [in this case: sound artists] thinking with and through their medium [in this case: sound]).

The debate about the sphere of sound is presently fought with high intensity. The emerging field of research “Sound Studies” is primarily discussed in the humanities and social sciences—the “Acoustic Turn” is tackled with the means of cultural sciences and semiotics. These disciplines are however based on foundations that could not be more alien to music (or sound, noise—the “sonic field”). Deeply rooted in one of the major strands of western philosophy, the concepts of cultural studies and especially semiotics are based on what Gilles Deleuze calls “image of thought,” dependent on the metaphysics of being, representation, and identity. Accordingly, a (passive) nature, matter, etc., is “informed” extrinsically, a substance affects existence, the subject organizes (the objects of) experience, progress determines the course of history, etc.

On the other hand, how Hans Jonas, among others, has demonstrated in his groundbreaking essay, “The Nobility of Sight” (1954) these foundations of western existential philosophy are in turn rooted in the ubiquity of a “visual regime”: a hierarchy of senses was established, in which the eye almost inevitably was declared the origin and foundation of all philosophy—central categories like “[in]finity,” “distance,” “abstraction,” and “objectivity,” are indebted to the intrinsic sensory qualities of visual perception. Since the twilight of the nineteenth century the consequences of this hierarchization of the senses (and the

“supremacy” of the eye) are discussed with increasing intensity. In his treatise about the origin of tragedy, Friedrich Nietzsche tried to regain the “aural culture” of the old, pre-platonic Greeks, and in a later note he hinted at the revolutionary implications for our culture, which a reorientation away from the eye towards the ear would trigger: “Images in the human eye! This governs the entire nature of the human being: from the *eye!* Subject! The *ear* hears sound! An entirely different, marvelous conception of the same world!” (19[66]: 25). Here Nietzsche is congruent with the bigger part of twentieth-century theoretical reflection, that deems the prioritization of the visual sense as the original sin of western thinking.

As Jonas further explains, the concept of “simultaneity”—and eventually of “identity”—is an effect of the visual regime: visual perception constitutes a “co-temporaneous manifold … at rest” (1954: 507), the sense of hearing however “construct[s its] perceptual unities out of a temporal sequence of sensations” (*ibid.*). Thus the eye suggests the notion of a permanent existence we would not have, if we could merely resort to “time-senses” (like hearing and feeling).

Music and sound, however, can also be considered the “other” of this ontology of being and the visual regime—ephemeral, a time-art, non-visual. So what could be the nature of a “sound thinking”? Initially one would have to oppose (or accompany) the predominant discourses in sound studies to a philosophy that is process-orientated: an ontology of becoming, not of being, which recognizes entities as events and contingent actualizations of virtual potentiality, as a flow consisting of “variously formed matters, and very different dates and speeds … phenomena of relative slowness and viscosity, or … of acceleration and rupture” (Deleuze and Guattari 1987: 3–4); an “alternative” philosophical lineage, which relies on thinkers like Spinoza, Schopenhauer, Nietzsche, Bergson, Whitehead and Deleuze. This perspective transforms “givens” with a preset and stable taxonomy of particular functions and agencies into “a construction site of exploration and connection” (Cox 2003: 3).

From this vantage point, the rigorous division between aesthetics and research (and the likewise rigorous division between the various

related [academic] disciplines, e.g., “art” and “science”) can no longer be seriously upheld.

Deleuze is also interested in “the relations between the arts, science, and philosophy. There is no order of priority among those disciplines” (1995: 123) for Deleuze. Whereas science involves the creation of functions, of a propositional mapping of the world, and art involves the creation of blocs of sensation (or affects and percepts), philosophy involves the invention of concepts. According to Deleuze|Guattari, philosophy, art, and science are defined by their relation to chaos. Whereas science “relinquishes the infinite in order to gain reference” (1994: 197), by creating definitions, functions and propositions, art, on the other hand, “wants to create the finite that restores the infinite” (197). In contrast, “philosophy wants to save the infinite by giving it consistency” (197).

Yet, since “sciences, arts, and philosophies are equally creative” (5), it might be fruitful, as Deleuze proposes, “to pose the question of echoes and resonances between them” (1995: 123)—that is, to pose the question of their ecology.

As Deleuze specified in one of his seminars, “Between a philosophical concept, a painted line and a musical sonorous bloc, resonances emerge, very, very strange correspondences that one shouldn’t even theorize, I think, and which I would prefer to call ‘affective’ . . . these are privileged moments” (“Image Mouvement Image Temps”).¹ These moments privilege an affect where thought and sensation merge into a very specific way of “doing thinking” *beyond* representation and categorization.

The hiatus of art and research is the result of the idea of a linear process ranging from invention|concept (mental) to design (material realization). This however does not do justice to the complexity of the matter: mental and corporeal processes and interactions as well as “implicit/tacit/practical knowledge” become relevant on all levels, for all decisions. As Martin Tröndle has pointed out, conceptual cognitive and manual affective activities go hand in hand, the sensual examination of the material and emotional reactivity is also of highest

importance. As Deleuze and Guattari put it in their idea of the “artisan” (rather than the “artist”): “It is a question of surrendering to the [materiality], then following where it leads by connecting operations to a materiality, instead of imposing a form on matter: what one addresses is less a matter submitted to laws than a materiality possessing a *nomos*” (1987: 408).

The mind is tightly embedded into the interplay between body, environment, and matter. This is the quintessence of Embodied Mind Philosophy. Alva Noë, one of its originators, even takes it a significant step further: for him the mind evolves from the movements of the body in its environment—the mind is not a substance that could be simply located within the confines of our skull. Consciousness is not “something that happens in us, like digestion”—it is rather “something we do … a kind of living activity … the ways in which each of us … carries on the process of living with and in response to the world around us” (2009: 7).

Embodied Mind Philosophy, I argue, can stimulate a fertile resonance with the concept of *artistic research*: the artistic practice is here not (only) understood in terms of the finalized work of art (work-aesthetic), but rather in regard to the practices and strategies of artistic production (production-aesthetic). The process of the emergence of a work becomes the center of attention. Artists comprehend this process as the phase of examination or evolution of a work. With this shift from the work to artistic research comes also an altered handling of the work itself. It has become a medium of insight, at the latest since twentieth-century’s Modernity (cf., e.g., Clement Greenberg). The work materializes knowledge—beyond the aesthetic experience it facilitates comprehension of the world. Making art then means, initially programmatically in general, to explore something with the specific means of art, to discover something about the world. This entails that art does not solely comprehend itself as a medium of representation and that artistic production does not solely revolve around questions of depiction. This alleged reduction of the artistic to a mere tool serving questions of content, turns out to be an actual extension far beyond self-occupation and the function of representation.

The artistic position does not ignore the dimension of aesthetic experience; it rather collaborates with it and perceives it as a mode of negotiable understanding.

Not to be mistaken: it is not that art *morphs* into science. Art and science are rather poised in a force field of “mutual becoming.” As Julian Klein has noted, “[a]rtistic experience is an active, constructive and aesthetic process, in which mode and substance are fused inseparably. This differs from other implicit knowledge, which generally can be considered and described separately from its acquisition” (2010: 4)—(cf., e.g., John Dewey, Michael Polanyi, Gilles Deleuze, etc.). The reflection of artistic research occurs on the plane of artistic experience itself. This neither excludes an interpretation on a descriptive plane, nor a theoretical analysis on a meta-level. It is however a false conclusion to assume that reflection is only possible from the exterior: artistic experience *is* a form of reflection. And affect-driven artistic production can arrive at more singular thought-positions than purely rationally organized philosophical systems of thought.

In the [American] musical avant-garde of the twentieth century these perspectives of music as a contraction of forces, currents, and speeds, coalesce with the notion of music as thinking, music as research—again, the “corporealization of the intelligence that is in sound” (Varèse and Wen-chung 1966: 17). Varèse did not describe himself as a composer, or musician, but rather as “a worker in rhythms, frequencies, and intensities” (18). Without any interest whatsoever in traditional categories like melody, pitch, or form, Varèse turned to sound itself, the exploration of tone, timbre, and volume.

When new instruments will allow me to write music as I conceive it, the movement of sound-masses, of shifting planes, will be clearly perceived in my work, taking the place of the linear counterpoint. When these sound-masses collide, the phenomena of penetration and repulsion will seem to occur. Certain transmutations taking place on certain planes will seem to be projected onto other planes, moving at different speeds and at different angles. There will no longer be the old conception of melody or interplay of melodies. The entire work will be

a melodic totality. The entire work will flow as a river flows.... In these moving masses you would be conscious of their transmutations when they pass over different layers, when they penetrate certain opacities, or are diluted in certain rarefactions.

Varèse and Wen-chung 1966: 11–12

To regard “form as a point of departure, a pattern to be followed, a mold to be filled” (16)—as being, as object—would be a mistake. Referring to Busoni, Varèse postulates, “Form is a result—the result of a process” (*ibid.*), a process of an impersonal becoming, that is rather comparable to the formation of crystals than to any kind of “subjective intuition.” Also John Cage, Morton Feldman, the Minimalists, etc., committed themselves to the musical exploration of the virtual and processual field of music, to the liberation from human subjectivity towards a realm of the experience of sound itself (cf. also Cox 2003).

As mediated by John Cage, a better part of the American musical avant-garde refers to the philosopher Henry David Thoreau, who conducted sound experiments at Walden Pond in the mid-nineteenth century.

In 1851, Thoreau notes an acoustic experience in his journals that reveals his particular sensibility to his sonic environment: “Yesterday and to-day the stronger winds of autumn have begun to blow, and the telegraph harp has sounded loudly ... the tone varying with the tension of different parts of the wire. The sound proceeds from near the posts, where the vibration is apparently more rapid” (1962, III: 11). Far from being an isolated case, Thoreau focuses on the “sound of nature”—and in particular the “sound of the weather”—in various other entries in his journals: “Nature makes no noise. The howling storm, the rustling leaf, the pattering rain are no disturbance, there is an essential and unexplored harmony in them” (1962, I: 12). Thoreau is exploring the audible world like a sound-archaeologist, carefully distinguishing “sound” from “music.”² To fellow-Transcendentalist Emerson, mind, not matter, is of prime importance—matter is only a manifestation of the mind. Thoreau, in contrast, stresses the material and sensual aspects of nature—“We need pray for no higher heaven

than the pure senses can furnish, a *purely* sensuous life ... Is not Nature ... that of which she is commonly taken to be a symbol merely?" (1998: 307). Thoreau does not *read* nature like, does not interpret nature according to a spiritual principle external to it—such a principle, because of nature's manifoldness, is *immanent* to it. For Thoreau, nature's "music" is "the sound of circulation in nature's veins" (1962, I: 251). It is in this stress on nature as sensuous experience and materiality that Thoreau "deviates" from Emerson. Thoreau focuses on [the music of] nature as a material, physical process, not as an Emersonian emblem of reason—"The very globe *continually transcends* and translates itself. . . . The whole tree itself is but one leaf, and rivers are still vaster leaves whose pulp is intervening earth" (1973: 306–7). "Transcendentalism" is understood by Thoreau completely "physical"—the natural, dynamic process of metamorphosis, of continuous change—transcendence becomes immanence.

In his journals, Thoreau writes: "Now I see the beauty and full meaning of that word 'sound.' Nature always possesses a certain sonorousness, as in the hum of insects, the booming of ice ... which indicates her sound state." The pun on "sound" as acoustic sound and "sound" as a state of health even calls for a reference to Thoreau's dictum "in wildness is the preservation of the world" (from his essay "Walking"). Here "wildness" refers to the untamed but also to anything that resists representation and any static thinking of identity: the continuous self-differentiation of the world, its growing, its dynamics, its processuality—here lies its "soundness" and also the "essence" of sound. Thus "sound thinking" does not only imply "the thinking of sound," but also "healthy thinking," or, as Deleuze puts it: a thinking that rightfully earns its name: a thinking that does not derive its parameters|concepts from an exterior "verified knowledge" (Deleuze calls this "recognition") in order to adapt the object of investigation to these parameters, but rather a thinking that develops its very concepts from the examination of the object of investigation (Deleuze calls this "encounter"): here—a thinking *with* and *by means of* sound, not a thinking *about* sound, which eventually does not deal with the question what music *is*, but

rather what music *can become*. And from this vantage point research and art, theory and practice, are coextensive.

The following essays explore this realm of sound thinking—essays by scholars and philosophers, interspersed with “sonic thoughts” from a more artistic/practitioners’ direction.

[. . .]

[. . .]

Notes

- 1 My translation of: “Alors je dirais que le concept philosophique n'est pas seulement source d'opinion quelconque, il est source de transmission très particulière, ou entre un concept philosophique, une ligne picturale, un bloc sonore musical, s'établissent des correspondances, des correspondances très très curieuses, que à mon avis il ne faut même pas théoriser, que je préférerais appeler l'affectif en général. . . . Là c'est des moments privilégiés.” Gilles Deleuze, “Image Mouvement Image Temps.” Cours Vincennes—St Denis : le plan—02/11/1983. www.webdeleuze.com/php/texte.php?cle=69&groupe=Image%20Mouvement%20Image%20Temps&langue=1 (accessed February 10, 2011)
- 2 See also Thoreau’s essay “Walking” and his|its concept of “wildness”—“sound” can be read as “wildness” with regard to “music” (as sound organized by a traditional composer)—the unformed, unintended,

untamed in comparison to John Sullivan Dwight's canonization in Thoreau's time of European Classical Music (and in particular the compositions of Beethoven) as *the paradigm* for a future American Music.

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Sonic Thought

Christoph Cox

Philosophical aesthetics suffers from a peculiar arrogance toward its object of inquiry, an arrogance that the “non-philosopher” François Laruelle calls “the principle of sufficient philosophy.”¹ With this clumsy phrase, Laruelle names the pretension of philosophy to elevate itself above any object or discourse so as to offer a philosophy *of* it: a philosophy *of science, of art, of music, etc.* For millennia, philosophy has conceived itself as the “queen of the sciences,” claiming the ability to reveal what its object cannot reveal about itself: the essence, nature, or fundamental reality of that object. Philosophy thus dominates its object, subjecting it to philosophical rule. Convinced that its object is fundamentally ignorant about itself, philosophy is little concerned with what that object has to say on its own behalf.

How might one challenge this domination, allow the object to speak, put it on equal footing with philosophical thinking, permit it to generate concepts rather than solely to be subject to them? In the case of music and sound, what would it mean *to think sonically* rather than merely *to think about sound*? How can sound alter or inflect philosophy? What concepts and forms of thought can sound itself generate? These are the questions I want to address here. My aim is to track some of the ways that philosophy has or could be inflected by sound in order to produce not a philosophy of sound or music but a sonic philosophy.

Sonic ontology

Sonic philosophy begins not from *music* as a set of cultural objects but from the deeper experience of *sound* as flux, event, and effect. Arthur

Schopenhauer and Friedrich Nietzsche are exemplary figures here, for both present not a metaphysics of music but a musical metaphysics. For Schopenhauer and Nietzsche, music directly figures the world as it is in itself, the primary forces and movements that drive all natural change, tension, creation, and destruction. In a passage celebrated by Nietzsche, Schopenhauer writes: “Music . . . expresses the metaphysical to everything physical in the world, the thing-in-itself to every phenomena. . . . [It] gives the innermost kernel preceding all form, or the heart of things” (Schopenhauer 1969: 262–3).²

For Schopenhauer and Nietzsche, music and sound are philosophically important because they present us with an *ontology* that unsettles our ordinary conception of things. In philosophy, ontology is the sub-discipline that investigates being, determining what there is or what sorts of things exist. We ordinarily operate with an ontology that begins and ends with what J. L. Austin wryly called “moderate-sized specimens of dry goods,” the objects of our everyday experience: apples, chairs, trees, cars, etc. (Austin 1962: 8). This ordinary ontology extends to include larger objects such as mountains or stars, and can accept scientific objects such as sub-atomic particles, provided that they are taken to be tiny versions of ordinary things—stable, solid, and durable, though very small. Indeed, when we speak of “matter,” we tend to think solely of *solid* matter. (Few, I think, would take liquids, gases, or plasmas—water, air, or fire, for example—as paradigms of matter.) This ordinary ontology privileges the senses of sight and touch; or rather, the senses of sight and touch determine this everyday ontology. The invisible, intangible, and ephemeral objects (so to speak) of smell, taste, and hearing seem to have only a shadowy existence relative to the standard of the ordinary solid object, whose presence is guaranteed by eyes and fingers, and enshrined in “common sense,” which names an entrenched hierarchy of the senses rather than some common agreement among them.

But surely sounds, odors, and tastes exist, and surely they are as material as sticks and stones. Sounds, to take the example that concerns me here, set eardrums aquiver, rattle walls, and shatter wine glasses.

Indeed, sound is omnipresent and inescapable. Lacking earlids, we are forever and inescapably bathed in sound, immersed in it in a way that we are not immersed in a world of visible objects. An attention to sound, then, will provoke us to modify our everyday ontology and our common sense conception of matter. Sound lends credence to a very different sort of ontology and materialism, a conception of being and matter that can account for objecthood better than an ontology of objects can account for sounds.

Sonic flux

Music has always posed an ontological problem, for (unlike the score or the recording that attempt to capture it) it is intangible and evanescent but nonetheless powerfully physical. This ontological problem is compounded by sound art, which, from its very inception in the late 1960s, challenged the ontology of objects and, in particular, the modernist work of art. Though clearly an outgrowth of the Cagean tradition in experimental music, sound art emerged within the milieu of postminimalist practices in the visual arts fostered by Robert Morris, Robert Smithson, Robert Barry, Michael Asher, and others whose emphasis on process, multi-sensory experience, and immersion defied the autonomy, medium-specificity, and purely visual or optical conception of art characteristic of high modernism.

Postminimalism's challenge to these features of modernism opened two different paths for artistic practice. Art could pursue the "dematerialization of the art object" (Lippard 1973) by way of the concept, the idea, language, and discourse; or it could pursue an expanded conception of matter extending beyond the limited domain of ordinary, middle-sized, visual and tactile objects (paintings and sculptures, for example), a notion of matter understood as a profusion of energetic fluxes. While a few artists saw these two paths as parallel rather than divergent, conceptual art tended to follow the first path, sound art the second. In so doing, conceptualism was bolstered by a set

of latently idealist theoretical programs insistent that our access to the real is fundamentally discursive, thus dismissing any notion of nondiscursive perception, materiality, or reality. During the 1970s and 1980s, this critical program came to dominate the visual and literary arts, offering powerful, sophisticated, and effective analyses of images and texts. By contrast, the provocation posed by sound art was not pursued philosophically or theoretically. As a result, sound art was left without a robust theoretical basis or mode of apprehension and was thus relegated to a minor status, at best an adjunct to music, at worst a naive or retrograde incursion into the visual arts. Thus, while conceptual art became a dominant concern for art historians and critics and a pervasive influence on the art of the past half-century, sound art remained (until recently) a minor and underground mode of art-making that attracted very little critical or art historical analysis. It is no coincidence, I think, that the emergence of powerful realist and materialist philosophies since the late 1990s has been paralleled by a renewed interest in sound.

Sound art's greatest forefather, John Cage, invited us to think of sound and music not as bounded by musical works but as an anonymous *flux* that precedes and exceeds human contributions to it. This conception of sound courses through the history of sound art, from Max Neuhaus's *Times Square*, La Monte Young's *Dream House*, and Alvin Lucier's *Music on a Long Thin Wire* to Christina Kubisch's *Electrical Walks*, Francisco Lopez's trilogy of the Americas, and the work of contemporary soundscape artists such as Chris Watson, Jana Winderen, and Toshiya Tsunoda.

If we accept this Cagean conception, sound constitutes one flux among many, joining the profusion of flows cataloged by Manuel DeLanda in his magnificent book *A Thousand Years of Nonlinear History*, which conceives all of nature and culture as a collection of flows—flows of lava, genes, bodies, language, money, information, etc.—that are solidified and liquefied, captured and released by way of various processes that are isomorphic across these various domains (DeLanda 1997). Yet, as Schopenhauer and Nietzsche pointed out, the

sonic flux is not just one flow among many; it deserves special status insofar as it so elegantly and forcefully models and manifests the myriad fluxes that constitute the natural world.

Sonic events

Sound, then, affirms an ontology of flux in which objects are merely temporary concretions of fluid processes. This flux ontology replaces objects with *events*, an idea nicely demonstrated in a book that provides another exemplary instance of sonic philosophy: Casey O'Callaghan's *Sounds* (O'Callaghan 2007). Sounds are intangible, ephemeral, and invisible; but O'Callaghan shows they are nonetheless real and mind-independent. Sounds persist in time and survive changes to their properties and qualities. Thus, they cannot be treated as secondary qualities (such as colors or tastes) that are relative to their observers; nor are they the properties of their sources, which cause or generate them but nonetheless remain distinct and separate. In short, sounds are not tied to objects or minds but are independently existing entities.

This is exactly what Pierre Schaeffer (the father of *musique concrète* and one of the progenitors of sound art) aimed to show in his analysis of the *objet sonore*: the sonorous object considered independently of its source, an entity to which audio recording draws attention but that ordinary experience also routinely encounters (Schaeffer 2004: 76–81). For Schaeffer, the sonorous object has a peculiar existence distinct from the instrument that produces it, the medium in or on which it exists, and the mind of the listener. Sounds are not qualities of objects or subjects; rather, they are ontological particulars and individuals. Yet Schaeffer's language of the “sonorous *object*” misses the mark. For sounds are peculiarly temporal and durational, tied to the qualities they exhibit over time. If sounds are particulars or individuals, then they are so not as static *objects* but as temporal *events* (O'Callaghan 2007: 11, 26–7, 57–71).

Sound effects

This ontology of events is unsettling, for it proposes that happenings, becomings, and changes exist independently of the subjects and objects that produce or undergo them. To put it another way, it gives priority to the verb, which is no longer conceived as subordinate to the noun. This is exactly the view proposed by that sonic philosopher Nietzsche, who argues that “there is no ‘being’ behind doing, effecting, becoming; the ‘doer’ is only a fiction added to the deed—the deed is everything” (Nietzsche 1992: 481). Or as Henri Bergson put it: “[t]here are changes, but there are underneath the change no things which change: change has no need of a support” (Bergson 2007: 122; emphasis in the original).

If sonic philosophy liberates the deed from the doer, becoming from being, the verb from the noun, it also liberates the *effect* from the cause. This ontology of the effect is richly developed by Gilles Deleuze, who, inspired by the Stoics, distinguishes between two kinds of entities.³ In the first place, there exist *bodies* that have various qualities, that act and are acted upon, and that inhabit states of affairs in the world. Yet, in addition to bodies, there exist incorporeal *events* or *effects* that are caused by bodies but differ in nature from them. Like Nietzsche, Deleuze asks us to think the ontology of the verb as distinct from that of the noun (bodies) and adjective (qualities): the verb as a pure becoming independent of a subject. Such becomings are best captured by verbs in the infinitive (“to cut,” “to eat,” “to redden,” etc.), which have no subject and are bound to no particular context (Deleuze 1990: 182–5). They simply describe various powers of alteration in the world, powers of becoming that are variously instantiated.

As continuously varying fluxes that are separable from their causes and maintain their own independent existence, sounds exemplify this ontology of events and becomings, and do so in two senses. In the first place, sounds are not punctual or static objects but temporal, durational flows. They thus accord with an empirical account of events and becomings as processes and alterations. Beyond this empirical sense, sounds are also events and becomings in another sense, a “pure,”

“incorporeal,” or “ideal” sense. We saw that sounds are not only “events” but “effects,” results of bodily causes that are nonetheless distinct from those causes and that have an independent existence of their own. But sounds are effects in another sense as well, in the sense in which scientists speak of the “Kelvin effect,” the “Butterfly effect,” or the “Zeeman effect” (Deleuze 1990: 7, 70, 181–2). Such descriptions refer to recurrent patterns of possibility, diffuse multiplicities that nevertheless have a coherence or consistency. The isolation or individuation of such effects is very different than that of a thing, substance, subject, or person. Deleuze calls them “haecceities,” which names a mode of individuation characteristic of *events*: a wind (the mistral or sirocco, for example), a river, a climate, an hour of the day, a mood, etc. (Deleuze and Guattari 1987: 261; cf. Deleuze 1987: 92ff, 151–2). “Effects” of this sort arise historically (hence their frequent attribution to the scientist who isolated them) but are recurrent, forming relative invariants that are irreducible to their empirical instances.

This notion of “effect,” independent of cause, has a broad and important set of usages in the world of audio. Musicians use the term to refer to the distinctive timbral and textural modulations (reverb, fuzz, echo, flange, distortion, etc.) produced by electronic signal processing devices known as “effects units.” Sound researchers Jean-François Augoyard and Henry Torgue have adopted this list of “effects” and expanded it beyond the domain of music to generate a catalogue of eighty-two “sonic effects” (*effets sonores*) that characterize everyday urban soundscapes: attraction, blurring, chain, dilation, fade, etc. Though inspired by Schaeffer, Augoyard and Torgue abandon Schaeffer’s “object” in favor of Deleuze’s “effect” in an effort to describe the soundscape not as a field of discrete entities but as a flux of haecceities, recurrent but transitory auditory modalities and intensities.⁴

An even more extravagant expansion of the notion and number of auditory effects can be found in the archives of “sound effects” employed by the radio and film industries since the 1920s. Ontologically and aesthetically, the “sound effect” is a peculiar entity. Generally anonymous, unattributed to an author or composer, these sounds are produced for

incorporation into radio plays, films, TV shows, and video games. Yet they float free of these concrete instances, constituting a general reserve capable of use in very different productions and contexts. In films, they get attached to particular objects and situations in the image track to provide a convincing auditory complement; but they are very often generated from sources and events that have little to do with the objects or situations that receive them. (Sheets of metal produce the sound of thunder, frozen romaine lettuce generates the sound of broken bones, etc.) Moreover, sound effects are often combined with one another to generate new sound effects that diverge further from their components.

These ontological and aesthetic peculiarities of sound effects have been explored by a number of artists. Working with commercial sound effects libraries, the duo Chris Kubick and Anne Walsh present these effects in their virtual state, as detached sound files indexed by titles that are at once singular and generic (“Amphibian Morph 4 From Rock to Flesh,” “Metal Squeal Huge 2.R,” “Power Buzz, invisible .R”). The sounds themselves likewise manifest this combination of the singular and the generic. Though generated by particular sources and causes, they are capable of signifying and functioning more broadly. *Full Metal Jackets* (2005), for example, is a sound sculpture composed of thirty-two small speakers scattered down a thirty-foot wall. A computer draws randomly from an archive of 500 sound files documenting falling bullet shell casings, and sends them to the speakers via eight different channels. At the base of the wall and facing it, a monitor lists in real time the file names, which carefully detail the type of casings and the material surfaces on which they fall. Yet, sonically, the installation is remarkably tranquil and non-violent, like a spare, aleatory percussion composition or a cascade of rain. One’s attention is drawn to the timbral and textural differences between the sounds rather than to their real-world or cinematic causal referents.⁵

Kubick and Walsh’s sculpture *To Make the Sound of Fire* (2007) similarly highlights the disjunction between source, sound, and function.⁶ Consisting of a Plexiglass box containing a few sheets of crumpled wax paper (used by Foley artists to generate the sound of

fire), the silent piece invites viewers to imagine the sound such a material might make, and to compare it with their silent mental conjurings of “the sound of fire.” The infinitive title highlights the role of this and all sound effects as haecceities or singularities, elements or processes to be drawn into proximity with others in the incarnation of actual cinematic entities and events.

Kubick’s recent project *Hum Minus Human* (2012) nicely brings together several features of the sonic ontology I have been describing.⁷ A single-channel video, the project presents a nearly randomized sub-catalog of drones collected by searching through a commercial sound effects archive using the keyword “hum” and subtracting those results that turn up “human” sounds. The piece freely combines the sounds of nature, culture, and industry—light transformers and cicadas, arc welders and bumble bees (etymological source of the word “drone” in English)—that form the sonic backdrop of our lives. In one sense, the “minus human” in the title simply describes a search function. But it has a broader significance as well, attuning us to that Cagean, Nietzschean, Schopenhauerian sonic flux that precedes and exceeds human being.

This conception of the sonic flux—and the ontology of events and effects it affirms—is strange. It unsettles our ordinary ways of speaking, sensing, and conceiving. A philosophical aesthetics that approaches sound and music with a conceptual apparatus already in place will reject it or be deaf to it. Yet, sonic philosophers such as Schopenhauer, Nietzsche, Schaeffer, Cage, O’Callaghan, Kubick and Walsh do philosophy otherwise. Beginning from a fascination with sound, they follow it where it leads, encountering a strange world in which bodies are dissolved into flows, objects are the residues of events, and effects are unmoored from their causes to float independently as virtual powers and capacities. To think in this way is to refuse the idealist enterprise that consists in imposing philosophical concepts onto the real, subordinating the real to a set of formal syntheses taken to be ontologically distinct from it. Instead, sonic thought follows the flows of matter and energy that constitute the real, producing concepts that are themselves instances of the syntheses by which the real articulates itself.

Notes

- 1 See, for example, Laruelle (2012a: 25ff). In the context of aesthetics, see Laruelle (2012b: 3ff).
- 2 Quoted by Nietzsche in *The Birth of Tragedy*, §16. For more about Schopenhauer and Nietzsche on music and sound, see Cox (2011: 145–61).
- 3 See, for example, Deleuze (1990: 4ff), Deleuze (1987: 63–6), Deleuze and Guattari (1987: 86ff), and Deleuze (1994: 21, 126–7, 156ff).
- 4 On Deleuze's notions of event and effect, see Augoyard and Torgue (2005: 10, 154n16). Deleuze briefly discusses “sound effects” as instances of incorporeal events in *The Logic of Sense* (1990: 7, 70, 181–2).
- 5 The project is documented at http://www.doublearchive.com/projects/full_metal_jackets.php (accessed October 13, 2013).
- 6 See http://www.doublearchive.com/projects/make_sound_of_fire.php (accessed October 13, 2013).
- 7 An excerpt can be found at <http://www.socalledsound.com> (accessed October 13, 2013).

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in|human rhythms

Bernd Herzogenrath

Time is rhythm: the insect rhythm of a warm humid night, brain ripple, breathing, the drum in my temple—these are our faithful timekeepers; and reason corrects the feverish beat.

Vladimir Nabokov, *Ada, or Ardor: A Family Chronicle*

In many ways, the twentieth century can be regarded as art's attempts to escape the “tyranny of meter” [“*Tyrannei des Tactes*”] (Schumann 1854: 126).¹ This phrase is Robert Schumann's, and he himself tried to free himself from that “law of metric cruelty” [“*Gesetz der Tactesschwere*”] (125) by ever finer and braver syncopations (see, e.g., his *Kreisleriana* and *Kinderszenen*).

For the American context, Charles Ives breathes a similar sensibility. Henry and Sidney Cowell report, that “Ives's whole approach to his complex rhythms should be understood as an attempt to persuade players away from the straitjacket of regular beats, with which complete exactness is impossible anyhow” (Cowell and Cowell 1955: 172). Instead, the performance should strive for a “variety of rhythmic tensions and muscular stresses that make constant slight changes of pace” (*ibid.* 173)—Ives's “Over the Pavements” may serve as an example here.

It might be argued, though (as, e.g., Saxer does), that all these Modernist attempts to evade what Nabokov has called the “miserable measurement of time” (1969: 538) are still marching (in relation to) a steady beat, be it in their scores (which still betray an adherence to “traditional notation”), be it in ever more adventurous deviations from that pulse (see, e.g., Messiaen's “added value rhythms,” “symmetrical permutations,” “non-retrogradable rhythms,” etc.).

So, is there a way to think rhythm otherwise?

For Deleuze and Guattari, the “tyranny of meter” is related to it being a non-productive (or only reproductive) and thus empty periodicity, a static repetition that does not produce difference, a difference they relate to becoming: “Meter, whether regular or not, assumes a coded form whose unit of measure may vary, but in a non-communicating milieu, whereas rhythm is the Unequal or the Incommensurable that is always undergoing transcoding. Meter is dogmatic, but rhythm is critical” (Deleuze and Guattari 1987: 313). Metric repetition is thus the repetition of the identical, creating equal units of time, whereas rhythm—real productive repetition, repetition with a difference—involves inequalities, maybe non-linear logics: intensities that create “incommensurabilities between metric equivalent periods or spaces” (Deleuze 1994: 21).

These equivalent metrical periods are what clock-time consists of—as Frank Kermode has so beautifully put it in his *The Sense of an Ending*, “[t]he clock’s ‘tick-tock’ I take to be a model of what we call a plot, an organisation which humanises time by giving it a form; and the interval between ‘tock’ and ‘tick’ represents purely successive, disorganised time of the sort we need to humanise” (Kermode 1967: 45). The disorganized time “in between,” the non-pulsed “time in its pure state” (Deleuze 1989: xi) is thus what Deleuze and Guattari refer to as rhythm.²

According to Deleuze and Guattari, as they outline in their *Plateau* “On the Refrain,” rhythm and the refrain are closely connected to a certain territory and geography, and simultaneously to the forces of deterritorialization, and of becoming. In turn becoming itself is closely connected to a notion of geography—“[b]ecomings belong to geography, they are orientations, directions, entries and exit” (Deleuze and Parnet 1987: 2). Deleuze’s concept of “history as becoming” thus reveals a close proximity to the “geohistory” (Deleuze and Guattari 1994: 95) of Fernand Braudel “[g]eography wrests history from the cult of necessity in order to stress the irreducibility of contingency” (*ibid.*: 96). With the concept of *longue durée*, Braudel commented on the “geographic aspects” of (historical) time itself. According to Braudel

(1982: 74), “[h]istory exists at different levels, I would even go so far as to say three levels but that would be simplifying things too much.” History—thus Braudel, thus Deleuze—happens at ten, at a hundred levels and time spans [at a thousand plateaus] simultaneously. This coexistent and dynamic becoming is to the static succession of being what locus is to datum, space is to time, and in analogy regards “geography as opposed to history, the rhizome as opposed to arborescence” (Deleuze and Guattari 1987: 296). History is a rhizome that historiography aims at translating into an arborescent order, with the rhizome standing for the complex interplay of necessity and chance, human and non-human, culture and materiality, intention and self-organization.

This notion of geohistory corresponds to a perspective on rhythm of one of the profoundest “escape artists” of the metric tyranny—Olivier Messiaen. In a dialogue with the internationally renowned organist and interpreter of Messiaen’s organ works Almut Rößler, Messiaen puts forward a “time-philosophical” notion of rhythms:

What could be more useful for a musician to create a link between movement and change . . . Of even greater significance, however, will be an awareness of time-scales, superimposed on each other, which surrounds us: the endlessly long time of the stars, the very long time of the mountains, the middling one of the human being, the short one of insects, the very short one of atoms (not to mention the time-scales inherent in ourselves—the physiological, the psychological). Whenever the composer sets the tempo-change machine going, he’ll become conscious of these different slownesses, these different quicknesses.

Rößler 1986: 40

Deleuze and Guattari’s own concept of rhythm (and of the refrain) owes much to Messiaen’s experimentations. When Messiaen refers to the composer’s “tempo-change-machine,” he basically talks about a synchronization of nature (that other tempo-change machine) and the composer’s activity. Even if Messiaen’s notion of nature still smacks of a transcendental concept (a God-centered harmonious *kosmos*), one can easily see how Deleuze and Guattari adapt that idea and relate it to their

machinic conception of nature. Nature thus becomes un-natural, in-human—machinic. From such a perspective, Messiaen's (and also Braudel's) classification of different time-scales and time-spans relates to a notion of the in|human that I want to discuss here in connection to three different composers and works. What I would like to call *in|human* corresponds to Jeffrey Jerome Cohen's “inhuman” reading of the term “inhuman,” which “signifies ‘not human,’ of course, and therefore includes a world of forces, objects and nonhuman beings. But *in-human* also indicates the alien within (any human body is an ecosystem filled with strange objects)” (Cohen 2014: 271)—a materialist, anti-“human”istic perspective that sees “the human” inextricably connected to and even emerging from in|human forces.

In the following, I would like to discuss three instances of in|human rhythms in works of John Luther Adams, David Dunn, and Richard Reed Parry, carefully heeding Deleuze's advice to not see this endeavor as “a matter of setting philosophy to music, or vice versa,” but rather as “one thing folding into another” (Deleuze 1995: 163).

in|human rhythms: the longue durée of the earth

John Luther Adams—*The Place Where You Go to Listen*

John Luther Adams is a contemporary composer who lives and works in Fairbanks, Alaska, approximately 125 miles south of the Arctic.³ Adams's work is highly influenced by his environment, this “hyperborean zone, far from the temperate regions” (Deleuze 1997: 82), far from equilibrium.

From his early works onwards he has always pointed out that he wants his music to be understood as an interaction with nature—as a site-specific “contact” with the environment that he calls “sonic geography” (Adams 1994: 8).

Adams's sonic geography comprises a cycle called *songbirdsongs* (1974–1980), consisting of various imitations of Alaskan birds

reminiscent of Olivier Messiaen's *Catalogues d'oiseaux*. Although Adams in the compositional process and the transcription brings birdsong on a "human scale" in terms of tempo, modulation, pitch, etc., he conceptualizes the different melodies—or "refrains"—as a "toolkit," so that during the performance, an ever-new aggregation of phrases and motifs comes into existence, an open system, indetermined in combination, length, intonation, tempi, etc. *Earth and the Great Weather* (1990–1993), an evening-long piece—or opera—consisting of field recordings of wind, melting glaciers, thunder in combination with ritual drummings and chants of the Alaskan indigenous people, was "conceived as a journey through the physical, cultural and spiritual landscapes of the Arctic" (Adams 1998a).

In a further step, Adams combined his "sonic geography" with the concept of what he calls "sonic geometry" (Adams 1998b: 143). Adams is more and more interested in the "noisier" sounds of nature and refers to findings of Chaos Theory and Fractal Geometry in order to find sonic equivalents for nature's *modus operandi*—*Strange and Sacred Noise* (1991–1997) is an example of this approach.⁴

To date, the culmination of Adams's sonic geography|geometry has been his recent project *The Place Where You Go to Listen*, the title of which refers to an Inuit legend according to which the shamans hear the wisdom of the world in [and get their knowledge from] the whisper of the wind and the murmur of the waves, being sensitive to what Deleuze, with reference to Leibniz, calls "little perceptions" (Deleuze 1994: 213).⁵

Adams aims at the realization of a "musical ecosystem, . . . A work of art . . . that is directly connected to the real world in which we live and resonates sympathetically with that world and with the forces of nature" (Adams 2006b)—Adams does not only *imitate* nature in its manner of operation, like Cage still does, he taps into nature's dynamic processes *themselves* for the generation of sound and light. Adams developed this project in close collaboration with geologists and physicists—as Adams stated in an interview, "[a]t a certain level, it was like . . . they were the boys in the band" (Adams 2015).

In Adams's installation, real time data from meteorological stations all over Alaska and from the five stations of the Alaska Earthquake Information Center are collected, coordinated, and made audible through pink noise filters. As Curt Szuberla, one of the physicists involved in the project, explains, “[t]he strings and bells and drumheads are plucked, bashed and banged based on the geophysical data streams. And the geophysical data streams . . . are the fingers and mallets and bells that hit things and make things sound” (Adams 2015). *The Place Where You Go to Listen* is a permanent installation at the Museum of the North in Fairbanks, where sound and light are generated in real time through data processing of the day and night rhythms, the rhythms of the seasons, of the moon phases, the weather conditions, and the seismic flows of the magnetic field of the Earth—nature itself, as well as the music it produces, operates according to its own times and speeds (and slownesses). Hours, even days (and more) might pass between perceivable seismic changes or changes in the magnetic field of the Earth. *The Place* is an open system, a machinic aggregation operating according to what Deleuze calls “differences of level, temperature, pressure, tension, potential, *difference of intensity*” (Deleuze 1994: 222)—just like the weather. Adams's noise-filter-machine is plugged into the sun-machine, and also into the wind-machine, rain-machine, etc. These in turn couple together to form the weather-machine—different milieus, different rhythms resonate with each other. Digital machines cut into the flows of nature, but within a machine|nature ecology|ontology which is not based on the strict separation of these two spheres, where nature is either a fixed, unchanging essence, or the mere retro-effect of culture and representation, but an ecology|ontology of dynamics and production. Adams's installation thus presents “modes of individuation beyond those of things, persons or subjects: the individuation, say, of a time of day, of a region, a climate” (Deleuze 1995: 26).

The Place Where You Go to Listen focuses on nature as process and event—in an almost Stoic emphasis on *becoming* versus *being*, Adams privileges time-sensitive *dynamics*, not clear-cut *states*. In his study *La théorie des incorporels dans l'ancien stoïcisme*, to which Deleuze refers in

Logic of Sense, Emile Bréhier states that, according to Stoic thought, “one should not say, ‘the tree is green,’ but ‘the tree greens’ … what is expressed in this proposition is not a property, such as ‘a body is hot,’ but an event, such as ‘a body becomes hot’” (Bréhier 1970: 20–1).⁶ This *becoming*, writes Deleuze, passes the line “between the sensible and the intelligible, or between the soul and the body” (Deleuze and Parnet 1987: 63)—or nature and culture—and places itself “[b]etween things and events” (*ibid.*). By getting rid of the *is* of representational thought, where an object’s quality is at least potentially related to a subject that expresses this quality as an attribute, by replacing fixity with process as both the subject’s and the world’s manner of operation, these “infinitive-becomings have no subject: they refer only to an ‘it’ of the event” (*ibid.*: 64). Adams’s installation goes further in the direction of the event than Ives and even Cage—although these two composers had also already pondered the conflict between the processuality of nature, and the means of art. Ives asked himself: “A painter paints a sunset—can he paint the setting sun? … [Is] [t]here … an analogy … between both the state and power of artistic perceptions and the law of perpetual change, that ever-flowing stream, partly biological, partly cosmic, ever going on in ourselves, in nature, in all life?” (Ives 1999: 71).

Ives tried to master these problematics by way of the ever increasing complexification of his compositorial means. Cage also emphasized that he did not think it correct to say “the world as it *is*”—“it *is* not, it becomes! It moves, it changes! It doesn’t wait for us to change … it is more mobile than you can imagine. You’re getting closer to this reality when you say as it ‘presents itself;’ that means that it is not there, existing as an object. The world, the real is not an object. It is a process” (Cage 1981: 80).

But Ives was still the subject in control of chaos, and Cage, in spite of all indeterminacy, regretted that he was still creating “clear-cut” objects. Adams solves this problem by leaving the executing|processing energy to the processual forces of nature *itself*. Music and environment thus become an ecosystem of a dynamics of acoustic and optic resonances interacting in|with an environment in constant flux. “Music” in this

sense thus for Adams becomes something entirely different than a “means” of human communication about an external world: “If music grounded in tone is a means of sending messages to the world, then music grounded in noise is a means of receiving messages *from* the world. . . . As we listen carefully to noise, the whole world becomes music. Rather than a vehicle for self-expression, music becomes a mode of awareness” (Adams 2006a).

Thus, *The Place Where You Go to Listen* leaves the conceptualization of a music *about* nature, of music as a means of the *representation* of nature and landscape, on which, e.g., Ives still relied, and creates music as a part of nature, as coextensive with the environment—“Through attentive and sustained listening to the resonances of this place, I hope to make music which belongs here, somewhat like the plants and the birds” (Adams 1994: 8). Even more direct than Cage, Adams emphasizes nature’s “manner of operation” in not only taking it as a model, but by directly “accessing” and relating to the becoming of a site-specific environment and creating works that *are* this relation—a music of place, of a place where you go to listen.

In this work, then, rhythm consists in the interpenetrating *longue durées* of cosmic milieus and seismic forces—the *Place Where You Go to Listen* emerges out of “an extraordinarily fine topology that relies not on points or objects but rather on haecceities, on sets of relations (winds, undulations of snow or sand, the song of the sand or the creaking of ice, the tactile qualities of both). It is a tactile space, or rather ‘haptic,’ a sonorous much more than a visual space” (Deleuze and Guattari 1987: 421). Deleuze and Guattari are referring to an ice desert here, but their notion of *haecceity* also describes Adams’s installation very well:

A season, a winter, a summer, a time of day, a date have a perfect individuality that lacks nothing, even though it can’t be confused with that of a thing or a subject. These are haecceities, in the sense that everything about them is a relationship of movement and rest between molecules or particles, the power to affect and to be affected.

Deleuze and Guattari 1987: 261

in|human rhythms: becoming-insect

David Dunn—“*Chaos and the Emerging Mind of the Pond*”

From the *longue durée* of Adams, the “endlessly long time of the stars” (Rößler 1986: 40), we move further (down? the scale?) to the “short one of insects” (*ibid.*), exemplified in the work of David Dunn.

In 1935, the naturalist Hugh M. Smith observed the following spectacle in Thailand:

Imagine a tree thirty-five to forty feet high thickly covered with small ovate leaves, apparently with a firefly on every leaf, and all the fireflies flashing in perfect unison at the rate of about three times in two seconds, the tree being in complete darkness between flashes ... Imagine a tenth of a mile of river front with an unbroken line of Sonnerati trees with fireflies on every leaf flashing in synchronism, the trees at the ends of the line acting in perfect union with those between. Then, if one's imagination is vivid, he may form some conception of this amazing spectacle.

Smith 1935: 151

Smith marveled at this unexplainable wonder—surely, these insects did not possess intelligence that made them intentionally flash in unison? It seems that this spectacle (which is still popular today, e.g. as a tourist attraction in the Great Smoky Mountains National Park) attracted lots of observers and commentators who published their responses in the journal *Science* in the early twentieth century. As one commentator put it:

If it is desired to get a body of men to sing or play together in perfect rhythm they not only must have a leader but must be trained to follow such a leader. Imagine the difficulty of keeping together on ‘Old Hundred’ if the notes were started with an interval so long as six or nine seconds between each. Do these insects inherit a sense of rhythm more perfect than our own?

Hudson 1918: 574

The question of how to keep a rhythm without a maestro, conductor or click-track puzzled the naturalists and scientists. Today, it seems that

the answer to all this is the concept of emergence, self-organization and spontaneous order. In fact, as Hudson already pointed out, the fireflies—or crickets, for that matter, where the emitted signal is not light, but sound—do not perfectly harmonize, unison is not total, but interspersed with slight variations, accelerandos, ritardandos, and stringendos, etc.: “[s]trictly speaking, there was no *measured* regularity in this response and therefore no *true rhythm* … There was present the influence of suggestion on what may be called a ‘mob-psychology,’ but there was *no special leader*” (Hudson 1918: 573). In their slightly out-of-sync, non-linear unison, the insects—no matter if fireflies or cicada—are monitoring their collective boundaries rather than individual insects establishing breeding fitness.

Now, with these sounds we enter what Deleuze and Guattari call the “refrain.” Taking their cue from their analysis of birdsong (which already shows the more cosmic vision in which they locate their concepts of “rhythm” and “refrain” and which they do not connect to music alone), Deleuze and Guattari state that a refrain is “any kind of rhythmic pattern that stakes out a territory” (Bogue 2003: 17). And even if Deleuze and Guattari take birdsong as a primary example, the same relation of song and rhythm to territory can also be seen in “human music”—the *deči-tālas* (the 120 Hindu rhythms), the Greek Συρτός (Sirtos), the Delta Blues, New Orleans Jazz, or East Coast versus West Coast Hip Hop. The refrain thus is a territorial marker that is always open to its surrounding milieus, which are constituted by different rhythms—rhythm itself is thus the difference between milieus, with chaos being the “milieu of all milieus” (Deleuze and Guattari 1987: 313). Chaos thus is the pool of the virtuality of rhythms, out of which rhythmic patterns emerge in a self-organizing manner.

David Dunn is a sound artist, ecologist, and researcher who is both interested in “the natural world” (and its sounds), as he is in science and complexity theory. In fact, quite a lot of his work can be considered “artistic research” in that it is based on active collaborations with scientists, e.g. complexity theorist James Crutchfield.

In his work “Chaos and the Emergent Mind of the Pond” (1991), Dunn had entered the acoustic world of underwater-life. He recorded the sound of aquatic insects in ponds in New Mexico and Africa, thus fusing insect-rhythms of different milieus and territories. In this underwater world, Dunn “hears a rhythmic complexity altogether greater than that in most human music” (Raffles 2010: 323). In fact, Dunn’s work accomplishes a twist on the standard *musique concrète* aesthetics and ideology. Whereas in the *objet sonore* the identification of the sound’s origin was to remain concealed, Dunn on the one hand keeps the representational level of the sound, he wants it to be identified as “something in[of] the world,” but on the other hand he also stresses the uncanniness of these sounds:

While the sounds above water are comfortable and familiar, those occurring [*sic*] under the surface are shocking. Their alien variety seems unprecedented as if controlled by a mysterious but urgent logic. The minutiae which produce these audible rasps and sputters remain mostly unseen amongst the tentacles of plants and layers of silt but each contributes to a sonic multiverse of exquisite complexity.

The timbres of these sounds are obviously magnificent, a tiny orchestra of homemade percussion seemingly intoxicated by the infinite diversity of audible colors, but what strikes my ears most readily are the rhythmic structures.... Amid a background hum of distant chatter the persistent clicks of several different insects pulsate. Many of these sounds are continuous but elastic, their constancy appears sensitive to the assertions of others. This fabric is punctuated by the intermittent cries of something unseen or the wheezing of larger beetles carrying their air supply between their legs. Steady state bands of sawtooth resonance waft across the distance between schools of insect thought that together form an emergent cognition. This infinitessimal [*sic*] world seems complete.

Dunn 1992

Dunn’s piece is both field recording, composition, and, first of all, a transposition to a human scale of those sounds which are “below the radar,” inaudible to the human ear—it takes special technology (in this

case, omnidirectional hydrophones) to pick up these patterns, frequencies, rhythms.

By fusing different rhythmic refrains (of different insect ecologies and milieus) Dunn is trying to reflect “in the mix” what he estimated the most striking feature of that underwater invertebrate communication—he basically faces a super-organism, and, ultimately, a consciousness:

[T]here are these emergent rhythms, these elastic pulsations of life, sounding as if the very morphology of these little beings and the pond’s macro body were dependent upon this aquatic jazz for the maintenance of time and space: primal drummers collectively engaged in the creation of worlds through jamming together the stridulatory resonance of their viscera. This is a dance between periodicity and chaotic swirl, the expansion and contraction of momentary self-resonance within the mutuality of mind.... Perhaps the complexity of these tiny rhythmic entrainments and chaotic cycles of microcosmic heart beats hover around that basin of attraction known as thought and together bring into being an awareness which I cannot fathom. The placidity of the water’s surface takes on the sense of a membrane enclosing a collective intelligence. I know that this is not a rational thought but I find it to be irresistible.

Dunn 1992:

In a mode strongly reminiscent of Whitehead or Bateson, Dunn asserts:

My direct experience of nature convinces me that the worlds I hear are saturated with an intelligence emergent from the very fullness of interconnection which sustains them.... To assert that human consciousness, arising out of a network of material interactions similar to those which give rise to the very existence of all life, is more important than other forms of mind not operating within the human linguistic domain is absurd.

Dunn 1992:

Dunn’s description of the alien sounds (clicks, sawtooth) is reminiscent of computer music (Dunn is a pioneer of electronic music himself). And indeed, Achim Szepanski, former owner and founder of the labels *Force Inc.* and *Mille Plateaux*, has explained that in Techno, “you can

hear a multitude of noises, shrieks, chirps, creaks, and whizzes. These are all sounds traditionally associated with madness.... Techno in this sense is schizoid music" (quoted in Anz and Walder 1995: 140–41). For Deleuze|Guattari, these sounds point towards a becoming-insect, towards a molecular deterritorialization of the territorializing refrains of birdsong:

the reign of birds seems to have been replaced by the age of insects, with its much more molecular vibrations, chirring, rustling, buzzing, clicking, scratching, and scraping. Birds are vocal, but insects are instrumental: drums and violins, guitars and cymbals. A becoming-insect has replaced becoming-bird, or forms a block with it. The insect is closer, better able to make audible the truth that all becomings are molecular.

Deleuze and Guattari 1987: 308⁷

In his sonic becoming-insect[s], then, Dunn deterritorializes the territorial refrains of different insects in order to make expressive the concept that everything is connected, and that mind—or consciousness—is not a human *quale*, but the multiplicity of virtual connections, intra- and interspecies, human and non-human: in|human.

in|human rhythms: the cardiac and respiration system

Richard Reed Parry—*Music for Heart and Breath*

In 1988, the Swedish Pop duo Roxette issued a double command to everybody willing to obey—they not only released their second studio album *Look Sharp!*, the album also featured their hit single “Listen To Your Heart.” The lyrics of this song show that to listen to one’s heart equals to listen to your feelings, emotions, to the cultured expertise of one who “truly loves”—and all this in 86 bpm. The mathematical/metronomic indication of beats per minute seemingly correlates the musical metrum with a bodily, organic function—that of the heartbeat. From this perspective, Roxette’s 86 bpm is in a significant mismatch

with the emotional state this song talks about—nothing excited/exciting about this measure, a bpm number of 60 to 100 signifies regular heart activity, while with 120 bpm we enter zones of excitation. But 86 bpm relates rather to a state of sitting on the couch than of emotional turmoil—it thus rather follows the standard rules and conventions of a soft rock ballad, of a cultural refrain, that is.

What is even more important—the cardiogenic mimesis of the bpm-system is in itself already a stabilization of a more chaotic rhythmic milieu, an abstraction. Consider the following quote by Ralph Waldo Emerson:

We are lovers of rhyme and return, period and musical reflection. The babe is lulled to sleep by the nurse's song. Sailors can work better for their yo-heave-o. Soldiers can march better and fight better for the drum and trumpet. Metre begins with pulse-beat, and the length of lines in songs and poems is determined by the inhalation and exhalation of the lungs. If you hum or whistle the rhythm of the common English metres,—of the decasyllabic quatrain, or the octosyllabic with alternate sexisyllabic, or other rhythms, you can easily believe these metres to be organic, derived from the human pulse, and to be therefore not proper to one nation, but to mankind.

Emerson 1875: 41–2

Emerson here clearly locates the origin of rhythm (in poetry, in music, etc.) in the organic movements of walking and heartbeat (in close *d'accord* with the fact that much of (post)Transcendentalist Poetry was structured not by the metrics of “good poetry,” but determined by the length of breath). However—it is meter he is talking about, not rhythm. English meters and the marching rhythm are in fact no rhythms at all—Messiaen complained about this, and Deleuze and Guattari followed—“there is nothing less rhythmic than a military march” (1987: 313). Meter thus is revealed as a territorializing refrain, a stabilization and regulation of the different rhythmic chaotic milieus of the human body. Thus, if you actually listen to your heart, you will not get a clean bpm-structure, but something more chaotic, more non-linear.

“As animals our lives are marked by rhythms, and the rhythmical activities of ventilation and heart beat are tangible evidence of the life force in each of us” (Taylor et al. 1999: 900). But what about the “subtle processes of generation, regulation, and integration of these internal rhythms” (*ibid.*)?

Meter—marches, sonnets, bpm, Roxette—are linear systems, and linear systems are well-behaved. Because of their regular repetition of identical patterns, they can be completely understood and even predicted—by dissecting them into their components, which always add up. Non-linear systems, on the other hand, do not add up—dissection will not work here, because the components are coupled, looped, involved in emergent processes. The research on the seeming synchronicity of crickets and fireflies, mentioned in the section on David Dunn, is also interesting because cardiac pacemaker cells function in a similar manner—the heart beats in a non-linear way, with subtle but complex fluctuations. Indeed, a completely regular heartbeat in homeostasis might signify illness, while the slightly chaotic fluctuations might indicate a healthy state⁸ (with the flat-line as both the point zero and point of infinity of metric regularity). The same, one might argue, goes for the respiratory system, and, in addition, these two systems are not only interdependent, but also coupled to hormonal and chemical stimuli (in|human here with the stress on “in” as an inclusive preposition), external excitations: a myriad of interconnected internal, external, intermediate, etc. rhythmic milieus, “differences of level, temperature, pressure, tension, potential, *difference of intensity*” (Deleuze 1994: 222)—so much for your bpm.

So, how if one *TAKES THAT* as a “rhythmic template”?

Enter Richard Reed Parry.

The multi-instrumentalist of your favorite Indie-Rock-Band Arcade Fire is also a classically trained musician and composer, who fearlessly and successfully straddles the two worlds of Pop and Classical—a tightrope-act he shares with the likes of Bryce Dessner (The National), Jonny Greenwood (Radiohead) and Glen Kotche (Wilco).

Parry’s *Music for Heart and Breath* (2014) listens to one’s heart in a mode very different from Roxette’s. With the musicians of these pieces

wearing stethoscopes, “the concept for the entire record . . . is that every note and everything that any of the musicians plays is played either in sync with the heartbeat of that player or with their breathing or with the breathing of another player. And it depends piece-to-piece what exactly is happening” (Parry 2014a).⁹ Referring to the influence of Cage, Reich, and Eno that Parry cites in his “Liner Notes,” one could say that *Music for Heart and Breath* ingeniously combines Cage’s indeterminism, Reich’s phasing, and Eno’s idea of Generative Music. But I’d argue there is more to Parry’s very singular way of trying to escape from the tyranny of meter.

The players of *Music for Heart and Breath* have to listen to their own bodily rhythms as well as to those of their co-players, while at the same time external stimuli (responses of the audience) and internal stimuli (excitation of the players, the feedback-loop of responding to responses, etc.) further destabilize the rhythmicities of the piece being played. Parry’s compositions attempt to “translate directly into music the quiet internal rhythms of the body . . . to guide and shape the dynamics of the pieces . . . following the subtly rhythmic ‘instructions’ of the body” (Parry 2014b: 6)—we need to add, though, that because of the complex feedback loops mentioned, we cannot be speaking of “internal rhythms” alone, rather of rhythms situated at the fold of inside|outside. The musicians body thus becomes a pivotal instrument in the performance—the body, that according to commentators from Roland Barthes to noted American jazz pianist and composer Yijay Iyer has always been suppressed in (cultural constructivist or semiotic) interpretations of music.

Consider Barthes’ love for Schumann. Listening to Schumann’s *Kreisleriana* (Opus 16, 1838), Barthes claims that he does not hear notes, themes, or even meaning—“I hear this body that beats” (1991: 299). However, interpretations and performances of that beating body that Barthes hears—“there is no beating except the heart’s” (1991: 302)—are rendered too docile, in general, those beats are played “too timidly; the body which takes possession of them is almost always a mediocre body, trained, streamlined by years of Conservatory or career,

or, more simply by the interpreter's insignificance, his indifference" (1991: 303).

For Parry's *Music for Heart and Breath*, it takes an interpreter not indifferent to the differences in intensity that the beating heart provides. Barthes' description of the "mediocre" and streamlined Conservatory player, a highly trained technician of music, might be described in Deleuze-Guattarian terms as a "paranoiac performer."

For Deleuze|Guattari, the body ultimately oscillates between two poles, "the paranoiac, reactionary, and fascizising pole, and the schizoid revolutionary pole" (1992: 366). It is important to point out that, despite the origin of the terms "paranoiac" and "schizoid" in psychoanalysis, Deleuze|Guattari have chosen the terms to refer to different logics and dynamics of social organization. Whereas *paranoia* designates an Oedipal and ultimately transcendental mode of a hierarchically structured and rigidly segmented, striated, and solid body, controlled by an external authority, *schizophrenia* marks liberating potentialities and "lines of flight," vectors of deterritorialization, a fluid body constituted by openness, dynamics, self-organization, and by a constant "becoming." Thus, while the "paranoiac performer" is Maestro or click-track fixated, what *Music for Heart and Breath* calls for is indeed a "schizzo performer," open to the irregular dynamics of his own body, to rhythms that are not metric and solid ("Solid as a Rock"), but fluid and marked by intensive differences.¹⁰

The headline of the NPR interview with Arun Rath claims that "Richard Reed Parry Turns Musicians into Metronomes"—which in fact he does not: the irregular rhythms of heart and breath provide anything but stable metric regularity, the effect is rather a stuttering.

Deleuze has related the concepts of "stammering" and "stuttering" to the question of style. And even though he mostly related stuttering to the realm of literature, I argue that stuttering bears a close affinity to the ideas of "rhythm" and "rhizome." Taking his cue from Proust, Deleuze claims that "great literature is written in a kind of foreign language" (Deleuze and Parnet 1987: 5). To write or speak in a foreign language is to write and speak in a minor and deterritorialized language, escaping

the solidified and molarized variables, variations, potentialities—virtualities—of any major language, making any “language” (literal, symbolic, music) “affective and intensive” (Deleuze 1997: 107). It is this deterritorializing and rhizomatic quality that links the idea of stuttering to the rhythmic complexities of *Music for Heart and Breath*—Rhizome is a Dancer!

In their various attempts to escape from the “tyranny of meter,” Adams, Dunn, and Parry have also commented on what might be called “Music in the Age of the Anthropocene.” With the idea of the human becoming a geological (i.e. non-human) force itself, art has the responsibility to create an awareness of how we live not only in the world, but also as part of that world. A music that “performs” these “cosmic dimensions” of the interdependence of human and non-human, by focusing on the in|human of the concept “human” might also teach us something in regard to artistic (or musical) form—form as a molar concept tied to the intentionality of a subject that in|forms brute matter:

[t]here is no longer a form, but only relations of velocity between infinitesimal particles of an unformed material. There is no longer a subject, but only individuating affective states of an anonymous force. Here the plan is concerned only with motions and rests, with dynamic affective charges.

Deleuze 1988: 128

These rhythmic “relations of velocity” ultimately reveal rhythm as the in|human non-linear pulsation of life—“a life”—that escapes conscious control and the all-too-human “tyranny of meter.”

Notes

1 See also Saxer (2004).

2 Deleuze refers to the Proustian idea of “time in its pure state” also on his IRCAM Seminar on music (Deleuze 1978)—hence, a vague correspondence between meter—movement-image and rhythm—time-image might be proposed.

- 3 Adams, it has to be noted, is also an environmental activist and founder of Alaska's Green Party. Mitchell Morris thus dubs Adams a “‘Green’ composer” (1998: 131), referring, however, to the notion of ecology as in *Deep Ecology*, whereas I would suggest to place Adams firmly within a Deleuzian Ecology that is based on a non-dualist ontology.
- 4 *Strange and Sacred Noise* is a concert-length cycle of six movements for percussion quartet. Its first and last movements (“...dust into dust ...” and “...and dust rising ...”) are based on the Cantor set and Cantor dust (the two-dimensional version of the Cantor set). These fractals model the behavior of electrical noise, which Adams takes as a diagram for the percussion set to explore “the dynamic form of the Cantor dust, whereby in an infinite process, line segments are divided into two segments by the removal of their middle third” (Feisst n.d.). See also Feisst (2001: 4–14).
- 5 A direct Leibnizian reference can be found in his *New Essays on Human Understanding*: “To hear this noise as we do, we must hear the parts which make up this whole, that is the noise of each wave, although each of these little noises makes itself known only when combined confusedly with all the others, and would not be noticed if the wave which made it were by itself ... [w]e must have some perception of each of these noises, however faint they may be; otherwise there would be no perception of a hundred thousand waves, since a hundred thousand nothings cannot make something” (Leibniz 1996: 55). Such a “sonorous ocean,” it can be argued, the becoming-perceptible of micro-sounds “underneath the [human] radar,” also provides a more materialist version of the Pythagorean idea of “sphere music”: contrary to a the harmonious universe rotating according to “well-tempered” intervals, it would refer to the multiplicity of sounds of “the world”—nature changes constantly, everything moves, and everything that moves oscillates according to a certain frequency, the total result of which would be white noise (the murmur of the universe). Such a concept, I argue, also defines much of today's electronic music (see, e.g., Murphy 2004, in particular 161–2). Lately, Adams has transferred the sound of the little waves that make up a sonorous body of water in his Pulitzer-Prize awarded *Becoming Ocean* (2014).
- 6 My translation of: “On ne doit pas dire, pensaient-ils: ‘L'arbre est vert,’ mais: ‘L'arbre verdoie’ ... Ce qui s'exprime dans le jugement, ce n'est pas une propriété comme: un corps est chaud, mais une événement comme: un corps s'échauffe.”

- 7 Compare with Deleuze|Guattari who point out that “a musician requires a *first type* of refrain, a territorial or assemblage refrain, in order to transform it from within, deterritorialized, producing a refrain of the *second type* as the final end of music: the cosmic refrain of a sound machine” (Deleuze and Guattari 1987: 349).
- 8 See Goldberger et al. (1990).
- 9 This concept had already been put to use by American composer Christopher Shultis in his 1994 piece “Written on the body, for musicians and dancers,” where the musicians “have a contact microphone attached to any part of the body that produces an audible heartbeat. This is amplified into an earpiece that is placed into the musician’s other ear.”
- 10 See also Szekely (2003) for a somewhat similar observation.

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Realism, Materialism, Art I

Things Aren't What They Used to Be: On the Immateriality of Matter and the Reality of Relations

James Ladyman

There are many varieties of realism in philosophy, but they have in common the idea that the world is fundamentally independent of our beliefs and desires about it. Realists oppose idealist philosophies that give the mind a role in making reality. Of course, there are mental and/or social constructs, for example, the meanings of these words, but realists maintain that in large part the way things are is not determined by what we think or say about them. For example, even if everyone believed to the contrary, it would still be true that the earth is roughly spherical, that it rotates causing the passage of day and night, and that the changing seasons are due to its being tilted on its axis at 23.5 degrees as it orbits the sun.

Materialism is the positive account of what the world is like that usually substantiates the abstract idea of objectivity with which realism is defined above. According to materialism, material objects like the earth and the sun exist and have their motions in space and properties like their masses and shapes; the same chemical elements are found everywhere; and these features of the world are the basis for the existence of everything else. However, materialism has evolved to the extent that many sympathetic to it now call themselves physicalists, and many also accept the existence of much that is immaterial, though they take it that it is somehow emergent from and dependent on the physical. Physics is the ultimate science of matter, and its development has transformed our concept of matter, and has also given us accounts of it that are both incomplete and far removed from our concept of everyday material objects. Space and even time have acquired a quasi-physical status. There are many open questions about the extent and nature of the cosmos. The materialism of the ancients and early modern philosophers is no longer plausible.

Materialism began as an imaginative vision about the nature of reality and the true natures and properties of the things we see around us. Where others speculated that the world was ultimately composed of water or fire or some combination of elements, the ancient Greek atomists proposed that everything we observe, including life itself, is nothing more than matter in motion, composed of indivisible material atoms. According to the atomists, the latter do not have many of the qualities that everyday objects seem to have in our experience; the sweetness of honey, for example, does not really inhere in its atoms, but rather is the sensation they

produce in us. This particular way of distinguishing appearance from reality was taken up by the “corpuscularian” philosophers of the seventeenth century (Boyle, Locke, Gassendi, and so on), who also thought that familiar features of the world we experience, notably colors, do not belong to things themselves but only to our perception of them. They were not only materialists, but also mechanists who suggested that the universe is like a clockwork machine; while the appearances may be of a hand moving around a face and perhaps bells ringing and figures moving as a consequence, in fact all the moving parts are responding only to the movement of their neighbors, and the only real causation is action by contact. They developed a picture of things according to which their real properties were limited to those of the extension in space, configuration, shape, and movement of the particles that composed them.

That these are properties amenable to geometrical description facilitated the application of mathematics to science as never before. The theories of physics and the mathematical techniques that were developed along with them have given us extensive predictive and explanatory success. The same basic theories of mechanics described terrestrial and extraterrestrial motions, and the same theories of chemical structure described rocks, cells, and comets. However, science seems to disenchant nature to a degree that moves many to reject the scientific image of the world. How could thinking, feeling, and acting beings consist in nothing more than the movement of small material parts due to action by contact? What room is there in the clockwork universe for the things that matter to us?

However, what some regard as disenchantment is to others a morally and politically important repudiation of belief systems that allegedly bind, enthrall, and intoxicate people, distracting them from addressing the true causes of their woes. Materialists have often been concerned with exorcising the supernatural and defending a positive picture. Since its origins in pre-Socratic philosophy, materialism has had a negative and critical component involving the repudiation of supernatural and immaterial entities, a consequent disdain for superstition, and a mission to liberate people from its control over their lives: Lucretius in his poetic elaboration of the philosophy of Epicurus (the Greek atomist who held that the mechanics obeyed by atoms involves a fundamental element of chance) says “so powerful is religion at persuading to evil.” The purpose of his account of the Nature of Things was therefore practical. Likewise, Thomas Hobbes was condemned as an atheist on account of his view that matter is the only substance. The claim that the only substance that exists is material substance is the usual definition of materialism. “Substance” is that which is not dependent on anything else for its existence. “Material” was explicitly defined by Descartes to mean “extended in space.” Although we clearly have experience of apparently nonmaterial things, most obviously the phenomena of consciousness, the materialist claims that a full description of all the material things that exist, and their properties, relations, and dynamics will be sufficient to account for everything else.

Ironically, it was the success of the science it did so much to inspire that undermined materialism. Materialism was made obsolete by developments in the area that materialists most admired (and for which they believed they were providing philosophical foundations), physics. First of all we must note that materialism and mechanism were never universally accepted by natural philosophers. Indeed, notoriously, Newton’s founding theory of modern mathematical physics from 1687 posited the universal gravitational force acting between all bodies instantaneously at a distance though diminishing in its power with distance. In the eighteenth century Charles-Augustin de Coulomb added the electrostatic forces between charged particles to the gravitational force. By the nineteenth century it was known that there must be exotic forms of substance such as the ether to account for the phenomena of light, electricity, and magnetism. Nonetheless, the hope remained that all of physics, and ultimately all of science, could be reduced to the properties of material particles moving around, perhaps with the addition of some kind of material field-like entity, being continuous and everywhere. The success of the kinetic theory of gases, according to which pressure, heat, and temperature were the manifestations of atomic motions and collisions, gave hope to materialists; but the discovery of radioactivity and the rise of quantum theory soon led to the radical transformation of our understanding of the nature of the atoms themselves. Far from being the indivisible building blocks of antiquity, they turned out to be compound entities whose behavior and properties were beyond visualization. Matter, in the sense of extended stuff that takes up space like the familiar solid objects we see around us, is according to physics not ultimately solid at all but mostly empty space. Matter is composed of atoms that are in turn composed of a nucleus and orbiting electrons. If an atom were the size of a football pitch, the nucleus would be the size of the center spot and the orbiting electrons on the touchline much smaller than that. Those electrons and other subatomic particles are regarded as point particles, further undermining the relevance and legitimacy of the notion of material things extended in space.

Meanwhile, relativity physics takes as its objects space and time, which can hardly be considered as material things in the sense of classical materialism. From the perspective of the early twenty-first century, it seems quite possible that, as entities existing independent of the existence of anything else, space and time will not hold a place in fundamental physics. Since material substances are supposed to be those substances that exist in space, the usual definitions of “materialism” and “material thing” have become irrelevant for the task of describing fundamental reality. The right theory of quantum gravity remains out of our grasp but the most popular research program is the theory of eleven dimensional superstrings, the vibrations of which give rise to particle-like behavior. We have come a very long way from the physics of *res extensa* (extended things).

It seems that the kind of materialism defended by the ancient Greek atomists and their successors in early modern natural philosophy is not viable. However, much of the spirit of materialism lives on in “physicalism.” Materialism offers a

positive metaphysical picture, but it has negative content too, namely, the denial of the existence of mental or spiritual substance. Furthermore, something of its positive content, namely, the idea that the chemical and biological ultimately depend on the properties of matter, is also retained in physicalism. There are two obvious approaches to the articulation and defense of the latter. The first responds to the obsolescence of the previous definition of material things by defining a physical thing as a thing that is posited by physics. Thus physicalism is taken to assert that what exists is precisely what physics says exists (plus those things that are regarded as aggregates of things posited by physics such as everyday objects and other compound entities posited by the different sciences). Unfortunately, this approach faces the apparent problem of being either trivial or false. It is (almost certainly) false if it refers to existing physics for its ontology, since it can safely be assumed that present-day physics will be superseded by a more advanced physics. On the other hand, it is trivial if it defines the physical as that which will be posited by a future, completed fundamental physics, since by definition physics is the science that must be capable in principle of accounting for all natural phenomena. If it were necessary to posit souls or ectoplasm to account for some phenomenon, then their behavior would be in the scope of physics, making it empty to say that all that exists is the physical. The second approach seeks to define the physical with reference to actual physics—but that means using the resources of common sense or some other form of intuition, neither of which seems likely to give us the last word on the nature of physical reality. Since physics is currently unfinished, and since, in the past, quite radical innovations in ontology have been necessary for the progress of physics, the prospects are not good for this second approach either.

Instead, physicalism is best characterized as a hypothesis about what it will take for physics to progress, according to which it will never be necessary to introduce new entities, laws, or processes into physics solely to account for biological or mental phenomena. At one time, it was thought it might be necessary to posit special chemical forces to account for chemical bonds, and vital forces to account for life. However, it was shown that chemical bonds could be understood in terms of electrostatic forces between charged particles, and that the processes that underlie life, such as cellular metabolism, can be related to chemical and physical processes. Physicalists need not commit to strong forms of reductionism about these matters. It may be the case that chemical bonds cannot be derived from fundamental physics without further assumptions, but there are many cases where quantum mechanics makes well-confirmed predictions about atoms and their chemical behavior. The same is true of genetics in relation to molecular biology and many other examples. We have no reason to believe that emergent phenomena, from biochemical reactions to social behavior, require special kinds of physical processes. Complexity science shows us how self-organizing and hierarchical order can arise spontaneously in large networks of components even though the nature of the components and their interactions gives no hint of it.

Science has developed to the extent that it now gives us ontology at many levels. Within the physical sciences we have a rough hierarchy from the solids and fluids of geology, through the molecular structure of chemical kinds, the atoms and their orbiting electrons, the subatomic realm of particles and fundamental forces, to quantum fields, superstrings, and beyond. The biological and behavioral sciences are much more complex but similarly offer layers of entities from proteins to social groups. What makes all these entities count as physical? We certainly cannot straightforwardly identify them with the collections of entities described by physics. Their place in the unified scientific account of reality is based on the shared system of units, the conservation of energy, the gravitational, electromagnetic, and nuclear forces, and the basic classification of the elements expressed in the periodic table. In science we have integration and not always reduction. However, there remains an asymmetric relationship between physics and the special sciences: all special science objects are such that their behavior is consistent with physics and can be understood without violations of basic physical laws. The objects of the special sciences and all the objects in current physics exist only at particular restricted scales of space and time. For example, there are no tables at the atomic scale of distance or at the geological scale of time; and there are no atoms at the scale of quarks or at the cosmological scale of time.

The atomists of old could respond to this situation by regarding emergent entities as possessed of a less than full-blooded reality. They might be necessary for the purposes of our cognition and representation of the world, but the true reality is the atoms and their motions and collisions in the void. However, we now know that atoms are not fundamental. The kinds of entities that are posited at the subatomic scale are exotic in the extreme; but more importantly we have no reason to believe that there is a fundamental level consisting of the one true set of ultimate individual objects. If we remain agnostic about whether the latter exists, we have no reason to regard scale-relative emergent domains as less real because everything we know is like that. What then does it mean to say that all these things exist? In *Every Thing Must Go*, Don Ross and I developed Daniel Dennett's idea that to be is to be a real pattern.¹ When we are doing microphysics we do not have to keep track of everyday physical objects because doing so would be of no predictive or explanatory value. The scales of distance, time, and energy make tables irrelevant. However, anybody faced with the task of keeping track of material objects in everyday circumstances would be very foolish to insist on thinking in terms of table parts other than drawers, legs, and tabletops. To describe a room only speaking of atoms, without mentioning the furniture, would be to miss out on the fact that there are correlations in the positions of some of the atoms that result from their being part of, say, a table. In that sense the table is a pattern in the information

¹ See James Ladyman and Don Ross, *Every Thing Must Go: Metaphysics Naturalized* (Oxford: Oxford University Press, 2007); and Daniel Dennett, "Real Patterns," *Journal of Philosophy* 88 (January 1991): 27–51.

about its parts more than it is a particular set of material particles (for any particular particle can be left out and the table is left unchanged), and it is certainly not a single extended piece of matter.

What all genuine entities have in common is that they are real patterns in the phenomena that emerge at their characteristic length and time scales, in the sense that any attempt to describe the world at that scale that did not refer to them would contain redundant information and miss out on simple causal relationships, statements, and laws that predict and explain phenomena. The distinctive ontologies of the sciences arise because we live in a universe that is rich enough to have various emergent regimes of (partial) order.

What was once a revolutionary thought may, centuries later, become a commonplace fact barely deserving of mention to an educated person. We can now see the rotation of the Earth from space; we have similarly confirmed that the world is millions of years old, that people have common ancestors with apes, and that much of what we see around us has a true nature that is very different from the way we might perceive it on the basis of culture, intuition, and our conscious experience. Children grow up taking the existence of the virtual world for granted. However, it is important to remember that, for that virtual world to exist, somewhere there is a physical machine subject to the laws of thermodynamics. Our brains can only function at a very specific range of temperatures, and computers have to be powered somehow. Yet it may be less misleading to say that the world is made of mathematics or information than that it is made of matter, because fundamental physics describes particles and fields that are nothing like the way matter appears and is conceived by us. The scientific image of the world is one from which mathematical representation is ineliminable. This applies no less to the special sciences than to physics. The different sciences are highly integrated and unified. Materialism and realism apt for the twenty-first century should be expressed in terms of the objectivity of real patterns.

From Within the Midst of Things: New Sensibility, New Alchemy, and the Renewal of Critical Theory

Diana Coole

A key feature of the new materialism is its insistence on the recalcitrance and vitality of matter and thus on its role in constraining and engendering the ways it is understood and handled. Matter is recognized as having its own forces of resilience, resistance, and productivity.¹ New materialists are accordingly critical of tendencies to abstraction or formalism in mainstream scholarship. In political theory or sociology, for example, this is played out respectively in shifts away from analytical and normative approaches or from reifications promulgated by structural analysis, formal modeling, and classificatory schemes. If greater attention is being paid to the empirical details of emergent processes, this is not in the name of positivism but rather a way of discerning myriad unpredictable ways in which matter forges provisional molar assemblages. The role played here by thinkers such as Michel Foucault, Bruno Latour, and Pierre Bourdieu shows how more realist approaches undertaken in genealogy, actor-network theory, or phenomenology are being seized upon to breathe life into the study of social phenomena.

In the visual arts, this may correspond with moves against Conceptualism inasmuch as its language- and text-based approach is renounced. Many artists and designers are returning to matter to explore immanent, elusive, and reclusive, properties of materials, working with chemical or biophysical qualities in response to degrading or emergent forms and their provocative invitations. Deleuze and Guattari write that, for example, “what metal and metallurgy bring to light is a life proper to matter, a vital state of matter as such, a material vitalism that doubtless exists everywhere but is ordinarily hidden.” Thus, in their account the “relation between metallurgy and alchemy reposes [...] on the immanent power of corporeality in all matter, and on the esprit de corps accompanying it.”² For “new alchemists,” such as those at the Munich Academy of Fine Arts, new materialism means giving matter

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¹ See for example Bruce Braun and Sarah Whatmore, eds., *Political Matter. Technoscience, Democracy, and Public Life* (Minneapolis: University of Minnesota Press, 2010); Diana Coole and Samantha Frost, eds., *New Materialisms: Ontology, Agency, and Politics* (Durham, NC: Duke University Press, 2010).

² Gilles Deleuze and Félix Guattari. *A Thousand Plateaus*, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987), 411.

its due.³ It engenders fascination with strange, brute, magnificent materials whose properties guide work that relies on scant formal or intellectual preconceptions but remains open to the provocations of emergent materialities and their innate qualities in a journey of shared participation that is active/passive: a reciprocal, irreducible process of becoming, where bodies and other materials are conjoined in a shared artistry.

While matter is constantly being reconstructed, it is also recognized as making its own suggestions in the way it frustrates or inspires. However, even this formulation may suggest too dialectical a schema. When it invites greater attention to the ways matter matters, new materialism is acknowledging that matter materializes itself through and with embodied humans because they are irremediably part of, not apart from, this material world. It accordingly summons us to plunge into the material realm, to appreciate that we live in the midst of things, in order to engage with immanent structures of materialization that are simultaneously familiar and alien, necessary for our survival yet threatened by the strength of our desire. Whether the field is ethical conduct, aesthetic practice, or critical theory, what is implied here is nothing less than a reorientation toward the material or natural domain in a way that is distinctive from modernity's prevailing will to dominate nature through knowledge and action.

Disavowing the domination of nature represents an additional polemical score. Here, new materialists oppose the following: A utilitarian tendency, lucidly expounded by Heidegger, to regard the material realm as meaningless stuff that lies ready-to-hand for manipulation and imposition according to human purposes; a Cartesian philosophy that presents subjects and objects, or consciousness and bodies, as ontologically heterogeneous, as well as its scientific development in mechanical physics for which matter is dead, inert material available for technological modification. Equally, it opposes philosophies that reduce material alterity to an unknowable thing-in-itself or strive to appropriate matter through conceptualizing, quantifying, and classifying it. So, too, theories that define matter as determinist or determined are rejected, especially inasmuch as matter is claimed to follow strict laws of causality or linear development. In this mixture of idealist and traditionally materialist philosophies, scientific theories, and cultural orientations, new materialist critics see a common thread in which the complexity, contingency, and generativity of matter is denied in order to regulate it, as well as an unwarranted separation and privileging of human reason as a controlling agency.

This challenge accordingly summons a countervailing ontology. Important philosophical influences here include ancient atomism, the ontological monism of Spinoza, the vitalist philosophy of Gilles Deleuze, and phenomenological approaches to corporeality by thinkers such as Maurice Merleau-Ponty. Their work

³ I am grateful to the directors and students at the new cx center for interdisciplinary studies at the Munich Academy of Fine Arts for discussions about their work as "new alchemists" with an affinity with the new materialism. See www.adbk.de/en/cx-centrum-fuer-interdisziplinaere-studien/archiv-jahresthemen.html.

is associated with marginalized positions within the canon that are now being excavated and combined in novel ways. Equally significant are new scientific conceptions of matter, ranging from complexity and chaos theory, on the one hand, to unprecedented ways of understanding and manipulating matter in theoretical physics or molecular biology on the other.

The ontology espoused by new materialism, which might be regarded as its signature contribution, attracts labels such as materialist vitalism or generative immanence. Such terms are indicative of an insistence that matter enjoys its own capacities for self-transformation, rather than awaiting the imposition of form or meaning by an external, transcendent agent (such as God or Man). In this sense it is secular and post-humanist. Yet by stressing the embodied, affective nature of humans, their affinities with animals, their imbrication with ecological systems, their enduring reliance on technological prostheses, their creative abilities to appreciate and improvise on natural forms, it does not eliminate human agency entirely. Rather, new materialism relocates humans by emphasizing their own materiality and through exploring their dependence on fragile or robust material systems and entities on which they leave more or less indelible traces. New materialist ways of thinking accordingly challenge traditional distinctions between the human and nonhuman, as well as classical hierarchies that describe a descending scale from God, through human, animal, and vegetable, to minerals and the inorganic. Instead, a singular yet variegated upsurge of materialization is countenanced. In summary, this is a philosophy of becoming rather than being: one that emphasizes materialization as a dynamic process (wherein matter matters itself) rather than a state.

It is worth saying a little more about this choreography because it ascribes some distinctive rhythms and qualities to materialization. Matter is regarded here as lively and constitutive. In emerging, it produces more or less enduring constellations; but since its course is neither linear nor predictable, it is inimical to conceptions of progress. Instability and volatility, flows and mobility, contingency and chance, are more typically invoked. Swerves and swarms, cracks and folds, virtuality and events, displace an older materialist discourse of cause and effect, determinism, or teleology. The internal, or immanent, generativity associated with materialization thus arises from matter's being understood not as solid, self-identical objectivity but as inherently relational in the sense that it is the shifting relations between or within entities that endow matter with innate capacities for self-transformation. This allows materiality—whether in macro-level assemblages such as the biosphere or micro-level entities in which genes and cells co-exist—to be ascribed agential capacity in the sense that materialization generates structure or patterns; it partitions the sensible and engenders provisional forms in ways that precede and exceed linguistic or cognitive capacities.

Such ideas are captured by references to a flat ontology and distributed agency. There is nonetheless some disagreement here as to just how widely distributed agentic capacities are. Do they, as thinkers such as Bruno Latour and Jane Bennett

argue, include even inorganic entities, as “actants” or “thing-power” whose efficacy affects human/nonhuman systems? Or, alternatively, should the extension of agency merely refer to corporeal or organic capacities that extend beyond human bodies but which remain limited to beings capable of reacting reflexively and creatively to their material milieu? In either case, the definition and privileging of the human, especially regarding the uniqueness of humans’ rational and linguistic skills, are being questioned in some fundamental ways.

It is important to stress that new materialist thinking is not merely a philosophical adventure. Many of its exponents recognize its ontological claims as a prelude to radical change in ethical-political life. In discussing this aspect, it is helpful to see new materialism tracking a distinction that marks contemporary political philosophy in its continental guises. This takes one direction when themes such as generativity and vitality are regarded as invitations to practice an affirmative ethos in which creativity, innovation, and the event inspire a more open and respectful attitude toward nature/things alongside queer, self-transformative practices that defy rigid classification or inertia. The other direction is more negative, critical, in taking up the wager to plunge into the midst of things in order to analyze sub-optimal, perhaps catastrophic, ways of treating matter and thus to identify leverage points for political action that are deemed essential for flourishing, if not for survival itself.

From the former, ethical perspective, new materialist ontology suggests a celebration of matter’s generative capacities, thus offering new sources of inspiration through engaging with nonhuman forms. A combination of joyful restraint coupled with Nietzschean exuberance suggests a new sensibility or ethos: a transformed mode of being-in-the-world, one that escapes the limitations of conventional politics, power struggles, and runaway material consumption in pursuit of novel ways of being, subjectivity, affect, performance, embodiment, and artistry that are also more ecologically sensitive. In particular, such an ethos suggests perceiving and performing nature, bodies, and things differently. It is reminiscent of counter-cultural ideals that surfaced during the late 1960s, in which, for example, Herbert Marcuse invoked a new sensibility aligned with the pacification of nature and a more sensuous, erotic, aesthetic mode of being that was complemented by limits-to-growth environmentalism. Among current new materialists, it is exemplified by the re-enchanted attitude toward vibrant matter that Bennett exhorts when she summons the cultivation of “patient, sensory attentiveness to nonhuman forces operating outside and inside the human body,” which she associates with a “countercultural kind of perceiving” that engenders “a more ecological sensibility.”⁴

This new sensibility might be understood as bringing affective ballast to social change. Yet its practitioners inevitably find themselves confronting relatively intractable structures of power and everyday practices that reproduce prevailing values

⁴ Jane Bennett, *Vibrant Matter* (Durham, NC: Duke University Press, 2010), xiv, 10.

and behavior to congeal and ossify material systems. Such is the weary insight of the second dimension of renewed materialism, whose exponents maintain that a robust understanding and critique of existing systems is required as a complementary task to ethical reinvention. In this guise, the new materialism assumes an altogether more mundane form inasmuch as it focuses on unprecedented ways in which matter is actually being transformed to alter everyday experiences and life chances in fundamental ways. This, then, is the sense in which new materialists are renewing the project of a critical theory, through an approach that might be defined as a critical or capacious materialism.⁵

Its proponents are attentive, *inter alia*, to pervasive forms of biopower that modify behavior at the level of everyday bodily habits and routines; to developments within political economy (such as intensified commodification of the commons or the invention of new consumer durables and production technologies); to the effects of population growth and other unprecedented demographic changes; to innovations in biomedicine that break bodies down into treatable, tradable parts; to digital technologies in which the distinction between human and artificial intelligence becomes difficult to ascertain; to changes to the geological fabric of the planet associated with the Anthropocene. While some of these developments are regarded positively as new opportunities for preserving and enhancing life, more typically it is the threats they pose to material (co-)existence that are being explored.

In this critical aspect a renewed materialism is thus returning to an analysis of material systems—such as political economy, demography, biopower, and the environment—in order to explore the material milieu bodies inhabit and to appreciate its contribution to limiting or inspiring discursive constructs. Linguistic tropes, like scripts or texts, accordingly yield to a language of complexity and ecologies, systems, structures, and assemblages. While critical investigations of political economy and the protean effects of global capitalism inevitably provoke memories of Marxism, a capacious historical materialism is a considerably more complex, wide-ranging undertaking congruent with twenty-first-century conditions. In particular, political economy is situated relative to larger and smaller systems with which it interacts. On the one hand, this means taking heed of manifold concrete details in everyday (co-)existence as a way to understand how power structures establish and maintain themselves at the micro, especially embodied, level where needs, capacities, and desires are negotiated and instantiated. On the other, the broader eco- and biosystems with which intimate and social life connect through dense networks are accorded greater attention as planetary systems manifest increasing symptoms of degradation.

⁵ Diana Coole and Samantha Frost, “Introducing the New Materialisms,” in *New Materialisms: Ontology, Agency, and Politics*, eds. Coole and Frost (Durham, NC: Duke University Press, 2010), 1–43, esp. 26–34; Diana Coole, “Agentic Capacities and Capacious Historical Materialism: Thinking with New Materialisms in the Political Sciences,” *Millennium: Journal of International Studies*, vol. 41, no. 3 (March 2013): 451–69.

This analysis proceeds in a holistic manner that is faithful to the dense relationality and complex becomings described by new materialist ontology. It recognizes that because materialization occurs simultaneously on multiple levels and between numerous interconnected systems, critical analysis must also be multi-modal in its approach. In recognizing the complexity, contingency, and mobility of materialization, it is, therefore, obliged similarly to trace the complicated flows and intricate reversals of matter as it passes through and transfigures different biophysical levels. From this perspective global capitalism may be the most significant conduit or switching point. Still, the challenge is to identify the ways matter shuttles back and forth between distant ecosystems and the embodied routines of the quotidian where biopower operates through increasingly pervasive and sophisticated forms of governmentality. In other words, while none of these levels is privileged as ultimately determining, tracking the relays, delays, and circuits through which matter passes as it is transformed, degraded, or constructed is crucial for understanding the material situation at any point in time. Here the social and natural sciences are enmeshed in ways redolent of the entwining of social and ecological systems, or of the human and nonhuman.

In conclusion, new materialism is a response to a resumed, pluralistic interest in matter that is receptive to criticisms of older materialisms developed by post-structuralists in particular, but also alert both to the efficacy of matter in shaping or constraining systems of meaning and discourse and to novel ways in which materiality is being negotiated and changed by the unparalleled scale of human intervention and innovation. It embraces more realist methodologies than those of the linguistic or conceptual turn; it adumbrates an ontology of contingent, even aleatory, becoming; it invites ethical and artistic reorientation toward nature and materials, and it renews the project of a critical theory, albeit in ways that take into account the unprecedented ways that matter is being transformed, its dynamic flows, and its imbrication with structures of power that normalize certain material practices. By locating embodied humans in the midst of things, new materialists are provoking novel ways to understand and engage with the dense material world of which our species is an irreducible part.

Acoustic Space I
(Soundwalk)

Acoustic Space II

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Any Place Whatever: Schizophonic Dislocation and the Sound of Space in General

By Will Schrimshaw

Abstract

Distinct from the tendency for field recording to be understood as a veridical act of documentation—faithfully recording the sonic specificities of a given place—there exists a complementary tendency towards abstraction, emerging from the ‘schizophonic’ dislocation implicated within phonographic practices. This tendency emphasises the mutability of space in general rather than the identifiable specifics of place. This ‘lack’ of specificity is understood to expose an underlying productivity or generative capacity only accounted for in a more abstract notion of space. This paper focuses on the extent to which field recording practices are heard to occupy a point of tension between the identifiable fixity of the site-specific and the generative mutability of space in general, a point of tension that is audibly manifest in the work of artists such as Francisco López and Asher Thal-Nir.

Introduction

Within the phonographic practices informing the related yet distinct fields of acoustic ecology, soundscape composition and field recording, we find varying degrees of fidelity to a notion of the site-specific. To attempt a brief and somewhat crude summary, site-specific sound practice seeks to engage the audible peculiarities of a given place, drawing upon, capturing, exciting or distorting found sounds and environments in the production of the work. Brandon LaBelle has described site-specific installation practice as a relationally contingent nexus wherein “sound gets played out, or positioned, in relation to a spatial situation, whether that be found or constructed, actualized or imagined, space is brought into the overall function of the artwork” (LaBelle 2004, p.7). The site-specific here refers to the work’s dependencies upon the context of its production and presentation for its meaning and grounding. Opposed to the autonomous sufficiency of the artwork espoused by Modernist perspectives, site-specific practice broadly understands the meaning of an artwork to be produced through a deflection of the listener or viewer’s attention away from an isolated consideration of the work-in-itself. Attention is directed towards the spatial or even ‘theatrical’ context of its production and presentation, a space which includes the observer amidst its various cultural, social, economic, geographical and physical conditions, all of which play a role in shaping the work.¹ In this article it is my intention to draw out some of the productive tensions that exist between the specific and the general, the distinct and the obscure, the ‘hi-fi’ and ‘lo-fi’ within broadly site-oriented sound practices.² More specifically, this article will explore the notion that these two poles of sonic spatial experience are inseparably related and that ‘they are unequal odd halves’ (Deleuze 2004, p.261). Following from this, this article will claim that the movement from the specific to the general can be one from the grounded to the generative, from the identifiable sound of place to the ambiguous, sonorous production of space in general.³ In attributing to the general this generative potential, the ‘lo-fi’ and obscure need not be thought to lack the differential function ascribed to place within site-specific practice, as these terms name the conditions of place and the specific.

The problematic site

Within the multitude of site-oriented sound practices we can identify numerous problematic and ambiguous relations to the nature of the site. This description of the relation to site as problematic should not be thought to denote negativity—in the sense of something that needs to be fixed—as the term problematic is here used in the Deleuzian sense of something which forces thought and provokes responses or creative ‘solutions’. In this context, the problematic is considered to be a generative or productive field of elementary interactions that may at times appear obscure and confused.⁴ The problem of the site within artistic practice denotes an agitative productivity that accounts for the allure of the ‘site specific’ due to, rather than despite, its contingencies and peculiarities. The agitative nature of this problematic relation is evident in the extent to which the term site-specific has been undergoing extensive critique within artistic practice, as various suffixes to site- seek to describe a more ambiguous, mobile and altogether less ‘rooted’ relation to the site than the specific may immediately suggest or allow.⁵ Phonographic practice often uncovers, through a necessary degree of abstraction, the otherwise inaudible and unheard peculiarities of place: the auditory objects, events or effects specific to a given location. Specificity, however, appears ill-fitting where it overstates locatedness, fixity or grounding within place, as is evident in the mobility of broadly site-oriented practice and the increasingly nomadic lifestyle of the artist or field-recorder. An

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Interference is a biannual online journal in association with the Graduate School of Creative Arts and Media (Gradcam). It is an open access forum on the role of sound in cultural practices, providing a trans-disciplinary platform for the presentation of research and practice in areas such as acoustic ecology, sensory anthropology, sonic arts, musicology, technology studies and philosophy. The journal seeks to balance its content between scholarly writing, accounts of creative practice, and an active engagement with current research topics in audio culture. [More]

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Graham Gussin; *I Love It, In Space there Are No Limits, I Love It.*; 2001; Photo courtesy of the artist.

A series of six wall drawings using sound as source material. Sound is put through a software program that translates it into image, producing a kind of audio map or territory, this is then projected onto a given wall and traced, the background for these pieces is an oil based blue ink. The sounds used are words spoken by participants in various pornographic films, the brief sentences becoming the title of the work.

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example of this nomadic mobility can be heard in *Airport Symphony* (2007): a collection of compositions by various artists made from field recordings carried out by Lawrence English at Brisbane Airport. While the locational specificity of the recordings is explicitly named, that which they document and the experience of place to which they refer is utterly generic: a runway, a waiting lounge, a duty-free shop. It is, therefore, with some difficulty that we might recognise this as a site-specific project, insofar as the source material evokes the transitory boredom, aesthetic banality and idle consumerism often associated with airport architecture and air travel. While the source materials we hear are named as being specific to Brisbane Airport they are—with the exception of a few accents—largely generic, evocative of almost any given airport. These globalised spaces are readily considered to lack the character or specificity thought to affirm the locational identity with which site-specific practice is commonly concerned. Yet through various processes of phonographic abstraction sonic matters are mobilized against this banality in the composition of something often beautiful and singular, if unspecific. It is in this sense that this project identifies and makes use of sounds occupying the spaces between the specific, generic and general.

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FEAR OF FLYING (EXCERPT); TAYLOR DEUPREE; FROM *AIRPORT SYMPHONY*, ROOM40, 2007.

UNTITLED # 203 (EXCERPT); FRANCISCO LÓPEZ; FROM *AIRPORT SYMPHONY*, ROOM40, 2007.

Critique of the specific within site-oriented practice can be made particularly strongly in the context of sonic and phonographic practices wherein abstraction and—in many ways a more fundamental—displacement operate as primary methods. The insufficiency of the specific in accounting for the allure of the site starts to reveal itself where we consider that a primary gesture of the phonographer is a scission, or more specifically one of schizophonic dislocation.⁶ The second aspect of this position takes its cue from a preliminary reductive physicalism according to which sound functions primarily through displacement, through the physical disturbance of a medium and a displacement of matter.⁷ The notions of schizophonic dislocation and displacement attempt to identify the allure of the site in its ambiguous plasticity. It is this general plasticity that is exploited in phonographic practices not restricted to the documentation, preservation and representation of place. The practices that I wish to discuss in what follows, rather than seeking to hold fast the relationship between sonic signifier and referent, engage with the distortion and composition manifest in phonographic practice. In addition to phonography's capacity for representation, such practices engage the potential for sonorous spatial productions.

Acknowledgement and exploitation of the necessary abstraction involved in recording and composing with site-specific sound entails a shift from the specific towards the general. This shift need not necessarily be total or unilateral, as what we hear in practices adopting abstract procedures is often an oscillation between place and non-place, between site-specificity and an abstract space-in-general. Here a clarification must be made, as the notion of an abstract space in general, producing a kind of 'non-place' is considered differently to the way this term has been used by Marc Augé (1995). For Augé, non-place describes the proliferation of spatial homogeneity according to the 'global style' of neo-modern architecture under late capitalism.⁸ An example of this is the airport ambience that forms the subject matter of the aforementioned *Airport Symphony* (2007). The schizophonic undermining of place to which I refer herein is specifically concerned with energetic matters of spatial production. These abstract signal components are considered anterior to the experience and identity of place. Opposed to the homogeneity of non-place, the shift from the specifics of place to the abstract generality of space addresses a generative potential in sonority that is exposed only where sound is not limited to representation but considered according to a primary displacement or deformation. Put into practice by artists working with the problem of site and sound is the capacity for sound to create, reconfigure and modulate space, presenting an acoustic spatial practice that does not solely entail a documentation of place but a production of space.

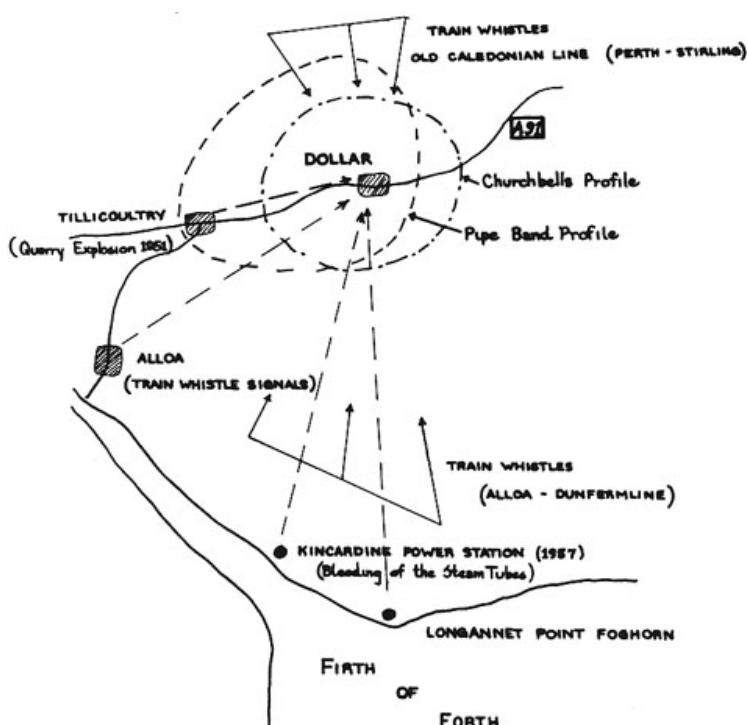
We hear the aforementioned oscillation between the specific and the general in the work of Asher Thal-Nir, which makes audible the movement of thought between contextual specificity and a general plasticity of space. The album *Landscape Studies* (2009), for example, manifests Asher's "desire to create recordings which have the unique characteristics of a particular room or space which only exists in the context of that recording", a desire that could hardly be more attuned to the sensibilities of site-specific practice.⁹ This concern for the specifics of place can be contrasted with its immanent ungrounding, as is audible in 'Any Place Whatever' (Asher 2008). In the latter work we hear the identifiable signals of passing traffic through a displaced location that is obscure and ambiguous. The resonant traces of a room remain, but they are strangely bent out of shape and contorted. Signal events echo round an interior, set against ubiquitous background noise that blurs their edges, rendering them confused and indiscrete. The presence of 'background noise' is characteristic of Asher's compositions, ranging from an audible proximity of signal components to a murmur into to which distinct elements decay and from which new ones emerge.

ANY PLACE WHATEVER (EXCERPT); ASHER; FROM AUDIBLE GEOGRAPHY, ROOM40, 2008.

The schizophonic dislocation performed by Asher through the use of field recordings allows for a recursive nesting of places that tends towards their abstraction: a room, place or site temporarily reconstructed within another by means of electroacoustic architectonics. Both sets of recordings capture or evoke an outside seeping in: Landscape Studies draws upon "ideas relating to the intrusion of outside sounds into [Asher's] home environment" and 'Any Place Whatever' manipulates a source of noise that encroaches upon any urban dwelling.¹⁰ In identifying the critical function carried out by this method of composition, it should be noted that the recursive displacements that we hear—and perform—while listening to these recordings do not appear to mourn a loss of specificity, locational immediacy, or imminent authenticity. Auditively tracing the root of these dislocated sounds back through procedural abstractions we find the place whence these compositions 'originate' to be ubiquitous or banal. The traffic which is clearly identifiable in 'Any Place Whatever' is an exemplary signal of the non-places to which Augé refers: that which is wholly unspecific and global in its recurrence. This source flirts with a sense of the homogeneous and banal that I am keen to render distinct from a productive sense of space in general. Asher utilizes abstraction and distortion to extract affective auditory components from what otherwise appears undifferentiated. In these recordings we hear the characteristic resonances of rooms, yet their function is oriented towards the novel production of acoustic space instead of being reducible to a representation of place.

Acoustic ecology and the sound of place

The role of sound in the determination of place—rather than a more abstract notion of space—is of central importance to acoustic ecology. The work of the acoustic ecologist is in part to document and investigate of the role of sound in the determination of place and the everyday rhythms of a community.¹¹ Perhaps the most succinct example of this can be seen in the diagrammatical representation of the 'acoustic horizons' of the Scottish town of Dollar presented in Five Village Soundscapes (Schafer 1977).



SCOTTISH TOWN OF DOLLAR PRESENTED IN FIVE VILLAGE SOUNDSCAPES

This diagram presents a sound map outlining the various acoustic events and territories that determine the character of Dollar as an "acoustic community" (Schafer 1994, p.215-7; Truax 2001, p.65-9). The sounds listed and arranged on this map underpin a sense of place, variously contributing to an acoustic territory and locational identity. Many of these sounds are what the acoustic ecologist would describe as 'sound marks' (Schafer 1994, p.9-10). Sound marks are components of the broader notion of a soundscape, recurrent sound events considered characteristic of a locale and therefore to be treated with the same care, attention and preservation

as visibly stable landmarks which contribute to local or national identity. The sound-mark constitutes one pole of the spatial experience of sound that I wish to discuss, namely the sound of the particular, well grounded and identifiable. The sound-mark, insofar as it supports a sense of place is taken as an example of site-specific sound.

To prevent this outline from reducing acoustic ecology to acts of documentation and interpretation, it is important to point out that these exercises and the data gathered are intended to inform the production of increasingly 'positive', functional or 'hi-fi' sonic environments. The Schaferian concept of the hi-fi soundscape is an important one, as in its contrast to the antithetical concept of the lo-fi soundscape it will become of importance to the current argument, particularly the attempt to place greater importance upon the indiscrete and confused. For Schafer:

The hi-fi soundscape is one in which discrete sounds can be heard clearly because of low ambient noise level. The country is generally more hi-fi than the city, the night more than the day [...] In a lo-fi soundscape individual acoustic signals are obscured in an overdense population of sounds. The pellucid sound [...] is masked by broad-band noise. Perspective is lost (Schafer 1994, p.43).

Despite the concern for the production of sound space that is evident within the practice of acoustic ecology, much of the work carried out within this field remains exemplary of site-specific practice. It is this specificity that I intend to problematise herein, insofar as it focuses upon a notion of sound as primarily a contextual and symbolic event rather than a more ambiguous if not autonomous—i.e. Schaefferian—object.¹² This distinction requires that we look elsewhere for alternative and more ambiguous methods of sonorous spatial production, practices that seek out not only the sound of place but the conditions of spatial production.¹³ More specifically, it is the importance of the foreground signal event or the 'hi-fi' soundscape within the ideology of acoustic ecology that requires we look elsewhere. The notion of a productive space in general, distinct from both the specific and the homogeneous, requires a more thorough engagement with the notion of background noise than can be easily gleaned from the practices of Schaferian ecology. The Schaferian branch of acoustic ecology necessarily sets itself apart from the problematics of the audibly confused in identifying the signal components of place. The emphasis placed upon signal discretion, identity and place should be complemented with an account of their undoing, of the blurring of place, signal and identity that accounts for the novel and anomalous production of space. Where too strong an emphasis is placed upon signal definition, place and the preservation of its sound-marks, the difference through which they are produced is obscured. In redressing this issue we should turn to the seemingly contradictory practice of an environmental or ecological audition that takes as its ground the 'lo-fi' and the confused.

Environmental confusion and the non-bucolic broadband world

Contrary to the emphasis placed upon the signal components and soundmarks of a soundscape, the approach taken by artist and composer Francisco López to sonic environments is one 'grounded' within a confusion of the distinct and discrete. López often takes an abstract approach to site-oriented practice, establishing a productive tension between location and schizophonic dislocation. A particularly clear instance of this can be found in the Birmingham Sound Matter (2009) project. Rather than seeking to represent the character or identity of Birmingham through mapping and documenting its soundmarks, the city is taken as a sonic substrate, providing materials for new compositions. López's contribution to this group project opens with a hint of what we might try to identify as traffic noise, horns sounding in tunnels or perhaps ringing church bells. Attempts to pin identities to these sounds are quickly rendered futile as they become increasingly abstract and distorted, with only particular bandwidths of frequencies being extracted for re-composition. Despite this progressive abstraction an ambiguous relationship with the city from which these sounds were originally drawn remains, with Birmingham being named if not audibly identifiable. The relationship to the site of sound established in this instance has little concern for fidelity, whether high or low.

UNTITLED # 225 (EXCERPT); FRANCISCO LÓPEZ; FROM *BIRMINGHAM SOUND MATTER*, AUDIOBULB, 2009.

Despite its abstract orientation, López's approach to sonic environments is radically inclusive in both its conception of an "acoustic community" and nature in general. In López's work we hear an example of Barry Truax's expansive definition of an "acoustic community" as "any system within which acoustic information is exchanged" (Truax 2001, p.66). For López this system is not restricted to the anthropic or organic, taking into account the 'inert' and base. López presents an extensive and inclusive conception of the soundscape's material contingencies by directing audition towards an expanded notion of the acoustic community that includes weather systems, soil, plants, animals (including humans), machines and so on.

UNTITLED # 200 (EXCERPT); FRANCISCO LÓPEZ; FROM *AUDIBLE GEOGRAPHY*, ROOM40, 2008.

This move highlights a tendency within López's thought to move from the specific to the general or from the somatic to the dynamic. López's approach to environmental recording attempts to focus attention upon an environment as a whole, upon an audible confusion of bodies that leads to blurred distinctions between the otherwise discrete. This purposive confusion entails a shift from the specific to the general that is audible in the blurring of foreground and background events. Here signal distinction does not hold the privilege that it does within Schaferian ecology, wherein confusion leads towards the emergence of the negatively charged lo-fi soundscape. Contrary to the negative associations that this term has within Schaferian ecology, López presents a conception of nature itself as an ultimately productive lo-fi soundscape. In López's recordings things do, of course, come to the fore, yet this foreground is strictly relative to the position of the listening subject:

Sound-producing animal species appear together with other accompanying biotic and non-biotic components of the sound environment that happened to be there when the recordings were done. In this sense, there is no purposeful a priori distinction of foreground / background, but only their unavoidable arising due to the location of the microphones, as happens with our ears. I'm not claiming objectivism [...] but rather that the 'focus' of my attention was the sound environment as a whole (López 1998).

This productively confused approach to "the sound environment as a whole" is exemplary of a more general tendency to shift from the specific to the general or apparently abstract. While perhaps not as dominant as it is within Lopez's work, this tendency can nonetheless be heard in the work of artists such as Eric La Casa (2011), Jana Winderen (2010), Asher or Russell Haswell (2009). Taking a broad overview we might say that the practice of field recording readily identifies and documents the auditory determinants of place and identity, elements easily associated with site-specific practice. This is often heard in the amplification of peculiar details and their framing through dislocation, setting them apart from the confusion of space in general. López's environmental recordings are exemplary of site-oriented phonographic practice, where emphasis is placed less upon the representation of place and more firmly upon the transmission of productive sonic matters appearing abstract to the ear.

López's chimeric and often polemical coupling of Schaefferian phenomenology and environmental recording can be understood as a critique of the specific within site-oriented sound practice. Specificity is indexical in this instance, binding sound to representation and sacrificing 'sound itself' to the efficacy of the symbolic. What is of concern in such instances is not that sound is drawn out of 'itself' but that the image of the referent remains too rigidly fixed. This referential operation limits affective understandings of sound as the anomalous and confusing is shed in favour of the identifiable. López's work, despite its Schaefferian impetus, never fully sheds referential or indexical operations. It nonetheless audibly manifests a shift of emphasis from specificity to the particular abstraction that is sound-itself, utilised as an a-referential and affective object or event. This progression towards abstraction forces dislocation insofar as the site-specificity of a recording becomes obscure, moving from the sound of place to the excessive obscurity of sound itself. Without fully escaping its emplacement the reproduction of phonographically dislocated sound entails a novel production of space and spatial relations. Movement away from the specific through a practice of abstraction or schizophonic dislocation uncovers an obscure productivity that is otherwise cancelled out in indexical operations, moving from sound as sign towards the ambiguous spatial productivity of sonic energy in general.

Ungrounding place

In referring to a sense of spatial abstraction and ambiguity, it is my intention to draw upon the critique of site-oriented practices that has claimed the exhaustion of the site-specific and the term's ongoing reconfiguration "to imply not the permanence and immobility of a work but its impermanence and transience" (Kwon 2004, p.4). Furthermore, this impermanence and transience is extended to the site itself and not just the work to which it gives meaning in site-specific practice. In drawing attention towards methods of abstraction and a notion of space in general, an attempt is made to build upon the tendency towards mobility and mutability in site-oriented practice. This tendency is emphasised in relation to a broader field of artistic practice in Miwon Kwon's critical assertion that "site specificity used to imply something grounded" (2004, p.11). The shift from the specific to the general, audible in López's shift from documenting the sounds of individual bodies or locations towards an abstract and confused environment as a whole, accordingly suggests an ungrounding of the site. The equivalence of the specific and the well grounded to which Kwon refers draws upon the sense that "to ground is to determine", that "it is always a claim or an image that requires a ground or appeals to a ground" and that "each well-grounded image or claim is called a representation" (Deleuze 2004, p.341-2). The well grounded and specific attains a fixity allowing it to operate efficiently within a symbolic and indexical order. It is precisely this grounding that the shift towards the abstract and general displaces, seeking to uncover that which "rumbles underneath" (Deleuze 2004, p.344). In this displacement or dislocation the specific is ungrounded, becoming abstract and confused. This ungrounding must, however, be considered distinct from the "spatial undifferentiation" that gives way to the homogeneity that is characteristic of Augé's non-places and identifiable in the source materials of *Airport Symphony* (2007) and Asher's 'Any Place Whatever' (Kwon 2004, p.157).¹⁴

Kwon identifies the importance of a "differential function" that sets place apart from the global and generic, "establishing authenticity of meaning, memory, histories, and identities" (2004, p.157). In this sense the identity of place is determined through a certain resistance to a "global style" or spatial and aesthetic homogeneity. For Kwon, this resistance or "differential function associated with places, which earlier forms of site-specific art tried to exploit and which current incarnations of

site-oriented works seek to reimagine, is the hidden attractor in the term "site specificity" (Kwon 2004, p.157). In presenting a concept of dislocative generalisation that functions as the lubricant of spatial productions rather than spatial homogenisation, we must posit a second "hidden attractor" by identifying this differential function as being at work within the productive ungrounding of place. This differential function should not, therefore, be limited to that which we identify as place. Whereas Kwon identifies this differential function as being provided by the resistant and grounded identity of place, an equally productive—and wholly more ambiguous—differential function must be identified within processes of dislocative ungrounding. We must, therefore, locate a productive sense of difference—distinct from that which Kwon associates with the affirmation of identity—within both the ungrounded and a sense of energy in general. In attempting to render this productive sense of the general distinct from homogeneity it is important that we avoid the "external illusion of representation" according to which "groundlessness should lack differences, when in fact it swarms with them" (Deleuze 2004, p.347). The general and ungrounded is not, therefore, to be confused with the homogeneous and undifferentiated. Equally, the abstract sound of schizophonically dislocated space in general should not be thought to lack the potential for spatial productivity. Abstract sonic elements become the agents of productive spatial displacements, constituting the 'differential function' of space in general that rumbles beneath the specific. Distinct from undifferentiated homogeneity, the process of abstraction and the sound of space in general draws upon the sense that "energy in general or intensive quantity is the spatiuum, the theatre of all metamorphosis or difference in itself" (Deleuze 2004, p.301). It is in this sense that generality is not to be associated with homogeneity but rather another pole of differential spatial production, with that which ceaselessly ungrounds and undermines place in the ceaseless production of space.

Where abstraction drives phonography—from the moment of pressing record, if not before—we hear a shift in thinking from site-specific audition to sonic spatial productions. This shift is one from specificity to intensity, from identity to its differential conditions. The background noise associated with lo-fi soundscapes comes to be understood in a productive sense as an individuating difference, drawing audition towards the intensive production of space anterior to the identification of place and its apparently discrete bodies. This transition from the specifics of identification and audible taxonomies to sound in general is mirrored in López's preference for the notion of sound matter over sound objects. This preference is not only terminological but ontological, placing general energetics ahead of specific identities, dynamic force before somatic consistency.

UNTITLED # 204 (EXCERPT); FRANCISCO LÓPEZ; FROM HB, BASKARU, 2009.

The shift from objects to matter distances practices of nature recording based upon the audible representation of place, individual species or bodies from those aiming to uncover the generative capacity and ambiguous creativity of generalised sonic events. Sound presented in this sense is thought to expose something of the affective capacities implicated within representation: "the richness of this sound matter in nature is astonishing, but to appreciate it in depth we have to face the challenge of profound listening. We have to shift the focus of our attention and understanding from representation to being" (López 1998). This shift "from representation to being" is here equated with a shift from the specifics of representation to the confused conditions of sonorous individuation and an ontologically oriented audition. As an agent of displacement and by way of its susceptibility to schizophonic dislocation, sound may function, to use Deleuze and Guattari's terminology, as a "cutting edge of deterritorializations" (2004, p.383), or as a kind of lubricant assisting recursive displacements despite its constant specific re-grounding through acts of audition.

Conclusion: Oscillating between space and place

Here we arrive at the opposite pole of spatial experience to that of the site-specific: that which is abstract, obscure and non-specific yet posited as the conditions and productive ungrounding of the distinct, the background noise against which signal appears and from which it must be discerned. At this point it is of particular importance to reaffirm that the generalising notion of sonic displacement or deterritorialization with which this argument is concerned is not to be thought as total, nor a task to be completed. Neither is the process which these terms represent to be thought as simply 'positive'. This processual deformation, de- and re-composition is wholly ambiguous and to be understood as productive before it is qualified as positive. Territorial or spatial production entails a displacement, an anterior state to be drawn upon, reconfigured and rearranged, and so this productivity may well be considered 'negative' from the position of what came before.¹⁵ Positivity and negativity are considered consequential to an otherwise blind and indifferent productivity that operates by way of ungrounding. These related notions of displacement, schizophonic dislocation and deterritorialization name a process of ungrounding that is required of new spatial productions, events and compositions. They must be understood as the peculiar complement or obscure underside to the site-specific, constituting the confused conditions of its production. The process of displacement and dislocation is in this sense figured as occurring between appearances of the specific and identifiable; the background noise of which signals are drawn and into which they dissolve being understood as the medium of their contingency. In its oscillations between the specific and the confused this discussion must be thought to take place between the "nostalgic desire for a retrieval of rooted, place-bound identities on the one hand and the antinostalgic embrace of a nomadic fluidity of subjectivity, identity and spatiality on the other" (Kwon 2004, p.8).¹⁶ Both López and Asher can be heard to maintain a relationship with site within their work, yet in neither instance is the notion of site rigidly fixed to the specific. Instead, both artists' work invokes a

Neither instance is the notion of site rigidly fixed to the specific. Instead, both artists' work invokes a spatial plasticity, evoking an incomplete and unfinished proto-place that is always in the process of being composed or decomposed. The audibly site-specific engages with the grounding of place; the more ambiguous notion of a site of sound in general, audible within the practices mentioned above, performs an ungrounding of place synonymous with the production of space. In this sense a site-oriented sound practice need not necessarily entail specificity, focusing instead upon the ambiguous productivity of the sound of space in general.

Footnotes

1. Michael Fried famously derided minimalist works for their 'theatrical' inclusion of contextual determination within the meaning of the artwork, an aesthetic system of relational production which he understood to undermine the autonomous consistency of the work (Fried 1967). []
2. The terms 'hi-fi' and 'lo-fi' are taken from the writings of R. Murray Schafer for whom 'the hi-fi soundscape is one in which discrete sounds can be heard clearly because of low ambient noise level [...] In a lo-fi soundscape individual acoustic signals are obscured in an overdense population of sounds (1994, p. 43). I will return to this point in more detail later in the essay. []
3. The relationship posited between the terms space and place herein is the inverse of that found in the work of Michel de Certeau, wherein space is considered as a specification or practice of place. Retained, however, is the active sense of space that de Certeau contrasts with the proper stability of place (1988, 117). The reason for this inversion is due to the extent that the term space can be considered to be more abstract than place, as is made evident in the extensive introduction to Henri Lefebvre's *The Production of Space* (2007, 1-67). []
4. The term 'problem' or 'problematic' receives sustained attention throughout Deleuze's *Difference and Repetition* (Deleuze 2004), most notably in chapters III and IV. The most concise, if somewhat condensed, summary of Deleuze's use of this term is given by Alberto Toscano who describes the Deleuzian problem as an 'impersonal field of singularities out of which thought draws its localized solutions' (Toscano 2006, 2). What is of importance here is that in this sense the problem is not thought as strictly conceptual or immaterial, but in an objective sense, as something comprised of real events and elements in the world (Deleuze 2004: 76, 205). []
5. Perhaps the best summary of developments in site-oriented practice can be found in Miwon Kwon's *One Place After Another: Site-Specific Art and Locational Identity* (2004). Also see Nick Kaye *Site Specific Art: Performance, Place and Documentation* (2000). []
6. The term schizophonia is taken from the work of R. Murray Schafer. This term is used by Schafer to critically refer to how 'sounds have been torn from their natural sockets and given an amplified and independent existence' (1994, 90). []
7. An overview of 'acoustic physicalism' can be found in Roger Scruton's 'Sounds as Secondary Objects and Pure Events' (Scruton 2009). []
8. On non-places see Augé (2005). On the 'global style' of neo-modern architecture see Hal Foster's *The Art-Architecture Complex* (Foster 2011). []
9. Quote taken from the text accompanying *Landscape Studies* (Asher 2009), available at http://room40.org/store/asher_united_landscapes1 and http://room40.org/store/index.php?route=product/product&product_id=163 []
10. Quote taken from the text accompanying *Landscape Studies* (Asher 2009), available at http://room40.org/store/asher_united_landscapes1 and http://room40.org/store/index.php?route=product/product&product_id=163. Both recordings can, in this sense, be heard as auditory experiments akin to the rhythmanalytical writing carried out by Henri Lefebvre in 'Seen from the Window' (2006). []
11. A very brief example of this, and of a site-specific sound project, is given by John Levack Drever in his overview of the Sounding Dartmoor project (Drever 2007). []
12. An excellent introduction to Pierre Schaeffer's concept of the sound object and its relation to phenomenology can be found in Brian Kane (2007) 'L'objet Sonore Maintenant: Pierre Schaeffer, Sound Objects and the Phenomenological Reduction'. []
13. R. Murray Schafer outlines a notion of sound events as contextually dependent and relational elements, 'to avoid confusion with sound objects, which are laboratory specimens' (Schafer 1994, 71). []
14. Admittedly, the politics of this dislocative generalisation must remain ambiguous insofar as this tendency towards displacement or an undermining of the specifics of place may remain wholly compatible with capitalist nomadism. In this sense, the material productions that I am attempting to locate in a tendency towards dislocation would seem only to lubricate rather than resist capitalism's global extension and homogenisation. While this is true, allegiance with this 'lubricating function' that fuels the undermining of specificity, identity and place must be risked if we are to avoid slipping into stifling nostalgia and romanticism of rootedness. []
15. As stated above, there is unfortunately insufficient space to go into the ambiguous political implications of this concern for displacement. []
16. On the tendency towards nostalgia in identifying and nominating the signal components or primary sounds of place see Drever (2007, 100). []

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Bio

Will Schrimshaw is an artist and researcher from Wakefield based in North Shields. Often working with sound amidst a larger vibrational continuum, his work is broadly concerned with the subliminal influence of backgrounds, ambiances and atmospheres, with the often imperceptible determinants of space and place. These concerns are manifest in an experimental practice combining earth, text and code in repeated attempts to engage with material and energetic states that exist in excess of the thresholds of perception. In 2011 he completed a PhD in Philosophy and Architecture at Newcastle University, focusing upon ideas of acoustic space and auditory influence within architectural and artistic practice. He teaches courses on sonic interaction and sound design and has completed a number of residencies, solo and group exhibitions, performances and workshops throughout Europe.

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Music as a Gradual Process

STEVE REICH

Steve Reich (1936–) is one of the four major early minimalist composers. He studied philosophy as an undergraduate and went on to study composition, first at Juilliard and then at Mills College and the San Francisco Tape Music Center, hotbeds for early experimental music in America. In 1970, Reich traveled to Accra to study Ghanaian drumming. Upon his return to the U.S., he began performing with a Balinese gamelan in Seattle. His early tape pieces, *It's Gonna Rain* (1965) and *Come Out* (1966), stand at the origin of both minimalist and experimental musical practices. Drawing from his experiences with African and Balinese musics, Reich's early instrumental pieces, particularly his music for percussion, foreground the phased repetition and accumulation of small rhythmic cells. In this 1969 manifesto, Reich succinctly proclaims his commitment to repetition and audible process in music.

I do not mean the process of composition, but rather pieces of music that are, literally, processes.

The distinctive thing about musical processes is that they determine all the note-to-note (sound-to-sound) details and the overall form simultaneously. (Think of a round or infinite canon.)

I am interested in perceptible processes. I want to be able to hear the process happening throughout the sounding music.

To facilitate closely detailed listening a musical process should happen extremely gradually.

Performing and listening to a gradual musical process resembles:

- pulling back a swing, releasing it, and observing it gradually come to rest;
- turning over an hour glass and watching the sand slowly run through to the bottom;
- placing your feet in the sand by the ocean's edge and watching, feeling, and listening to the waves gradually bury them.

Though I may have the pleasure of discovering musical processes and composing the musical material to run through them, once the process is set up and loaded it runs by itself.

Material may suggest what sort of process it should be run through (content suggests form), and processes may suggest what sort of material should be run through them (form suggests content). If the shoe fits, wear it.

As to whether a musical process is realized through live human performance or through some electro-mechanical means is not finally the main issue. One of the most beautiful concerts I ever heard consisted of four composers playing their tapes in a dark hall. (A tape is interesting when it's an interesting tape.)

It is quite natural to think about musical processes if one is frequently working with electro-mechanical sound equipment. All music turns out to be ethnic music.

Musical processes can give one a direct contact with the impersonal and also a kind of complete control, and one doesn't always think of the impersonal and complete control as going together. By "a kind" of complete control I mean that by running this material through this process I completely control all that results, but also that I accept all that results without changes.

John Cage has used processes and has certainly accepted their results, but the processes he used were compositional ones that could not be heard when the piece was performed. The process of using the *I Ching* or imperfections in a sheet of paper to determine musical parameters can't be heard when listening to music composed that way. The compositional processes and the sounding music have no audible connection. Similarly in serial music, the series itself is seldom audible. (This is a basic difference between serial—basically European—music and serial—basically American—art, where the perceived series is usually the focal point of the work.)

What I'm interested in is a compositional process and a sounding music that are one and the same thing.

James Tenney said in conversation, "Then the composer isn't privy to anything." I don't know any secrets of structure that you can't hear. We all listen to the process together since it's quite audible, and one of the reasons it's quite audible is, because it's happening extremely gradually.

The use of hidden structural devices in music never appealed to me. Even when all the cards are on the table and everyone hears what is gradually happening in a musical process, there are still enough mysteries to satisfy all. These mysteries are the impersonal, unintended, psychoacoustic by-products of the intended process. These might include sub-melodies heard within repeated melodic patterns, stereophonic effects due to listener location, slight irregularities in performance, harmonics, difference tones, and so on.

Listening to an extremely gradual musical process opens my ears to *it*, but *it* always extends farther than I can hear, and that makes it interesting to listen to that musical process again. That area of every gradual (completely controlled) musical process, where one hears the details of the sound moving out away from intentions, occurring for their own acoustic reasons, is *it*.

I begin to perceive these minute details when I can sustain close attention and a gradual process invites my sustained attention. By "gradual" I mean extremely gradual; a process happening so slowly and gradually that listening to it resembles

watching a minute hand on a watch—you can perceive it moving after you stay with it a little while.

Several currently popular modal musics like Indian classical and drug-oriented rock and roll may make us aware of minute sound details because in being modal (constant key center, hypnotically droning and repetitious) they naturally focus on these details rather than on key modulation, counterpoint and other peculiarly Western devices. Nevertheless, these modal musics remain more or less strict frameworks for improvisation. They are not processes.

The distinctive thing about musical processes is that they determine all the note-to-note details and the overall form simultaneously. One can't improvise in a musical process—the concepts are mutually exclusive.

While performing and listening to gradual musical processes one can participate in a particular liberating and impersonal kind of ritual. Focusing in on the musical process makes possible that shift of attention away from *he* and *she* and *you* and *me* outward toward *it*.

Realism, Materialism, Art II

Making Non-Standard Thoughts: An Introduction to François Laruelle

John Ó Maoilearca

François Laruelle's concept of "non-philosophy" or "non-standard philosophy" is said to expand the definition of what counts as philosophical thought. However, this gesture goes beyond merely relativizing thought within a neoliberal pluralism that is actually indifferent to philosophy ("all opinions are valid") or anarchizing science as part of a methodology where "anything goes." Rather, the "flat" thought Laruelle strives for is democratic because it is materialized in different ways, some of them scientific (biology, fractal geometry, quantum physics), some of them aesthetic (cinema, photography, performance), with other models (erotic, mystical, animal) possible. What might look like relativism is always an expansion, an inclusivity of thought. The non-standard philosophy of photography, for instance, is not simply the generation of new thoughts (about subjectivity, light, the flash, and so forth) through an unorthodox source, but the materialization of thought through a photography of philosophy. Such an art of philosophy acts as a non-philosophical practice, especially in terms of the materiality of photographic performance as it involves posture, exposure, definition, and resolution. These are not mere metaphors, but models invoked to mutate what counts as philosophical practice.

In "Artistic Experiments with Philosophy," my interview with Laruelle in this volume, two words stand out: "failure" and "sample." In one form or another "failure" occurs six times; "sample" occurs once. Though used in passing (they are not part of the current non-philosophical lexicon), they are highly pertinent, both to each other and to Laruelle's project as it relates to art practices. It is notable that the interview begins with a reference to another recent interview with Laruelle, and the relationship discussed there between the general project of non-philosophy and his more "experimental" or "artistic" texts. There, he recounted his ambition to "treat philosophy as a material, and thus also as a materiality—without preoccupying oneself with the aims of philosophy, of its dignity, of its quasi-theological ends, of philosophical virtues, wisdom etc." He then added: "What interests me is philosophy as the material for an art, at the limit, an art."¹ Furthermore, it is not difficult to show that it is not just Laruelle's "experimental texts" that aim for this art, but that all his works partake in this experiment in as much as they each

¹ Robin Mackay, "Introduction: Laruelle Undivided," in *François Laruelle, From Experiments in Non-Standard Thought*, ed. Robin Mackay (Falmouth, UK: Urbanomic/Sequence Press, 2012), 29.

realists.⁶ That is why the non-philosophical orientation does not lead to philosophy becoming an art in some reductive merger, or art becoming philosophy, as its mere illustrator, but rather their standing as equals, both thinking equally, both samples of the Real. No firstness at all. Thinking is everywhere. For standard philosophy, both ontological and differential (from Parmenides through Heidegger to Derrida) this will be unacceptable. In truth, the real philosophical horror for them is not that we are not (yet) thinking, but that there has always been thinking. Given the view that philosophy must have an essence (even if it be in difference) and so an exclusivity, then what is (philosophically) unthinkable is that thinking might be found all about us. Yet this is the monster, or philosophical clone, that Laruelle offers us.

And what of the connection between “sample” and “failure” in this respect? A notable aspect of Laruelle’s style of writing is the lack of examples and citations in his work. He explains this absence in the following interview in this way: “I don’t talk about the great metaphysical poets like Donne, Hölderlin, and Mallarmé who have been the consistent prey of philosophical commentaries; my project is different. I’m not that kind of commentator and perhaps that’s why I’ve failed.” The mention of failure is connected to his lack of citation, as he then continues to explain:

Just as I cite very few other philosophers (except as floating markers in my dream) and never cite myself at all, I do not cite applied work, much preferring a certain type of paraphrase that is a destruction of commentary (as in *Mystique non-philosophique à l’usage des contemporains*). [...] I try to do so in such a way that I use just a strictly circumscribed piece or moment in my work. What I write is a sample, not an example, of what I do when I think. To think is to make, no?⁷

Thinking is making, neither exemplary success nor inadequate failure. Thinking is not “of” the Real, its ideal representation, but a material part or sample of it: we think “according to” or “alongside” the Real. And making can also be thinking, only of its own kind (rather than an illustration of one philosophical kind). A reorientation of philosophy into art-material, then, can be likened to Laruelle’s call in *Photo-Fiction* (which has no examples of “philosophical photography” but merely postures toward a “photography of philosophy”) to perform what he describes as the

⁶ For instance, see Timothy Morton, *Realist Magic: Objects, Ontology, Causality* (Ann Arbor, MI: Open Humanities Press, 2013), 19–20: “I argue that causality is wholly an *aesthetic* phenomenon. Aesthetic events are not limited to interactions between humans or between humans and painted canvases or between humans and sentences in dramas. They happen when a saw bites into a fresh piece of plywood. They happen when a worm oozes out of some wet soil. They happen when a massive object emits gravity waves. *The aesthetic dimension is the causal dimension.*” See also Graham Harman, “Aesthetics as First Philosophy: Levinas and the Non-Human,” *Naked Punch* 09 (Summer–Fall 2007): 21–30; and the interview with Harman on page 97 in this volume.

⁷ “Artistic Experiments with Philosophy: François Laruelle in Conversation with John Ó Maoilearca,” pp. 177 in this volume.

“under-practice” of philosophical language. Yet this attempt, he adds, to “under-understand it, is not to lower oneself as an individual, or at minimum, it is to think in a more generic manner without exceptions.”⁸

From the very start, then, Laruelle’s most recent experiment in a non-standard philosophy “of” photography fights against positing any philosophical aesthetics that would over-determine this or any art from without—“the Principle of Sufficient Photography or photo-centrism,” as he calls it. Instead, he gestures us toward a philosophy that is photography’s own:⁹

I call this gesture of creation non-aesthetics or non-standard aesthetics, its standard form being philosophical and photo-fiction being one of its non-standard objects. [...] This project seems absurd. It will no longer be absurd if we accept changing our level of reference for defining the real. Instead of treating the photo and the concept of the photo as two given and describable physical, intellectual objects or representations, we treat them as completely different than given objects closed in on themselves.¹⁰

The “absurdity” of his project is what will strike standard philosophical thinking: it cannot abide not being allowed a transcendence over the (art) object, hence, “it takes quite an effort to render the photographic act immanent, to interiorize it, and to render it real without external determinism or realism.”¹¹ And this new “effort” is also a matter of reorientation and posture: “what we must really consider as an indivisible whole is the ‘photographic posture,’ a conjugation of optical, perceptive, and chemical properties that can only be fully understood as those entangled, non-local properties of a generic matrix.”¹² A true flattening, equalizing or deauthorizing must include philosophy itself as a sample of the Real, an experiment in thinking no more or less than (but different from) photographic experiments: a failure to represent but an invention, or making, in the Real.

⁸ François Laruelle, *Photo-Fiction, a Non-Standard Aesthetics*, trans. Drew S. Burke and Anthony Paul Smith (Minneapolis: Univocal, 2012), 62.

⁹ Ibid., 19.

¹⁰ Ibid., 13–14, (emphasis mine).

¹¹ Ibid., 52.

¹² Ibid., 19.

Artistic Experiments with Philosophy

François Laruelle in Conversation with John Ó Maoilearca

John Ó Maoilearca: In your recent interview with Robin Mackay, when asked about your “experimental writings,” you said that you had aimed to use philosophy “as the material for an art.”¹ How far has this experiment also been pursued, if at all, in your own, more standard, non-standard writings?

François Laruelle: I would like to use philosophy as a material (as one would use space or color, as a materiality) for an art that would be of a piece with conceptual thought without making a new aesthetic or a new philosophy. The ambition of creating a new genre is the deepest consistent core of all my undertakings. I have always pursued two parallel and competing strands of work: first, the theoretical work of elaborating rules that rise like the tip of an iceberg from the non-philosophical matrix, and also, secondarily, their quasi-poetic execution. At first this idea was not absolutely clear and became confused with Nietzsche’s “artist’s metaphysics.”² Then there was a first realization of this effort in the “experimental texts,” written in parallel with the rules issuing from my first formulations of non-philosophy (Philosophy II and III) in something close to the form of a poem. Currently, following the theoretical mutation of this matrix, I have started to reformulate the rules on new foundations for a new effort to create this genre, in particular in recent texts on art-fiction or photography. It’s as though my entire theoretical oeuvre had been conceived as an effort to establish the conditions for a new genre or had been dedicated to one unique poem.

To what end? It is evident that the theoretical realization prevails over the practical realization. The ambition to create a new “genre” of writing and a poematics [*poétique*] of theory has probably failed; the project is currently on hold, though I don’t dare affirm that it is completely abandoned. There are echoes of it and sometimes a type of formulation of it in my recent theoretical writings—such are “the joys of writing.”

I see this enterprise as a failure overall because, while I (usually) have fewer doubts about my theoretical writings, I feel myself incapable of subjectively evaluating

Conversation conducted by e-mail, January–March 2013.

¹ Robin Mackay, “Introduction: Laruelle Undivided,” in François Laruelle, *From Decision to Heresy: Experiments in Non-Standard Thought* (Falmouth, UK: Urbanomic/Sequence Press, 2012), 29.

² See Friedrich Nietzsche, “Attempt at a Self-Criticism,” in *The Birth of Tragedy*, §§2, 5, 7.
—Translator’s Note.

the “experimental” writings. These experimental texts would be rejected by poets and philosophers alike without something to tip the balance in their favor. This makes it difficult to ascribe recognizable value to them. Objectively, my relations with art have been a failure: the impossibility of being a musician-composer was an artistic castration that has left scars and traces, in the same way that the renunciation of politics has done for others (like Plato). I quite late and only partially accepted this renunciation (after several efforts to abandon philosophy and reengage with music) around the age of fifty when I had the feeling that I had used everything up and couldn’t hope to create again except in philosophy. Is it thus, by force, that one becomes a philosopher?

How do you see the relationship between the two types of writing?

For now, and most likely forever, I have not succeeded in achieving a good unification of philosophy and poetry in a new genre, even if certain effects of writing show their intertwinement or entanglement. I don’t talk about the great metaphysical poets like Donne, Hölderlin, and Mallarmé, who have been the consistent prey of philosophical commentaries; my project is different. I’m not that kind of commentator and perhaps that’s why I’ve failed. Poetry and philosophy are what’s left of music and of a grand project of fusion, the provisional paradigm of which is opera, maybe Wagnerian drama, that is now too metaphysical for our time. Who will write an opera-fiction or a musical utopia? More than ever I am looking for the matrix necessary for the fusion and the creation of what might be called a new particle of thought. Basically I should take an interest in al-chemy in the same way I once said that non-philosophy was an al-philosophy.

In the interview with Mackay, you also cite Henri Bergson’s view that each philosopher has only one idea that he or she restates indefinitely. What is the one idea in your own work (if there is one)? How might it be recognized, in various guises, across your works?

The one generative idea is without a doubt the one I just described. It has been progressively intensified, and enriched in places; it has broadened in the same way that a river gains breadth and maybe even begins to be a bit oceanic, but still it has stayed the “same.” In any case, this has been the thrust of my elaboration of it. Dare I say, without provoking too much misunderstanding, that non-philosophy is also a waking dream?

Could this idea also be an image, or some other kind of object, perhaps even an aesthetic one? I am thinking, for instance, of Jean Renoir’s statement that each filmmaker only makes one film, and remakes it again and again. Might there be a filmic idea within non-standard philosophy?

I see only a system of waves, not even of stages, barely of phases. To use filmic language, the sequencing [*séquençage*] of non-philosophy, its *découpage*,³ seems to me less urgent now that I see it from a distance and find in it the logic that comes with retrospect. Rivers contemplate their source all the way to the sea, carry it with them and stay one with it, but the sea, as the Greeks discovered, is another matter altogether.

If non-philosophy does not offer us a new set of ideas to displace those of philosophy, then what does it offer? Is its offering connected to your statement that your problem is that of “reorientation”?

Indeed, the reorientation of thought after its absolution and then its Hegelian (or other) disorientation seems to me to be demanded not by our finitude but by our transfinitude. Finite beings that we are, we are ceaselessly traversed and transported by affects and orientations rather than by objects. It is no longer a matter of being, like the classical and modern philosopher, either a fish surrounded by infinite water where we asphyxiate, or that fish washed up on the beach of the world, surrounded by unbreathable air and doomed to another suffocation. To be able to lift your head out of the water and breathe the air of the stars ...

Why are there no examples, or nearly none, in what appear to be your more “applied” works, especially in your photographic studies? Is this intentional?

Just as I cite very few other philosophers (except as floating markers in my dream) and never cite myself at all, I do not cite applied work, much preferring a certain type of paraphrase that is a destruction of commentary.⁴ First of all, I have enough to say myself without getting anyone else involved (hence my usage of the “etcetera”). But most importantly, I have always fought fiercely against the famous “examples,” concrete or abstract, pretty much the same war I’ve led against the aesthetic. Rightly or wrongly, and I admit that that it may be wrongly, if it is necessary to cite an aesthete, I try to do so in such a way that I use just a strictly circumscribed piece or moment in my work. What I write is a sample, not an example, of what I do when I think. To think is to make, no?

Is there a hierarchy amongst the arts, either in terms of your own personal preference or their significance or kinship to non-standard philosophical practice?

3 In cinematic discourse, *découpage* refers to the shooting script, the breakdown of filmic narrative into shots and sequences. More broadly, the term designates the underlying structure of a film. See Noël Burch, *Theory of Film Practice*, trans. Helen R. Lane (Princeton, NJ: Princeton University Press, 1981), 3ff.
– Translator’s Note.

4 François Laruelle, *Mystique non-philosophique à l’usage des contemporains* (Paris: L’Harmattan, 2007).
– Translator’s Note.

I have shared my obsessions and my fantasies (and my practical failures as well) concerning my preference for music more than any other art and the poem above all other forms of enunciation. I cannot stand novels, with their overlong passages, their indulgence of details always rendered too explicitly. They're not dazzling and enigmatic enough for my taste. Surrealism, along with Chinese poetry and a few other things, represents the ideal of concision and enigmatic brilliance. What I call the "vision-in-One" is also this need of the spirit, naturally empty, to fill itself up with eternal emotions.

Is there any Real difference between non-photography and non-standard philosophy? That is, in what way does non-photography escape from being merely an example?

It's just the difference of materials (and of syntax, which is included in philosophical and aesthetic materiality) that separates non-photography and non-standard philosophy, though at the same time we must not forget that this difference is reflected in the effect and the force of the "non" and of its expression. Non-philosophy is univocal by its invariability for all arts and all thought, hence its formalism, but it is constantly varied by its materials (including the syntaxes that belong to the material), hence its material formalism, but certainly not its materialism.

Is there a difference between "applied" and "non-applied" non-standard philosophy?

In a way, none, except as I just said, that of the material or the occasions (including objects and syntaxes, that each in turn fall into material formalism). Non-standard philosophy is an application of itself to the nearest "non" or to the nearest generic, but it is precisely not an auto-application in the way that "philosophy" is in relation to philosophies. All that comes from philosophy and from its power, the different aesthetics for example, are replacements in a sequence of auto-modeling, a procession of philosophical models, while non-philosophy produces only hetero- or "non"-modeling because it combines and superposes heterogeneous models.

You say, in *Photo-Fiction*, that you are working like an artist, that you are creating a kind of "installation."⁵ How would you compare and contrast art practice and non-philosophical practice?

To work "as" an artist is not a matter of labeling oneself professionally, commercially, and technologically "as" an artist. The true distinction derives from a plurality of specific practical, technical, and theoretical differences that together create a veritable generic difference between the artistic and the non-philosophical. The

⁵ See François Laruelle, *Photo-Fiction, a Non-Standard Aesthetics*, trans. Drew S. Burk and Anthony Paul Smith (Minneapolis: Univocal Press, 2012), 4, 11ff. – Translator's Note.

artist experiments concretely with a defined model of activity, specifically distinct from others. Art as a positive practice is an instrumentalized intention that works within the limits of a type of material and techniques, and also within the limits of potential imitation of other works in the same genre. Non-philosophy proceeds completely otherwise, superposing three different models: 1) the empirical artistic model that it takes as given or as reference material without necessarily practicing it itself; 2) a philosophical model (the most general and invariant possible) that interprets it; and finally 3) the scientific model of quantum superposition that allows it to combine the two previous models in a “matrix” and to orient them generically. If one judges it from a theoretical angle, the complexity of non-philosophy may seem overall superior to that of an art, but the “positive” arts also have their secret calculations or mathematics. It is precisely this compressed character of diverse instances that comprises the secret or the unconscious (the transconscious?) of art in general and that distinguishes art from technology. In art-fiction or non-aesthetics, there are algebraic operations like idempotence and superposition that assure compression (“without concept,” “without end;” see Kant)⁶ of the instances at play and guarantee a certain mathematical rigor. For its part, the philosophical function of the variable assures the taking-into-account of the aesthetic in the non-aesthetic. As for the reference to a particular art, it roots non-aesthetics in artistic experience in general rather than in scientific or religious experience. This complexity gives non-philosophy the character of “installation” that enlarges that of “oeuvre.” The oeuvre has an individual subject and a humanist context; the installation demands, relative to the oeuvre, an expansion and an exteriorization of means. This generic extension paradoxically has the effect of under-determining the nature of the artist forced to abandon the lofty heights of philosophy and to confront instead a heterogeneous materiality.

What might artists do with non-standard philosophy? How would someone recognize a non-standard philosophical artwork (if they could)?

One does not recognize a work of art that might be in the non-standard spirit or might have a stylistic affinity with non-standard philosophy: that would imply the wish to found an aesthetic legitimacy for non-standard philosophy. One already practices it as such, free to recognize in it a power and the effects of philosophical meaning. That is to say, non-philosophy is only a work of non-standard art if it openly takes for its base material an artistic activity as given and causes it to follow the constraints appropriate to that material. It is the end of aesthetic objectivity and the creation of a “genre” that must in all rigor be called “non-aesthetic” art—or even more strictly “non-art.” But all these formulae are obviously ambiguous and can be taken up in a spirit of aesthetic objectivity that clouds their proper sense.

⁶ Specifically, see Immanuel Kant’s *Critique of Judgment*. – Translator’s Note.

Can one say that some artists, those not working under the authority of standard philosophy, are therefore already practicing non-standard philosophy, *avant la lettre*? And if so, what is added to their work by reading Laruelle?

I don't believe that the notion of virtually non-standard art is pertinent or that non-philosophy would serve to actualize it. Each particular art has its own revolutionary tradition but that may not be the case with non-philosophical art, which gathers together several traditions and several possible revolutions. But I would prefer to be prudent here and, in the face of the inventiveness and creativity of the arts, not prohibit liberty. In fact, the model of art and of its liberty of material is something that encouraged me in non-philosophy. But obviously I lean toward safeguarding the notion of a non-aesthetic genre of art.

Is there a political dimension to art practiced under the aegis of non-standard philosophy, one related, perhaps, to the defense of the Human in your work?

From the point of view of non-philosophy, there is not a specifically political domain, though perhaps a political dimension may be possible as a function of the occasional material that one decides to treat that might be concerned with specific problems of power. On the other hand, it can be called political in the last instance insofar as philosophy is a constant variable of all phenomena and is a “crowned power” of domination. Philosophy is the eminently political variable of non-philosophy. It's a matter of diminishing its spontaneous self-importance and not just that of its specifically political domain. It is, if one can put it this way, a sub-political determination of philosophy and an unconditional defense of humans insofar as they are generically definable.

Can you speculate on the future of non-standard philosophy? Is it inevitable that it enters into 6th, 7th, ... nth phases/waves? And if so, why?

A wave succeeds a wave, the desire to create n phases or waves is in itself infinite but the brevity of the individual life is not the “infinite unfurling of the sea”!⁷ I have thrown myself into a final wave, between the quantum and the cosmological opening, always according to the same method of under-determination or subtraction, with an aim to renovate the Anthropic Principle under a form of-the-last-instance, something I hope to be able to see through to completion without being sure that I can do so. I have already let go of two once essential-seeming books, one on music and one on Eros, dreams lost along the way.

⁷ Laruelle's phrase “le ‘moutonnement infini de la mer’” alludes to a line from Paul Verlaine's poem “L'échelonnement des haies” (1875). – Translator's Note.

What would happen, both to non-standard philosophy and to standard philosophy, were your work to enter into the philosophical canon?

I don't have many illusions about the explicit perseverance of this difference; the philosophical canon has seen plenty of other accidents. Like everyone, I will at best be assimilated by tradition, at worst marginalized by it (since it does have so many possible margins at its service). What will remain of non-philosophy? A "destining" [*envoi/Geschick*] as Heidegger would say? A mini-wave [*vaguelette*]? Or rather, as the physicists say, a "wavelet" [*ondelette*]?

Would that be a sign of failure? Or would it only be an illusion that non-standard philosophy had been assimilated?

An awareness of the possibility of theoretical failure has always been with me in every way, quite aside from the fact that it has been carefully nurtured from the start (and still is today) by critics and traditional academic philosophers. But not by philosophers like Levinas, Derrida, or Deleuze, who have never reduced me to despair.

Or, more positively, might it mean that standard philosophy itself no longer exists?

I don't think so. It continues under multiple modalities and its life force has been embodied in a quasi-mythological institutional form far too long for it to really disappear. I've always suspected that, in the order of thought, it was the twin sister of capitalism, and capitalism is not about to die; too many metamorphoses are still possible for this couple. The famous "death of philosophy" alludes to a very narrow conception. And I am too gnostic not to see in it an expression of the world or of evil.

Might the future of non-standard philosophy reside within art practice?

There is a certain affinity claimed with artistic practice. But since philosophy or theology are implicated there, we must accept a higher level of theoretical complexity and turn to scientific modeling—which doesn't make non-standard thought a type of activity or a "genre of life" superior (in the classical sense of the Greek philosophy) to that of art.

A last word. They tell me I am an artist-without-art and a philosopher-without-philosophy, that I take the "pose" of an artist without the practice, or a philosopher without the doctrine—and I would add that of a believer without a religion. This criticism recognizes me by subtraction: I am exactly not one of the sincere liars that the artist, the philosopher, and the believer are.

Translated from the French Molly Whalen

Sonic Thinking II

Time|Place|Memory: Artistic Research as a Form of Thinking-Through-Media

Krien Clevis

Autobiographical sightline: Time-sound-memory

My earliest memory goes back to my second year, to 1962 and a nineteenth-century town house in Blerick/Venlo, close to the Dutch/German border. This memory, if it is a real one indeed, is not linked to some image but to sound: I am a busy toddler, leaning on the edge of my playpen. I remember this because I heard music on the radio: Maria Callas, *Madame Butterfly* (as I would learn years later). This was also the first time, as I remember now, that I had to cry, moved by the beauty I heard. Sometime later on (about a year or so, a long time in a child's experience), I cherished that memory and whenever I wanted to listen to the radio I would go and sit in the intimate space of my playpen. The *Top 40* was my favourite show, and for a long time it would really bother me when some song no longer made it to the list. Trying to cheer me up, my mother would tell me that there also were *evergreens*, but that didn't convince me, for it meant you had to wait until some deejay would play your favorite evergreen on the radio, implying you were completely dependent on his whims.

In the early 1970s my parents became fervent collectors of *Alle 13 goed*, a series of albums with top favorites, and this allowed me to play my best loved songs any time *ad nauseam*. Still, I realized that something quite different was going on as well. I had become aware of the notion of fleetingness, transitoriness. Things could simply be over, never to return again. I would be eagerly looking forward to an anniversary or

some outing, but when the day arrived I was also quite sad, because I realized that soon it would be over again. If time made it possible for things to take place, because of the passing of time things would also be gone again in a flash, vanishing into the past. I began to record specific moments in stories and I started drawing—to capture some of the moments soon to be lost.

This new awareness in me, fuelled by a single song or sound fragment, proved defining for the rest of my life and, through its documentation, also for my artistry. The “Proust phenomenon,” the power of smells to trigger early memories, is well known of course.¹ Although my abovementioned memory was evoked not by a smell but by a sound, classical music in particular, the effect has basically been the same.² In my case it pertained to a feeling of sorrow that not until much later was I able to link to the notion of the passing nature of all things. This is important to me because it touches on what in essence a memory embodies: that which is not there anymore. I remember, and therefore I am. To me this understanding implies a desire to organize and cultivate some memory—reconstructing it, as well as shaping it and showing it. Our autobiographical memory exists as thoughts, on paper, and in images, and it is invoked by images, smells, or sounds.

The autobiographical “sightline” emerges here as an all-decisive factor in the things I created (artistic) and studied (historical). It allowed me to design a life of my own, whereby the autobiographical realm functions less as a straightforward “explanatory” factor than as a catalyst of memory (Kruithof 1995). For example, my photo work *Et in Arcadia Ego* is an attempt to map memories (or the realization of things passing) in a new way (see Figure 2.1).

Artistic research: Thinking-through-making

I grew up with *images*. My father was an architect, my mother was multi-creative. As a child I would sit at my father’s drawing table



Figure 2.1 *Et in Arcadia Ego* (2010–2012). Duratrans Light Box, frame: old bed shelves, 130 × 160 × 25 cm.

and make sketches of the people who were going to live in the houses he designed. Had I been raised in another family, I might perhaps have developed other talents. From an early age, I wanted to become an artist. Although I did not have one particular art discipline in mind, I was fascinated by images and in particular by their content, which also determines their form. This is where the initial starting point can be situated: why do I want to create certain images, what is it that I want to express, and what does it mean or represent?

Artistic research is a specific mode of research of and in the domain of art from the perspective of the arts. This may apply to all arts (fine art, composing music, performative art). It implies research by artists of their own work, which is realized in the questions they ask in relation to particular concerns in (the development of) their work. Unlike in

strictly scholarly research, these concerns come into being in part by doing, trying, developing, making. In this context, *making* involves such various mental activities as thinking, analysis, study, understanding, reflection and scrutiny. This process of making, including the problems that present themselves as the work evolves, gives rise to critical reflection, which in turn provides the basis for further research, also in other contexts (cultural, historical, scientific, and so on).

Human beings are capable of three creative modes of action in particular: visualizing, complementing and symbolizing. Visualizing, in the sense of man who builds what he has seen—to understand nature—and who subsequently tries to express it (where nature suggests unlimited space, man will build a fence); complementing, in the sense of adding something that is missing; and symbolizing, as the main step that expresses the mode of *man-made* action, namely the power to translate, transform something into a new product, medium or place. The Norwegian architect Christian Norberg-Schulz (1926–2000) thus characterized the basic principle of creating or making: as a process that takes place in order to appropriate a place and the transposition that comes about between idea and imagination or translation in a tangible object (1980). In the research of artists the process of making coincides with the process of thinking:³ *making = knowing → reflecting → artistic research.*

Performativity through materiality

Sound, smell and image are all autonomous sensory entities, they are tangible and have autobiographical power; they all appeal to our sense of memory. Tangibility, tactility, grabbing, touching, feeling, smelling, tasting, hearing also apply to materiality, the material with which we create art (in whatever form). *Artistic research* is thinking through the material, determining its language, and what it represents; but also: what *does* the material *do*, and what does it bring about? The material represents and is performative at the same time.

The performative/performatory/performativity is defined as an expression or mode of expressing which not only describes or represents an act in language, but also causes something or sets something in motion.⁴ A text does not just have a meaning, but it also does something, is itself an enactment. Performance as method starts not from a given reality which precedes a personal experience, but from the world that is being enacted, performed or from the situation in which freely and actively a new world or reality is performed. In the performing or visual arts, a performance is a physical presentation within a seemingly familiar context in which acts occur which may completely surprise the spectator. In such instance, the performance or act refers to generating a world, creating something new. No two performances are identical, in fact they are always unique and they will also be experienced as such because each spectator is unique as well. The performative implies a fluid world in which subjects and objects do not yet exist, have not yet materialized, but in which they are in a state of ongoing change or transformation—one which is unstable and hard to repeat (Salter 2002). The performative *makes* and *realizes* the world at the very moment it is called up (by the reader, user, spectator, the audience).

Through my photo works I intend not only to represent a place, but also to generate a world (see Figure 2.2). Basically, a photo invites the observer to look while simultaneously directing his or her gaze. The image itself (the sightlines within the work), the way of showing (the frame, the installation in the space: sightlines on the work) functions as a device which can be operated by the observer, who thus also gives meaning to the work. The interaction or “cross-traffic”—the meeting of making and receiving—takes place where representing and performing, the game of creating, converge and can be experienced by the spectator—at the point where art and space coincide, as in a dialog from which both interlocutors benefit.

Artistic research makes material arguments. Art can create a world by using specific materials. A place is transformed into a new place by using the power of the imagination. *Artistic research* involves a form of thinking through matter (including the various disciplines,



Figure 2.2 *Bewaarplaats / Storage 4* (2012–2015). Duratrans Light Box, frame: aluminium Z-profile with open supporting structure, 126 × 162 × 26 cm.

media, and methods), but the material itself may activate the spectator as well.

Artistic sightline: Photo works and place

A transposition occurs from idea to *image*, or to *sound*, etc. This transformation is important in the process of realizing my work. I complement and symbolize places; I record and render visible. I select some existing place to which I seek to add a new dimension; I disconnect or disengage a place from its everyday environment, giving it a new context. In making, building, acting, the place is transformed and all its physical elements and atmospheric qualities resonate in the artwork. By fencing-in a place, it becomes isolated from its environment and takes

on a symbolic function. From a social-historical perspective I look at and comment on a place and by photographing it I appropriate it, making it visible in its new context. The transformation process determines the expressiveness of the ultimate image. The artistic “I” may refer to the “maker” in various guises: artist, composer, performer, and so on. *Artistic research* is about that transformation; in fact, the creative process—the work’s materialization—is the embodiment of the research.⁵

All art essentially seeks to appropriate a place in the transformation process and elevate it, so that it becomes a new, “autonomous” place. In this respect, the process of making a photograph involves an ethnographical process of observation: selecting the right moment, the right time of day and of year, the right day, the moment itself, leaving room for chance, serendipity. This also means knowing a place through and through, appropriating it and trying to grasp its spirit. The places I research are historical, concrete (in the actual world) or imaginary (from my memory). They are all local—if within a larger global context—and many of them are *lieux perdus*, places of meaning no longer present as such in the real world. Being subject to ongoing changes, these places are marked new layers of construction, temporal and spatial aspects, which are being overwritten all the time. If they did not yet figure as places of meaning, they become so by being photographed—I (re)create them also as maker. My mode of research centers on three dimensions of places in particular: historical, artistic, and autobiographical. They determine the three similarly named sightlines in my work. All these places can be traced in time (the present making contact with both past and future). Moreover, they also have in common that they revealed themselves to me: as *given places*, they are on my mental map, daily in Amsterdam, staying in Rome, or when I travel. As such I literally run into them as part of everyday activities, when jogging or taking a walk, which automatically involves exploring and repeating the same routes (see Figure 2.3). I have grown familiar with them and made them my own. At one point, they simply will reveal themselves to me. Next, it is up to the spectator to do



Figure 2.3 *Plaats S103 / Place S103* (2009–2015). Duratrans Light Box, frame: pinewood covered with cigar boxes, and sprinkled with essential oils of *Cedrus Atlantica*, 130 × 166 × 22 cm.

something with these places. A major element thereby is that also spectators should manage to appropriate the new place by means of the photo: ideally, the power of their imagination should trigger all sorts of associations.

Historical sightlines: *Genius loci*

To get to the “bottom” of a place (historical, concrete, imaginary), I studied the *genius loci*, the spirit of place, which in antiquity referred to the protective spirit of some area or location.⁶ This originally Roman concept emphasized the characteristic nature or atmosphere of a certain location or the impression it left. It involved a metaphorical quality

rather than a strictly defined one, a quality which becomes manifest in a suggestive or associative manner. By making a photo of a place I try to activate its spirit again—as a form of intervention in that place. The places to be photographed have a certain, given quality, but there is also a dimension that you can play with or influence by making the photo. In this respect I consider the camera I use as an external eye that enhances the observation, an element which at times becomes visible on the actual photo only.

It is not impossible, however, to catch the *genius loci*. It is hidden in layers of time and space, but can barely be seen, if at all. At the same time, it may be experienced. The *genius loci* is bound by place. A place changes because its surroundings or contexts change across time and space. This is not to say, however, that the *genius loci* is a given, unchangeable. A place's spirit is determined by all the people who in one way or another ever used that particular place. Every event or occurrence *takes place*, leaving traces behind which will in part define that place.

In my photoworks, I look for ways to activate that *genius loci* and to incorporate the locations to be photographed into a new meaningful place. Just as such location becomes isolated from its surroundings (in nearly all cases the image has no sounds, for instance), the photo of that place is literally and figuratively cut from raw reality, liberated from its existing context and thus itself becoming a *new place*. In the series *Bewaarplaats / Storage* I tried almost literally to “catch” the *genius loci* of a contemporary (construction) site in Amsterdam, which through recent digging activities became directly linked to an age-old history (see Figures 2.4 and 2.5). The underground location, part of a new subway line, reveals—much like in a time capsule—how a place in its very core, through excavation of the soil and subsequent construction, is changed and overwritten. The process of digging, the victory over forces of nature, the quest for the lowest point made possible by the construction—all are major beacons for the changing history of a meaningful place which becomes a new one by recording it on a photo. The individual associations this image may subsequently evoke among spectators add a third layer of meaning.



Figure 2.4 Bewaarplaats / Storage 2 (2011-2015). Duratrans Light Box, frame: aluminium Z-profile with open supporting structure, 144 × 126 × 26 cm.

In my photoworks I try to represent that intangibility hidden in processes. But in contradiction to what the use of language suggests, when recording, *fixing* some moment in a photograph, the *genius loci* will always escape us. My photos thematize the quality of place in an affective manner. It is about a place's non-taken-for-grantedness—its sightlines, terrestrial radiation, pits and traces, and so on. It is about “triggering” that specific, not always visible quality of a particular place and therein lies what the photos do/bring about. With my photos I try



Figure 2.5 Bewaarplaats / Storage 3 (2011–2012). Duratrans Light Box, frame: aluminium Z-profile with open supporting structure, 126 × 162 × 26 cm.

to appeal to the audience's affective, empathic and associative powers and to activate the atmospheric quality of a particular place. This sets in motion and actualizes the *genius loci*.

Sound

Is it possible to grasp sound? Does a *genius loci* exist of/in sound? Where do we encounter the *genius loci* of sound, and if we find it, does it reflect the emergence of a new place? If we cannot catch this spirit in an image, can we do so in a sound? Deep down in the Amsterdam underground, at 23 meters below the surface, precisely halfway into a bored tunnel connecting two subway stops, I found the sound of *nothing/nothingness*, a soft distant noise, like the echo of a cloud. It was ephemeral yet tied to this particular place; it grew more dim when

doing two steps forwards or backwards, while it also became increasingly mixed with the sounds of the outside world, the faint noises coming from the future platforms of the metro station. It underscored how changeability and the noises tied to a place come together.

Transformation

The changeability of the *genius loci* is crucial for my research. The quality of a new place lies in its *transformation*. The original *genius loci* which can still be felt changes because the context changes. This merely renders the newly emerged situation, which has incorporated the old one, richer, adding a new layer of meaning to the whole. This is essential to my search for the final place, which for the time being cannot be localized.

In the new places I create as an artist I try to offer spectators possibilities for opening up new layers—of memory, history, the *genius loci* of the site. The new *places* are expressions of my historical research and link up historical places with new, incorporated places. They are sites of *transition*, constantly subject to change, the final stop or destination being unknown. The permanent movement in fact reflects the mystery of the *genius loci*. Photos ought to be seen, but also felt (Barthes 1980).⁷ To me, they are *sanctuaries*, temporary storage places of indefinable residues or relics.

Places of transition are productive because they change all the time. Layers of time and space from divergent historical periods may briefly coincide in a momentary “here and now.” This permanent dynamic suggests a connection with the concept of intertextuality, referring to the notion that every text is built from a mosaic of existing texts. Intertextuality suggests a fluid system, in which each text is in dialogue with other texts, and, more broadly, with the cultural context at large.⁸ Yet there is more to it. Different, unlike images are connected to each other, reflect on and influence each other. Histories, places, and media enter in a dialogue with each other, generating echoes which resonate in new times and places.

Crossroads on the sightlines: From photo to house, from place to memory

The findings of my exploration of the historical research initially served as foundation of my work, as a solid footing. Next, in the context of my dissertation, it evolved and resulted in a new place, an installation in the shape of a house, based on a classical layout, overwritten by modern means, yet indebted to a long tradition. In my installation *Familiehuis/Halte-2* (which initially was going to be built underground in Amsterdam), the three sightlines I discussed (historical, artistic, and autobiographical) converge.

However, the house I wanted to build never left my studio and was prematurely overwritten, as it were, by time and spatial problems. It turned out, in other words, that the underground house could not be realized due to planning problems in the subway line's construction. The "reality" or physical experience of my underground house vanished before it even materialized. Yet what remains—what always remains—is the imagination, the drawing table of the mind. The impossibility of building a real house actually extended my central concern of performativity: how to show my photoworks in another performative manner? Fellini's *Roma* was my great example. Subway builders discover a hole in the wall in the subway shaft of Line B in Rome, which after countless problems were solved and it in fact opened in 1955. Behind it sits a Roman house, however; after the unsuspecting research team descended into the hole bored, they used their large searchlights to reveal the treasures of the Casa Romana. Until one of them ("Michele, Michele, guarda che succede!") notices that all frescos seem to vanish just like that. Indeed, the freshly discovered house suddenly disappears into nothingness again, as if it never existed. Briefly, the atrium house is unearthed from the dust of 2000 years, but it vanishes forever again right at the moment when it comes into contact with the present-day era. If anything, Fellini's movie transports us back to the power of the imagination. A new layer of meaning presents itself simply through the power of imaginative creating and showing.

Having lost the opportunity of building a physical place, I turned to “virtual reality” instead. I decided to build the house in different media, serving as model for the new performative way of showing. The spectators were first of all invited to enter the house and they could thereby choose various different approaches: the book (a reflection on the house), the scale model, the 3D-animation, the app or the film: all the media in which this house was represented and the place—or recollection of it—was created). In my installation, material experience and virtual discovery existed side by side as equals, but at the same time they overwrote each other through time and place. Every spectator could have his own experience of the house, thus adding a new layer in (its) history. The house was “performed” in alternative ways by relying on different media. The spectator determined how and to what extent he related to the artwork. Art is a great mediator of course, and it performs its responsibility in this respect through all these various media. Art mediates via all these various media. Accordingly, *artistic research* is a form of thinking-through-media.

Having to respond to the new situation of not being able to build my installation in the subway shaft, I became more aware of the artist’s twofold task: how to imagine some particular work and how to show it in a relevant/adequate way, so that it earns a place of its own in the audience’s perception. This also pertains to appealing to the different audiences that a work may generate (by means of different manifestations/media).

By deploying media such as film, 3D-animation and app, it became possible to overwrite, so to speak, the “real” underground house in a reversed experience of time. A film was made of what might have been, rather than of what was. Virtual performativity or material experience—both overwrite the temporal and spatial limitations of the installation, the disrupted place becomes a site of memory. In bringing together these various media, it became possible to reach different audiences contributing to the work. If we all have our own, private world of memory, taken together these overwrite each other and become part of a more collective one. Places of meaning never exist as static givens;

they take on new meanings by being overwritten, and this involves an ongoing process. In the end it is irrelevant, from an artistic angle, whether or not the house is real at all.⁹

The eternal and the continuum

Is it possible for us to hold on to what is bound to pass? Can we isolate or “fix” time and space? Do we have the power to touch the ephemeral and retain it, if only momentarily? By “digging” in collective classical history and tapping my personal recollections, I found fertile soil in which my fascination for place, transience, and transition could take root. My photo works involve photos in context which tell a story about a place. If in my performative house project the house served as accommodation of the photo works, in my current work the Duratrans Light Boxes themselves serve as artistic accommodation, each work having its own individual encasing. As such each box is like a ‘house’ telling its own story, a temporary museum for the image, captured in a photo. It turns my photo works into objects. Historical, current, or imaginary places, all shrouded—“placed”—in a context of their own. The new house operates performatively: it gives visitors a red-carpet welcome by pulling them into the image, sprinkled with scent, climate-control, and sound. The sightlines on the work are enhanced by performative media, mutually influencing each other from the essence of the image in equal measure. The method of *artistic research* works by thinking-through-media, underpinning the *genius loci*, no matter how imaginary or ephemeral (see Figure 2.6).

Disciplines may become interdisciplinary and media may become interchangeable, and as such they all contribute to what constitutes our personal motivation. In *artistic research* I am concerned in particular with thinking-through-media. This involves a process which cannot be analyzed from the outside by others; rather, it can only be transformed, reflected on, played with and felt from within by the



Figure 2.6 Hall overview *Empire of lights*, exhibition of Duratrans Light Boxes in Nieuw Dakota, Amsterdam (May–June 2015); www.krienclevis.com.

maker. Subsequently, the work may find its way to the audience, which should ask what it brings about, rather than passively wondering what it means, as a way to generate active involvement. *Artistic research* is the trajectory the artwork has covered based on questions, studies and reflections, in order eventually to occupy a new place of its own, which in turn needs to be interrogated. This dynamic involves a continuum, and as such it embodies the very heart of research.

Notes

- 1 This phenomenon has been linked to Proust's *A la recherche du temps perdu*, in which he describes how his eating of a "Madeleine" as an adult reminds him of the happy moments in his childhood.
- 2 Already in the late nineteenth century studies were done of people's earliest memories (such as by Victor and Catherine Henry in 1896 and F.W. Colegrove in 1899). These studies revealed that early memories are

nearly always described in visual terms, rather than in terms of smells or sounds. See also the chapter on “Flitsen in het duister: eerste herinneringen” in Draaisma, 2001.

- 3 Norberg-Schulz, in *Genius Loci*, refers to Heidegger’s theory of *poiēsis*, which goes back to Greek antiquity. The notion of *technē* is linked directly to *making*. See also Wesseling, 2007.
- 4 The British linguist and language philosopher John L. Austin was concerned with the relationship between “saying” and “doing” in language, thus providing the basis of contemporary debates on performativity. See also the introduction of Salter, 2002.
- 5 Or as Henk Borgdorff puts it: “For the opposition between theory and practice as soon we learn to understand the dynamic of the emergent field as a chain of transformations, . . . interactions, and articulations that may ultimately produce more reality” (Borgdorff 2012).
- 6 The *genius loci* refers to the atmospheric quality of a place whose meaning is rarely obvious right away. Indefinable by nature, the *genius loci* frequently determines a place’s feel and character. For more on this, see Norberg-Schulz, 1980, in particular the preface and Chapter I.
- 7 The original title is *La Chambre claire* (Paris: Gallimard 1980). See in particular Chapter 2 on the notions of *studium* and *punctum*.
- 8 The concept of intertextuality was launched by Julia Kristeva (1941) in 1969. She claimed that every text is intertextual in the sense that every text is built from a mosaic of existing texts. Rather than being an autonomous object or closed system, a text is always linked to other texts and, more broadly, the cultural context at large. For Kristeva, the text is a crossroads of all sorts of possible ideological (social, political, literary) systems which an author integrates in his text, be it consciously or not. These systems, then, are not so much tied to the author, but function autonomously.
- 9 For the movie *The Once and Future House* (2013), in which the sound of the bore tunnels is processed, see: http://youtu.be/8VVwfZl_IUk

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